

SEMIOSIS & SIGN EXCHANGE

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Prof. dr ir R.E. Maes Informatiemanagement, Faculteit der Economische Wetenschappen en Econometrie

SEMIOSIS & SIGN EXCHANGE

Pieter Wisse

DESIGN FOR A
SUBJECTIVE
SITUATIONISM,
INCLUDING
CONCEPTUAL
GROUNDS
OF BUSINESS
INFORMATION
MODELING

Information Dynamics

cip-gegevens

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prelude 1

Every chapter is preceded by a short explanation of its contribution to my overall design. These preludes help you navigate the treatise. For my acknowledgements see the Postscript.

So, Prelude 1 is where I explain how Chapter 1 fits in. For introducing the Introduction, I first offer a quotation from *Reality Construction in Society* by B. HOLZNER (1968, p 14):

Frames of reference influence our perception, but even more they influence our interpretation of what we see, and the formulation of plans of action. Given a frame of reference, which directs our attention to a particular range of possible experiences, and equips us with methods of relating what we find to other knowledge, we do indeed feel that we discover reality, since we cannot vary our perceptions at will. Yet, we can vary the frame of reference and discover still different aspects of the actuality before us. It is, then, useful to describe the cognitive process as if it were an active process of reality construction on the part of the experiencing subject. When, finally, we formulate in some symbolic system or language what we have experienced, the resulting symbolic representation contains the residues of so many active transformations of the original experience, that we are entirely justified in calling it a "reality construct."

A conceptual information model is a "reality construct," too. Its relevance strongly varies according to the "frame of reference" applied by the modeler. This treatise presents – a design for – a different frame of reference for conceptual information modeling. I believe – see Chapter 2 for the Peircean concept of belief I adopt – that indeed it helps significantly to "discover still different aspects of the actuality before us." And of course those aspects are not just different. The point of this treatise is that they are more relevant for conceptual models as "plans of action" for realizing successful information systems & services.

The Introduction prepares you for what to expect from the rest of the trea-

tise. HOLZNER's concept of frame of reference is termed an ontology in my vocabulary. In the Introduction (Chapter 1) you will therefore find my announcement of an ontological design. It is what underlies modeling practice and thereby specific models. My theoretical design treats as especially relevant the themes of multiplicity and subjectivity. The resulting ontology I have labeled subjective situationism. If you want, you may also read it as subjectivist situationism.

I feel motivated – see Chapter 6 for the Schopenhauerean concept of motive I adopt – to apply a personal writing style. It rests on the special attention subjectivity requires. In Chapter 1 I also suggest some other adjustments to your expectations. My aim is that you should even increase your appreciation of this treatise as a piece of serious science writing. Openness to multidisciplinary influences is a first prerequisite.

Subjective situationism itself is documented from Chapter 2 on.

chapter 1

INTRODUCTION

1.1 answering a vital question

Artifacts in general, and information systems in particular, often fail to meet expectations of stakeholders. How can they be made (more) consistently successful? It is this question that I address.

The direction in which I point at answers, and aim to provide some contributions at a fundamental level, is that of conceptual modeling.

Right away, *conceptual modeling* must surely seem an odd expression. Insiders to disciplines and professions of modern-day information systems mostly use it inadvertently. Outsiders are left guessing what conceptual modeling entails. Are concepts modeled? Or do models consist of concepts? And what does it all have to do with information systems, anyway?

The need for improving information systems along these lines is actually captured well by the label of conceptual modeling. For what counts as conceptual has once been established in opposition. I treat the vital question of information system quality from the assumption that the original concept that gave rise to conceptual modeling as its opposition is still dominant. Conceptual modeling therefore betrays a bias that still favors, say, nonconceptual modeling.

Nonconceptual modeling, then, is oriented at applying technology for the actual construction of information systems. Such construction modeling should ensure that a tool is made right. But is it the right tool? Though it seems obvious that doing the right thing deserves priority over doing something the right way, the technological orientation still largely determines the overall perspective brought to bear on information systems. This bias is usually counterproductive, sometimes even dangerous.

More terminology is ill-directed at present. The predominance of the orien-

tation at tool construction has resulted in 'nonconceptual modeling' being called design. Subsequently, conceptual modeling is known as analysis. As a label, it reflects the outlook that goes under the philosophical name of naive realism. Crudely put, it means that reality is built up logically from atomic objects which have absolute existence. Then all that is required for modeling reality, is merely (also read: objectively) to recognize the relevant objects and apply their proper names to them. Indeed, if human understanding of reality is just that, conceptual modeling is quite rightly called analysis. Naive realism, however, is especially untenable when *different stakeholders* are involved as is without exception the case for complex information systems. Understanding is not passive recording, but active construction. I contend that the 'real' design, with all the subjective creativity it implies and taking into account subjective interests of stakeholders, lies more in the activity of conceptual modeling than in that of construction modeling.

To escape from the bias of (digital) technology, conceptual modeling should be treated independently as much as possible. It deserves its characteristic foundation, too, which is conceptual in nature. The conceptual models I refer to can also be called business information models. The foundation I present consists of conceptual grounds, thus explaining the second part of the subtitle of this treatise.

A more independent position for business information modeling relative to construction modeling contributes to overall quality. This might seem a paradox when viewed from the traditional – and usually implicitly applied – technological perspective. But the benefits of establishing with relevant precision *what* is needed with priority over *how* to fulfill those requirements should be clear when a comprehensive view is taken.

Concentrating on conceptual grounds has several consequences for this

1. This does not imply that technology must be excluded from conceptual models. On the contrary, but it should appear integrated in such a model as an *idealized* design in R.L. ACKOFF's (1978) sense. For the *conceptual* model is not about a specific existing technology but about a reality *including* a tool and possibly even a technology yet to be developed into existence.

The distinction between conceptual model and construction model also serves to protect a large part of the investments for modeling. When different specific technologies are deployed for a tool's next version, this transition usually requires a different construction model. Of course with the provision that use requirements for the tool remain unchanged, the conceptual model usually does not need adjusting. The conceptual model's relevance continues as long as the idealization of technology remains valid. This is especially beneficial when *specific* technologies rapidly change within quite stable conceptual boundaries for successive technology *generations*.

treatise. First of all, it is not about specific applications of business information modeling. In fact, practical modeling is hardly treated at all. The focus has been kept on conceptual grounds, for it is precisely my point that those have been decisively lacking for business information modeling. Applications of the principles developed in this treatise can be found in my book *Metapattern:* context and time in information models (2001).

A second consequence of concentrating on conceptual grounds is that this treatise goes well beyond such fundamental concepts for business information modeling, only. This shouldn't come as a surprise. What else can be expected when the orientation at a particular – that is, digital, late twentieth century – technological perspective is removed on purpose? It is only logical that a (more) general perspective on information, knowledge and communication emerges. Though my primary interest remains with improving the quality of information systems, I entertain the idea that information science can also make productive contributions to other disciplines.

1.2 an outline of the treatise

Information systems are tools. Roughly speaking, there are two perspectives – to be combined of course, for optimal practical results – from which to improve the quality of a tool. The (most) traditional perspective relies on improvements in technology for construction and operations, thus leaving requirements – and how they have been arrived at – (largely) unquestioned.

The other way leading to an improved tool is to first concentrate on requirements. Central to requirements for an information system is a so-called conceptual information model. The pertinent (research) question becomes: How can such models be improved?

Underlying the activity of conceptual information modeling are assumptions. Taken together, such assumptions, or conceptual grounds, constitute an ontology. The very first step is to recognize that different ontologies are possible. The next step is to undertake an ontological design, i.e., to create an ontology with the express purpose of improving support of modeling.

The treatise Semiosis & Sign Exchange develops an ontology that supports the conceptual variety needed for designing 'realistic' models. Next, improved construction models and, subsequently, improved tools for increasingly complex human involvement with business processes may be constructed.

The main ingredients are [1] CHARLES S. PEIRCE'S triadic dynamics of semiosis (object-sign-interpretant) together with a triple development of his singular notion of ground, [2] ARTHUR SCHOPENHAUER'S concepts of the will, of the intellect as an instrument of a unique objectification of the will (read: an individual), of the individual's capacity for empathy and of modes of causation (according to which a sign counts as a cause aimed at a motivationally induced effect), and [3] the author's own modeling approach called metapattern, according to which every situation is a function of related objects and an object may exhibit different behaviors as pertaining to corresponding situations.

Combining [1] and [3] yields an enneadic, rather than a triadic, schema for semiosis. The explanatory power of a synthesis of realism and idealism consisting of nine variables is of course much larger than a system of three (plus one).

Adding [2] subsequently leads to a radical anatomy of meaning summarized by the slogan: Every sign is a request for compliance. For the sign's engineer enters into an exchange with a (potential) observer only to promote his interests (will). Given the predominance of the will, that is all (s)he *can* do and therefore *actually* does. The provision of empathy 'controls' to what extent individual behavior is social.

The ontology of subjective situationism – with the Schopenhauerean concept of the will as the ultimate, preintellectual ground – may be viewed as a superset of ontologies currently applied for conceptual information modeling. For it configures more variables. When some variables are 'bracketed,' subjective situationism simply 'behaves' like another ontology. It also means that subjective situationism provides a vantage point for analysis and evaluation. The treatise does not review specific modeling methods, but concentrates on a selection of primary sources – especially on speech acts and communicative action – that are among those which have influenced some modern schools of conceptual information modeling. Such underlying theories are shown to lack 'requisite variety' for modeling increasingly complex information systems.

Semiosis & Sign Exchange aims to contribute to the fundamental discussion on conceptual information modeling. Some of its concepts may appear unorthodox, when not outright unfamiliar. For example, subjectivism goes against the established objectivism of several modern scientific disciplines. As a corollary, the concept of shared meaning is, say, deconstructed. Even 'worse' from a strictly positivist point of view, the a priori nature of the will contradicts purely rationalist belief. However, such elements are all assembled into a theory with both increased rational explanatory power and improved support of practical information modeling. Maintaining focus, and for reasons of some restraint on the length of this treatise, the practical application of subjective situationism for conceptual information modeling has been largely kept outside the scope of the treatise. The reader is advised to consult the companion volume Metapattern: context and time in information models (2001).

1.3 succinct guidelines for reading

Figure 1.3.1 offers a visual guide to the material in this treatise. Central to my argument are the chapters that the figure collects inside an additional, encompassing rectangle. For most benefit, I suggest they are read in the order that is indicated. I don't believe it is possible to arrive at a compete understanding when omitting one or more of these central chapters. Their *order* is important as material from an earlier chapter is assumed to be interpreted by the reader before embarking on the next chapters. Those Chapters 2, 3, 4, 6, 7, and 8 constitute a carefully constructed development, with the semiotic ennead (Chapter 4) and the sign-as-request-for-compliance (Chapter 8) as the two major conceptual designs.

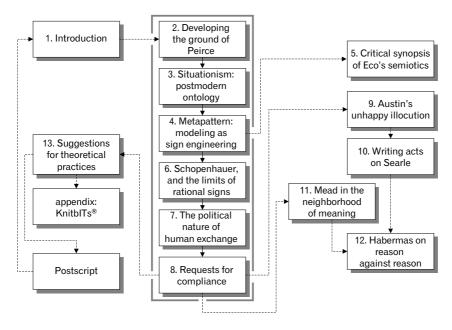


Figure 1.3.1. Organization at chapter level of this treatise.

As Figure 1.3.1 also indicates, Chapters 5, 9, 10, 11, and 12 are *not* essential for the design(s) of the conceptual grounds of business information modeling. Rather, they are examples of both more general criticism and their critical application. Therefore, even though these five chapters may all be considered supplementary from a constructive point of view, they serve the equally important but different purpose of pursuing a critical discussion.

The chapters on ECO, AUSTIN and MEAD may each be read independently,

provided that in each case all the preceding chapters that support the central argument are read first. The chapter on SEARLE requires reading the chapter on AUSTIN first, and the one on HABERMAS those on both SEARLE and MEAD.

A reader who feels pressed for time, and primarily interested in the practice of business information modeling anyway, may choose to read, after this Introduction, only the treatise's final chapter. He could include the appendix on KnitbITs[®] that refers to the theory's practical embodiment in computer software. In addition to this Introduction, also assisting the reader to gain an overview every chapter is preceded by a separate prelude; it explains how the chapter that follows contributes to the overall program of this treatise.

Each of the Chapters 2 to 12 may be considered to support a particular 'hypothesis.' These headlines are listed below for some additional overview, and as informal invitations to study how I propose how artifacts in general, and information systems in particular, can be made consistently (more) successful.

Chapter 2: Three times two equal six; PEIRCE's formalization of semiosis may be extended to a hexad by differentiating a ground for every single element of his original triad.

Chapter 3: Ontological space is epistemologically subjective, which amounts to a degree of freedom in modeling. The concept of situation adds a(nother) full degree.

Chapter 4: Three times three equal nine; the semiotic ennead may be developed from the earlier hexad (see 2) through the recognition that differences can be held together by an identity that is otherwise empty; the – modeling technique of the – metapattern can be used to explicitly engineer the signature, context and intext aspects of signs (models).

Chapter 5: ECO's theory of semiotics is no theory of semiotics, not in the Peircean sense, anyway.

Chapter 6: The conceptual scheme of SCHOPENHAUER is eminently suited for a postmodern ontology and is empirically sound, especially because he recognizes the limits of the (rational) intellect for determining behavior; ultimately, individual behavior is determined by a unique objectification of the will, or configuration of interests.

Chapter 7: A sign, every sign, is driven by interests of its producer (engineer).

Chapter 8: A sign, every sign, is a request for compliance for it is exchanged to seek an observer's compliance with the engineer's interest(s).

Chapter 9: AUSTIN recognizes contradictions in his concept of illocution but nevertheless persists in a theory of speech acts.

Chapter 10: SEARLE elaborates upon AUSTIN's speech act theory, solidifying misconceptions about illocution.

Chapter 11: MEAD's theory of social psychology suffers from one-sided sociological assumptions.

Chapter 12: HABERMAS does not only confuse because he builds on the contradictory work of AUSTIN, SEARLE and MEAD. His theory of communicative action is not so much a theory as it is an ideal; it is applied in prescription and judgment, rather than aiding explanation.

1.4 the variety of differences with unity

The application range of digital technologies is rapidly widening. Involvement of stakeholders is increasingly numerous and varied. An inquiry into quality and opportunity of information systems therefore requires *fundamental* scientific and professional attention. A particularly strong case for the need for improvements is stated by G.C. BOWKER and S.L. STAR in *Sorting Things Out: Classification and Its Consequences* (1999). As their observation perfectly fits my own interests, I offer it right here at the start of the problem sketch (p 308):

[t]he toughest problems in information systems design are increasingly those concerned with modeling cooperation across heterogeneous worlds [...] and multiplicity.

The current perplexity is all the more surprising because such problems have already been raised in antiquity. That should illuminate their enduring importance.

It only takes abstraction from applying current digital information technologies for distributed use to recognize earlier approaches. For example, as C. SHIELDS reports in *Order in Multiplicity* (1999) – and, as he convincingly argues, contrary to the still dominant opinion in modern science – ARISTOTLE (384-322) makes homonymy² productive for both his critical and constructive phi-

2. SHIELDS does not mention polysemy. I treat homonymy and polysemy as synonyms here. A primarily lexicographical tradition exists in which they are treated as different. See *The Oxford Companion to the English Language* (T. MCARTHUR, editor) for the following account (1992, p 795): "Dictionaries usually put polysemous words with all their senses in one article and homonymous words in two or more articles, dividing each into senses and subsenses as appropriate. In doing this, lexicographers generally take the view that homonymy relates to different

words whose forms have converged while polysemy relates to one word whose meanings have diverged or radiated." Figure 4.5.6 captures my radical reversal of name and named.

As his terminology of homonymy indicates, ARISTOTLE proceeds from names to what-is-named. SHIELDS acknowledges that (1999, p 269) "Aristotle can fairly claim to have uncovered some logical space for analysis, a *tertium quid* between univocity, or definition in terms of necessary and sufficient conditions, and mere family resemblance. A

problem sketch losophy. And A. HAAS, in *Hegel and the Problem of Multiplicity* (2000), demonstrates how GEORG W.F. HEGEL (1770-1831) theorizes on the related concepts of identity and difference.

Though I definitely do not set out with the express goal of contributing a study on ARISTOTLE and HEGEL, nor have I actually written one, I believe that my proposal includes a comprehensive conceptual approach to designing "order in multiplicity." It results from drawing a synthesis of identity and difference.³ How especially HAAS introduces his theme I can readily recognize

philosophical account given in terms of core-dependent homonymy occupies just this space." My reversal may be interpreted as to promote "some logical space for analysis" to *general* conceptual grounds.

An early modern writer on semantics is MICHEL BRÉAL (1832-1915). Polysemy is (1897, pp 139-140) "a phenomenon of multiplication[:] Language, besides obving its own laws, is subjected to the rebound of outward events, which evade all classification. [...] In proportion as a new signification is given to a word, it appears to multiply and produce fresh examples, similar in form, but differing in value. [...] The more meanings a term has accumulated, the more it may be supposed to represent the various sides of intellectual and social activity." BRÉAL thus clearly anticipates MANNOURY's (1948) concept of language circle (Dutch: taalkring) and WITTGENSTEIN'S (1953) concept of language game. For he remarks (1897, p 141): "It will be asked, how is it that these meanings do not thwart each other; but we must remember that each time the words are placed in surroundings which predetermine their import." Elsewhere, BRÉAL comments on the same theme of polysemy (1887, p 157): "Why does th[e] multiplicity of meaning not produce either obscurity or confusion? Because the word comes prepared by what has preceded it and what surrounds it, has

been put into context by time and place, and has been defined by the actors on the scene.
[...] We have only to chance on a conversation in progress to see that words are a poor guide by themselves, and that they need that complex of circumstances which, like a key in music, fixes the meaning of signs."

3. In Logos, Mythos, Chaos: Metaphysics as the Quest for Diversity (1987), D.L HALL depicts traditional metaphysics as speculation on a rational, or logical order, i.e., (p 10) "as the science of uniformities." He contrasts it with what he calls aesthetic orderedness, that is (p 11), "an alternative notion of orderedness celebrated by many poets and some few philosophers, a notion emergent from the appreciation of diversities.". Then, (p 10) "one may celebrate the manner in which just those items constitute themselves and their relations one to another in such a way as to permit of no substitutes." Therefore (p 11), "[i]t is simply not the case that the uniquenesses establish no orders." HALL continues (p 13): "For metaphysics to develop from the alternative ground of aesthetic order, the meaning of reference must be enlarged so as to permit its intitial exercises to be performed with respect to diversities, not uniformities." However, traditional metaphysics exerts a strong bias, for HALL remarks that (p 14), "forced to presuppose something in our

from the perspective developed in this treatise (2000, pp 10-26):

The continual reduction of multiplicities [...] signifies that a new structure is needed[....] Can philosophy restructure itself in order to think polymorphously? [...] And if thought-forms are expressed as logic, then what can it mean to think with logics? [...] What matters is precisely that which classical logic does not grasp, the place into which it cannot reach, that which eludes structural considerations, mere formal multiplications. [... Two thousand years of m]etaphysics then impl[y] a radical failure in success, the success of identity and difference [... M]ultiplicity is the becoming multiple of questioning to the point where the logic of calculation [...] no longer functions, the point where predication via identity and difference no longer accounts for thought – and further, to the point where they continue to function, and therefore permit another logic to emerge. [...] Only if thought is a motion can it begin to think multiplicity as such[....] And if multiplicity has a multiplicity of meanings, [...] then another language is necessary. [...] How does metaphysics think many objects, their identities as many, as well as their differences?

My research objective has been to inquire into *design* in a theoretically fundamental way by concentrating on conceptual grounds of business information modeling. A modeling language is explained from a behavioral theory about its users and their interaction. BOWKER and STAR analyze, and report on, the need for – again, what I call – conceptual grounds of modeling. Their conclusion is that (1999, p 291)

[w]e lack a good relational language here. There is a permanent tension between the formal and the empirical, the local and the situated, and attempts to represent information across localities. It is this tension itself which is underexplored and undertheorized. It is not just a set of interesting metaphysical observations. It can also become a pragmatic unit of analysis. How can something be simultaneously concrete and abstract? The same and yet different? People are not (yet, we hope) used to thinking in this fashion in science and technology. As information systems grow in scale and scope, however, the need for such complex analyses grows as well.

This treatise shows that *only* a particular language, albeit relational, or whatever, is still insufficient to transcend such traditional oppositions as mentioned by BOWKER and STAR. First and foremost, the *concept* of language requires

endeavors, we presume that unity is prior to plurality and tacitly shape our metaphysical endeavors in unitive terms." His concept of an aesthetic order leads HALL to conclude that (pp 22-23) "[t]he burden of the contemporary speculative philosopher is to account for the theoretical diversity on other than rational grounds. [...] The revitalization of speculative philosophy awaits the emergence

of articulated understandings of the enriching diversities celebrated by recourse to aesthetic ordering." That is precisely what I attempt in this treatise, by applying SCHOPENHAUER's concept of the will and enlarging PEIRCE's semiotic triad into an ennead. It even results in a synthesis between the alternatives of metaphysically labeled order HALL views as separate.

repositioning. As E.T. GENDLIN (1926-) argues in his essay *Thinking Beyond Patterns; Body, Language, and Situations* (1991, pp 102-105):

Body, situation and language are an implicit intricacy[. ...] The body implies, and comes up with, our words and actions. [...] All day long, it is as a bodily sense that we know what we do and say, what situation we say it in, and how it makes sense. [...] The body provides the focal implying without which there would not be situations or language. [...] *Indeed, all the functions of the implicit intricacy in language and situations are functions of the body*.

My attempt closely resembles what VALENTIN N. VOLOSHINOV (circa 1884-1936) proposes in *Marxism and the Philosophy of Language* (1929). At this point, I only draw attention to what VOLOSHINOV determines as the basic opposition to be surmounted (1929, p 79):

How can the fundamental polysemanticity of the word be reconciled with its unity? To pose this question is to formulate, in a rough and elementary way, the cardinal problem of semantics. It is a problem that can only be solved dialectically.

4. I have indicated the year of publication as 1929. That was the year of the book's first edition. Throughout this treatise, and for all publications, in the main text I refer to the year of original publication. As I did not compare different editions of what has been published under the same title by the same author(s), I believe mentioning the year of original publication is the second-best way of honoring the chronology of ideas. Information about the edition that I have actually consulted appears in the bibliography at the end of this treatise. All page numbers given pertain to such editions, many being not the original and/or being a translation.

What first struck me about Marxism and the Philosophy of Language in particular is the clarity of the exposition. I am in no position to judge the quality of the translation from the original Russian, but L. MATEJKA and L.R. TITUNIK have certainly produced an English text that is eminently accessible.

Applying assumptions similar to VOLOSHI-NOV's, W. HARTUNG et al. write about their *Sprachliche Kommunikation und Gesellschaft* (1974, p7, my translation from the German): "The point is to contemplate anew on the relationships between society, communication and language, and to do so on the foundation of Marxism-Leninism and the knowledge gained from linguistics and other social sciences." Indeed, published at the ideological heyday of the German Democratic Republic under the supervision of its Central Institute of Linguistics, such an introduction serves to feed suspicion and forms an obstacle for scientific interests grown from western perspectives. Though suspicion is fully justified as, in spite of the professed attention paid to Russian publications (see dust jacket), for example VOLOSHINOV's book is not mentioned at all by HARTUNG et al., certainly not only party-ideological but also (other) relevant issues are raised, such as the concept of situation in communication.

For a Marxist approach that applies more outspoken subjectivist assumptions, see for example *Dialectical Theory of Meaning* (1961) by M. MARKOVIC. For a synthetical treatment recognizing VOLOSHINOV as a "founding father" of semiotics, see *Social Semiotics* (1988) by R. HODGE and G. KRESS.

The primary assumptions VOLOSHINOV applies as ground(s) for his theory are sociological, whereas mine are psychological. But he subsequently achieves a balanced view by making psychological provisions, too. As I introduce essential sociological provisions myself, it should come as no surprise that we find ourselves on a tract of common ground(s) even though we start from different perspectives. Many of our conclusions about the nature of language are quite similar. But several are not. If anything, the anatomy of meaning presented here in Part ii is more radically dialogical than the dialogical theory of VOLOSHINOV and MIKHAIL M. BAKHTIN (1895-1975).

It is a matter of debate whether VOLOSHINOV actually wrote *Marxism and the Philosophy of Language* himself or whether it was BAKHTIN who had it published under the name of another member of what was later to become known as the Bakhtin Circle. I consider VOLOSHINOV the ultimate author for, as C. BRANDIST (1997) comments on this very subject,

[i]t seems much more likely that the materials were written as a result of lively group discussions around these issues, which group members wrote up according to their own perspectives afterwards.

But how does concentrating on concepts such as language, meaning, and authorship contribute to addressing the vital question of the quality and opportunity of information systems? A preliminary sketch can already shed some light on the research approach.

Though important, improvements in – digital – technology are only a partial answer, at best. Critical for success is that each and every stakeholder finds, and continues to find, her or his relevant 'stakes,' or interests, adequately supported. This points to the need for communication, especially during design. However, the traditional approach(es)⁵ to complex problems of design, or modeling, has (have) been to try and put communication at the service of achieving maximum consensus among stakeholders. This treatise argues that wisdom does not at all reside in so-called shared or identical meaning. On the contrary, attempts at shared meaning must necessarily fail. It explains the failure of whatever is subsequently built on such erroneous ground. An orientation at *individual* behavior (A.W. COMBS and D. SNYGG, 1949) is therefore applied.

5. A treatment of different – kinds of – approaches which productively concentrates on basic assumptions is presented by R. HIRSCHHEIM, H.K. KLEIN and K. LYYTINEN in *Information Systems Development and Data Modeling: Conceptual and Philosophical*

Foundations (1995). The authors have of course applied assumptions of their own. Those are not yet as radical as mine, I believe, but generally point in the same, social-psychological direction. Underlying their exposition, they include an excellent bibliography.

research objective This treatise aims to create the productive ground(s) that is (are) required to deal responsibly with design problems of ever-increasing complexity and variety. These conceptual grounds are primarily intended for application at business information modeling. However, they may be profitably applied along a wider range. Abstraction from a (strictly) technological orientation is taken as inspiration to cover grounds of semiosis and sign exchange in general.

1.5

science as design

research questions and approach From the outset, it should be clear that I realize that the scientific status of design is at present widely considered problematic. Design is often denied serious treatment – neglected, actually – due to reasons such as mentioned by BOWKER and STAR (1999). Yet, as J. ROSSMAN remarks at the very opening of *The Psychology of the Inventor* (1931, p 1):

The outstanding characteristic of our civilization is its complete dependence on invention. Of course, in many of its appearances, design as innovation can be studied scientifically. But can it be *performed* scientifically, too? Underlying this treatise is the assumption that it can, and should. It requires an attitude that is different from how design theorist J. CHRISTOPHER JONES pictures, in *Design Methods* (1981), the traditional scientist whose (p 11)

aim is to describe precisely, and to explain, phenomena that exist. His attitude is one of trained scepticism and doubt: his main tools are the experiments that he sets up to disprove hypotheses by searching for truth in a statement of the opposite.

What JONES himself does not 'explain' by his Popperean view is how science arrives at new hypotheses or even axioms, i.e., at theoretical innovation. He argues that (p 10)

designing should not be confused with art, with science, or with mathematics. It is a hybrid activity which depends, for its successful execution, upon a proper blending of all three and is most unlikely to succeed if it is exclusively identified with any one.

But, then, isn't innovative science what such designing is all about? Doesn't it *include* the more conservative science-as-studying, just as it includes aspects of art and mathematics (also read: formal modeling)? Indeed, what will undoubtedly confuse traditional scientists in what follows is precisely the blend that JONES suggests for design. Aware of possible misinterpretations, I nevertheless persist in applying a design-oriented scientific paradigm. I believe it to be essential both for the result of successful theoretical innovation, and for a responsible account on the process of achieving it. I want to support the case, not only for a specific science of design, but also for every science characteristically *implying* a design aspect.

Actually, an important tradition exists for integrating discovery and innovation with justification into an overall theory of science. This is documented by C.A. VAN PEURSEN in *Ars Inveniendi* (1993). The subtitle of his book is (my translation from the Dutch) *Philosophy of Inventiveness, from Francis Bacon to Immanuel Kant.* VAN PEURSEN proposes that ars inveniendi, or the art & science of discovery (p 7, again my translation),

has historically occurred especially [...] when new worlds are unlocked, both literally (geographical discoveries) and figuratively (new and groundbreaking methods). More importantly, this theme [of ars inveniendi] appears highly relevant for philosophy and scientific theory building during our current period.

He attributes to GOTTFRIED W. LEIBNIZ (1646-1716) the proposition that (p 99, my translation from the Dutch)

it is precisely the task of the ars inveniendi to confer rationality upon apparent irrational imaginations.

Invention, or design, can yield advances in rationality especially when an originally irrational experience is given a conceptual position, i.e., is included as a concept into a rational scheme. As VAN PEURSEN (1993, p 200, my translation from the Dutch) attributes to KANT (1724-1804):

This heuristic function of all Ideas [also read: conceptual grounds] implies that reason reaches beyond perception. It delimits 'transcendence' indirectly (beyond the limit) to permit inventiveness inside the domain of both perception and scientific knowledge! Ideas exemplify ground rules which are not formative in nature, i.e., they do not produce concepts that can be proven. Instead, Ideas regulate inventiveness, that is, their nature is heuristic. [... p 201] The great Ideas belong to the reason and thus outreach what is strictly empirically given[.]

In mathematics, prime examples are the concepts of zero and the infinite. A Marxist theory such as VOLOSHINOV expounds rests on the concept of social class. Still referring to KANT, VAN PEURSEN stresses that (p 201)

[t]he cohesion of Ideas does not occur by coincidence, as in their application to an arbitrary goal, but originates from an inner structure of interests.

The inner, subjective dimension of interpretation serving outer-directed interests has subsequently been more radically stated and developed by SCHOPENHAUER. For the behavioral theory of communication proposed in this treatise, I have therefore adopted SCHOPENHAUER's concept of the will. As for my overall method, all along I am especially conscious that (VAN PEURSEN, 1993, p 214, my translation)

there is a continuous tension between emphasis on a closed method of proof (ars iudicandi) on the one hand, and emphasis on the more adventurous ars inveniendi on the other.

Design problems of increased complexity and variety require for their solutions an approach, or method, with an increased variety to match. This simply follows from W.R. ASHBY'S Law of Requisite Variety (1956).

A design approach must itself be designed, too, of course. Aiming to secure the largest variety imaginable, *Semiosis & Sign Exchange* establishes conceptual ground(s) at the ontological level. With respect to what can be expressed by it, the modeling language that is explained and applied is actually a metalanguage. The Peircean assumption of triadic irreducibility – which is essential for proper understanding of my development; the semiotic triad is presented in detail in the next chapter – dictates that the metalanguage entails an ontology, or a metaphysics as it may also be called.⁶

My particular proposal illuminates conduct in postmodern life. Postmodernity is taken here as a label for the quality and quantity of variety which have not yet been generally achieved for design approaches. To the reader, still here at the beginning, I express my confidence that (s)he will discover value in a both compact and flexible conceptual toolset.

At the ontological level, conceptual shifts are essentially – and tautologically, actually – paradigmatic. The announcement of a different ontology is indeed supposed to sound ambitious. And to someone who cannot believe how the nature of an ontology is always 'just' instrumental, it must surely even be an incredulous claim. Its claim to scientific recognition will also be rejected by anyone who does not believe theoretical innovation at the axiomatic level to be science's business.

There are many obstacles for accomplishing a fundamental shift of referential frame. But, when successful, it is highly rewarding, too. I have conducted my research and design, and I report on its results in this treatise, because I recognize the need for an essential change of conceptual grounds. I hardly need to invoke to T.S. KUHN's famous *The Structure of Scientific Revolutions* (1962) to illustrate that a new paradigm is usually a response to an experienced crisis.

Referring to the distinction KUHN proposes, what I practice for this treatise is crisis science, rather than normal science. But then, even changes in metaphysics must be considered "normal," as H.A. MYERS (1906-1955) explains in *Systematic Pluralism: A Study in Metaphysics* (1961). Especially relevant for my own proposal is that his (p 9)

argument for choosing the road toward pluralism is based entirely on the necessities of knowledge in our own time, the only argument that should carry weight in theory of knowledge.

6. I do not follow the point of considering ontology any different from metaphysics,

vice versa. Or cosmology, for that matter.

Though I have remarked (see § 1.4) that multiplicity is a theme from classical thought, "necessities" such as MYERS recognizes have now increased to the extent that the knowledge climate is often labeled postmodern. He already states that (p 48)

[t]he most obvious quality of modern experience is that it yields many sciences, many thought-constructs, many systems, of one and the same object.

About metaphysics, MYERS argues that (p 56)

an important function [...] is to round off and complete, to harmonize and give a touch of finality to, human experience. Hence, the gaps which a system of metaphysics needs to fill in order that the individual may see life steadily and see it whole are determined by the shortcomings and the needs of the environment. A certain environment and certain needs in the world of action and emotion determine in some details the metaphysics which follows.

What follows here (still) resembles in many aspects what MYERS proposes. I believe, however, that as rigorous a metaphysics as possible for my "own time" should abolish his concept of knowledge as the impersonally communicable result (also read: shared meaning) developed from personal opinions. I believe knowledge is *only* personal. As N. MANSFIELD concludes in *Subjectivity* (2000, p 175):

[T]he subject attains an absolute intensity of significance.

1.7 the paradigm case of information modeling

It is called situationism, this ontology. For an obvious characteristic of postmodernity is the large variety of situations that an individual person experiences at any stage of life. Situations often vary widely during life's course, too. But some situations can be (more) pervasive.

An extended label for the ontology this treatise presents is that of subjective situationism. The added adjective of *subjective* reflects that the focus is on behavior of the *individual* person. Consequently, the focus is also on the essentially individual organization of knowledge about the world.

In no way does this focus detract from the observation that individual behavior occurs to a large extent in social settings. It should also not be taken as a denial, at all, that an individual is shaped by the exchanges with other individuals (nurture) he has been engaged in. With the emphasis on subjectivity I stress, for example, that an even richer theory than VOLOSHINOV's dialogism is possible by starting from an explanatory scheme that contains the individual as a structured participant in communication. Every individual, at any moment, is considered the unique 'result' of nature *and* nurture. Of course, a Marxist theory can hardly rest on such assumptions. Indeed, VOLOSHINOV does not succeed in providing a convincing argument for a privileged starting

point of a sociological nature when he criticizes (p 89):

Individualism is a special ideological form of the "we-experience" of the bourgeois class[...] It is a particular kind of interpretation, projected into the individual soul, of a complex and sustained socioeconomic situation.

Invoking "the individual soul" betrays a bias – and it must have been at an unspeakable personal suffering; STALIN and his regime persecuted several members of the Bakhtin Circle – other than what he publicly attempted to proclaim. Again, it only serves to confirm why I easily recognize my anatomy of meaning as an extension to the main tenets of his dialogical theory of language. Both theories feature the focus on participants in communication.

Another characteristic of postmodernity is every individual's exposure to, and responsibility for, what seems an ever increasing volume of artificially produced information. That is precisely why I find problems arising from a modernist-only ontology also clearly manifested through the involvement of individual persons with business information systems. For many specific and highly relevant interests are, as a matter of regular practice, often ignored or, even worse, actively opposed.

Do I have empirical proof for such judgments? No, for those are not hypotheses that I state and test in this treatise. Rather, I fully concentrate on the *design* for an ontology.

Nevertheless, I already firmly believe, and recommend it for that purpose, too, that subjective situationism offers a rich paradigm for conducting correspondingly different empirical research. As s. KÖRNER explains in *Conceptual Thinking: A Logical Inquiry* (1955, p 4)) about his own exposition, my design

is at least undertaken with an eye to certain empirical facts: for what lends interest to its definitions is that they are not empty, and the possibilities which will claim our attention are possibilities often realised.

I also recall how BOWKER and STAR (see § 1.4, above) relate pragmatic units of analysis to metaphysical observations. Again, framing hypotheses for such "pragmatic units," testing them, etcetera, all lie outside the scope, and depth, of my primary ontological development. In a similar way, many other statements should be taken especially as expressions of my inspiration to understand the postmodern world very much with the attitude of − what I believe is − classical philosophy.⁷

I specify my paradigm case for postmodern social activity even further as that of business information modeling. Currently, it certainly constitutes a new frontier in VAN PEURSEN'S (1993) general sense of chances and requirements for discovery and invention. Information modeling involves drawing

7. I therefore agree with A. KLUKHUHN (1989) who states that KANT and SCHOPEN-

HAUER can (now) be considered as postmoderns. up the predominantly conceptual design of (business) information systems. Especially when stakeholders are engaged in modeling, they have the best opportunity to secure their different interests. And they will have to use it for results. I clarify the conceptual grounds for respecting individual differences, and for thus even promoting responsible variety.

This view has admittedly taken considerable time to mature. A book that has been seminal for my theoretical development is De bedoeling van informatie voor mens en organisatie (1976) by G.C. NIELEN. My translation of its title is: The meaning of information to man and organization. I am hesitant, though, about the term of meaning. Another option is: The intention of man and organization with information. Anyway, I read it soon after it was published, and reread it many times in later years. I learn from it not so much the actual conceptual scheme NIELEN presents but value the power of a concise yet flexible set of concepts. And it is precisely the need for a dual interpretation of its title that I clear up in this treatise. What NIELEN still presents in a largely anecdotal fashion in the beginning paragraphs of his book – and he takes a similarly interesting course later in Van informatie tot informatiebeleid (1993) – is given here (much) extended, (more) formalized expression. At the same time, I limit formalization in its current academic sense of expression by symbolic logic as much as possible. Developing conceptual grounds should also be considered work-in-progress. The contemporary taste for formal expression I can contrast with one of the concise statements to be found in inspiring abundance in VOLOSHINOV's Marxism and the Philosophy of Language (1929, p 78):

Formalism and systematicity are the typical distinguishing marks of any kind of thinking focused on a ready-made and, so to speak, arrested object.

J. HINTIKKA (1996) expresses clearly how I also evaluate the role of formalization. I gladly borrow his pertinent statement (p x):

This work is a philosophical essay, and not a research paper or treatise in logic or mathematics. Even though I will try to explain all the main formal details that I need in this book, I will accordingly do so only in so far as they seem to be necessary for the purpose of understanding my overall line of thought.

GENDLIN, too, argues for limits of logic (1962, p 141):

We are employing the term "logical" to apply to uniquely symbolized concepts. A "logical relationship" is one that is entirely in terms of uniquely specified concepts. Whatever occurs in the creation, specification, or symbolization of concepts is obviously prior to their properties as finished products. Also prior is whatever must occur in the creation of the concept of a logical relationship itself.

My own experience is that formalization certainly can inspire new ideas. In "crisis science," that is precisely the powerful service it must provide. Formalization should support, not hinder. HAAS remarks (2000, p 150):

Logic is precisely not the exclusion of ambiguity: shallowness in science and superficiality in

philosophy mean omitting the difference of different terms, and then taking them as identical.

Indeed, unwarranted identity puts design at risk. I put forward a procedure for avoiding "ambiguity" when identity is seen as situationally disseminated. As in structuralism, by drawing attention to additional possibilities the imaginative exploration of – what has been designed as – a formal system can lead onto new ground. The paradox, especially of conceptual grounds as rationalized irrationalities, is that such grounds must always be 'moved' as dictated by the interests of the individual and of the (social) conduct he develops in their pursuit.

At this stage, a certain postmodern obscurity is still unavoidable. I am confident that my explanation, in Chapter 6, of SCHOPENHAUER's concept of the *will* provides adequate support. I also recommend a sympathetic understanding of D. BLOOR's (1976) strong program in the sociology of (scientific) knowledge. 8 It amounts to applying to a study of scientific knowledge (p 4)

8. I do not enter into a discussion of BLOOR's strong program. I completely agree with the antifundamentalist attitude toward scientific knowledge that he convincingly expresses. My conceptual designs essentially confirm his strong program and even contribute to a 'stronger' foundation for it.

While avoiding the terminology of strong program, it is also presented in Scientific Knowledge, A Sociological Analysis (1996) by B. BARNES, D. BLOOR and J. HENRY. An earlier critique of knowledge as (p 1) "best achieved by disinterested individuals, passively perceiving some aspect of reality, and generating verbal descriptions to respond to it" is given by B. BARNES in Interests and the Growth of Knowledge (1977). Instead, (p 2) "knowledge is [...] actively developed and modified in response to practical contingencies." Unknowingly almost echoing MYERS (1961), in Scientific knowledge and sociological theory BARNES observes (1974, pp 154-155): "[O]ne perspective can only be shown to be preferable to another in expedient terms, which means that the perspective adopted in this

volume is itself a contingent one. [...] It is indeed plausible to represent this work as very much the product of its time. Until recently, it has been difficult to write of scientific knowledge without either seeking to justify it or assuming it to be justified. In the last two decades, however, the study of natural science has undergone significant and parallel changes in a number of academic disciplines. In philosophy, traditional forms of empiricism and the idea of a neutral observation language are coming under attack, together with the orthodox deductivist accounts of science. [...] In all disciplines, there is a trend away from regarding science as the earthly embodiment of some Platonic universal; instead it is being treated more and more as a human activity like any other, or as a sub-culture routinely interacting with other areas of society." Of related interest is The Social Construction of Technological Systems: New Directions in the Sociology and History of Technology (1987) edited by W..E. BIJKER, T.P. HUGHES and T. PINCH. J. ZIMAN has published a whole series of books on

"the same values which are taken for granted in other disciplines." Explanations of knowledge should therefore involve "causality, impartiality, symmetry and reflexivity."

1.8 on a postmodern introduction

In the modernist, and mostly positivist, tradition of science a particular term is normally believed to carry a universally unequivocal meaning. The obvious place to supply such definitions of key concepts is clearly the introduction part of a treatise. Then, the main text is occupied with subsequently applying them.

The Introduction here is consistently different. For example what specialized terms mean, I leave undecided for now. For meaning itself is considered a highly problematic concept. It all depends. On the particular situation, of course. What adds to meaningful variety is that it is even subjective what counts as relevant situations.

In the course of this treatise, I remove the assumption of identical occurrence and universal validity in the knowledge of different persons. Such shared meaning is impossible. That is ultimately why any firm definitions are absent, here.

But is it acceptable to go against well-established modernist ontology? Echoing BOWKER and STAR (1999), maybe not yet, I fully grant at this stage. But it is precisely the purpose of this treatise to establish compliance with the proposed subjective situationism as a more productive ontology. The measure for productivity is also explained at a fundamental level. In any case, it is logically impossible to express a richer theory in terms of a poorer one. The necessary concepts and their relationships simply fail. It is equally fruitless to try and describe what n-dimensional space entails by applying less than n dimen-

social determinants of scientific processes and knowledge, from *Public Knowledge, the Social Dimension of Science* (1968) to *Real Science: What it is, and what it means* (2000). See also *Personal Knowledge* (1958) by MICHAEL POLANYI (1891-1976).

From such a sociology of scientific knowledge has developed an emphasis on science-as-practice. See *Science in Action: How to follow scientists and engineers through society* (1987) by B. LATOUR. See also *A Rhetoric of Science:*

Inventing Scientific Discourse (1989) by L.J. PREL-LI and Science as Practice and Culture (1992) edited by A. PICKERING. In Science as a Process (1988), D.L. HULL deals with very much the same themes.

M. SCHELER singles out metaphysics for a sociological treatment, even arguing that it is "notwendig *personhaft* gebunden" (my translation from the German reads: of an necessarily *individual* nature; see *Die Wissensformen und die Gesellschaft*, 1925, p 85).

sions, most likely even different dimensions at that. For a both entertaining and pertinent allegory I refer to *Flatland* (around 1885) by E.A. ABBOTT.

Throughout, indeed, attempts at defining terms for concepts are made. But I stress that they must be taken against the background of the ontology of situationism. So, in each case they must wait until I have sufficiently explained my proposal.

It leaves me with the dilemma of how to present that ontology for post-modernism, in the first place. No clear start seems available. Isn't this the very predicament that is known as postmodernity? It might be, but I hardly consider it a valid scientific exposition. Yet, I do not try to solve this problem of transition, for it simply cannot be positively solved. Again, VOLOSHINOV experiences the same difficulties. No, that is the wrong (also read: unproductive) concept. They are not difficulties but normal characteristics of the position of the theorist (1929, p 45):

We do not, of course, have in mind anything like a conclusive definition of these concepts. Such a definition (insofar as any scientific definition may be called conclusive) might come at the end of a study, but not at its beginning. When beginning an investigation, one needs to construct methodological guidelines, not definitions. [...] At he outset of an investigation, it is not so much the intellectual faculty for making formulas and definitions that leads the way, but rather it is the eyes and hands attempting to get the feel of the actual presence of the subject matter.

It is a vivid expression of the ars inveniendi that VAN PEURSEN (1993) so forcefully brings to the attention as an integral aspect of viable science. As I cover similar ground as VOLOSHINOV does, his subsequent warning is especially apt at the start of this treatise (p 46):

With each attempt to delimit the object of investigation, to reduce it to a compact subjectmatter complex of definitive and inspectable dimensions, we forfeit the very essence of the thing we are studying-its semiotic and ideological nature.

But of course I attempt to guide the reader. I do so through my composition of this treatise, especially of Part i. As many concepts as possible are still familiar. Or they could be, anyway. In fact, all essential ingredients have already been prepared long ago, most notably by ARTHUR SCHOPENHAUER (1788-1860) and CHARLES S. PEIRCE (1839-1914). I continue to quote extensively from VOLOSHINOV (1895-1936), mostly in strong agreement with his positions.

I add formal depth to PEIRCE's model of sign use dynamics. I put emphasis on differences between an object's behaviors depending on its various situations. Basically, through combination, it amounts to a long-overdue rehabilitation of SCHOPENHAUER's metaphysics of will (also read: interests) and interpretants, which is now fitted with explicitly semiotic aspects, and is updated for the variety of postmodern life.

The most logical place to meet SCHOPENHAUER, the uncontested hero of my essay, would have been right at the start. However, I believe the resulting shock would likely alienate the reader. SCHOPENHAUER therefore comes last in Part i. A more gentle opening offers my commentary on PEIRCE, and the beginnings of developing his basic model of semiosis.

The design emphasis of this treatise should once more help to understand that I do not aim to give an exhaustive, traditionally academic, treatment of theories such as 'designed' by great thinkers as SCHOPENHAUER and PEIRCE. Rather, I look for, and find, inspiration to develop my own theoretical design. Beyond what I consider to be an inspiration for further innovation, I don't feel obliged to venture. My sources of inspiration are of course properly accounted for. It explains why large parts of the text will read, figuratively speaking, like my laboratory notebooks, containing as they do a direct report of the progress of the design process.

I realize that what I consider a necessarily responsible design attitude will remain unappreciated by scientists of a more traditional b(l)end, i.e., persons favoring justification over discovery and invention. A completely one-sided attitude reflecting justification (also read: analysis) even leads to exclusion of discovery and invention (see VAN PEURSEN, 1993). However, I do not compromise the integrity of my ontological design, and of the way to present it. I accept the difficulties that a change of paradigm inevitably encounters. As in this case, especially, the emphasis is on interdisciplinary synthesis. Strictly parochial interests are ill-served and likely to suffer. I only repeat that I do not pretend in-depth specialization in any related discipline. What I try to reach is a general view to provide sufficient depth for (more) integrated design in the face of problems of ever increasing variety. It will certainly not meet the standards of many of today's highly specialized philosophers, linguists, etcetera. What I say to those objections is that, seen from an inverse perspective, their own works so far do not seem to adequately support - actual and future requirements of the theory and practice of – information modeling in situations of extended variety. An attempt from an essentially different orientation is required. Being qualitatively different, it is necessarily ambitious. Innovative conceptual grounds must be broad, generally speaking, while providing opportunities for specialization in the aspect of information modeling. I therefore emphasize the interdisciplinary nature of my efforts. A restricted, unidisciplinary evaluation and judgment (also read: interpretation) will miss the point. I hope my interdisciplinary design is acknowledged, not as the final result, but as a constructive step. It can always be only intermediary in the continued development of conceptual grounds.

For planning future steps, throughout this treatise (but see especially § 3.4 with attending notes) I include references to – what I recognize as – related

developments. I view it as a starting inventory. Again, as it is impossible to achieve I also do not try to keep up pretenses at exhaustiveness. The interdisciplinary approach should be clear enough through the references across a broad range.

Academic disciplines operate predominantly in isolated modes. Conceptual grounds for interdisciplinary work will do much to enable synthesis of theories developed from different perspectives. Where differences are valid for conduct, they should of course remain. Other differences only needlessly complicate theoretical and practical matters. Those should be eliminated across disciplines as much as possible.

1.9 reorientation against extrapolation

The treatment of my subject matter follows to a large extent from my critical attitude toward modernism. I understand modernism as a mechanism of one-dimensional extrapolation. More of the same is better, captures its characteristic approach. On the side of planned change, it is dominated by the desire for quantitative development. When something is valued as good, then more of it surely must be better, etcetera.

What modernists usually fail to take into account is that more added to more, etcetera, eventually ends up as too much. The original problem is not solved, but gets out of control. There is irrevocably some point beyond which quantitative changes also have noticeable qualitative effects. Admittedly, any such unforeseen effects could be for the better. But often enough, they are not. With the next (re)action regretfully styled in modernist fashion, too, usually wide oscillations result. (Again, I point out that no empirical proof for judgments like these is forthcoming. I state my – interpretation of my – own experience to indicate what inspired me doing ontological work.)

I also attribute this modernist nature to most of the theoretical work that I know of in information systems. For example, of what use is yet another isolated case study? Especially when earlier work has not been more than superficially valued, what uncritically builds upon it can never reach productive depth, too. Soon enough, this exhausts a particular approach, only to be replaced by the next fashion in research.

The paradox of postmodernity is that its variety makes conceptual tools for synthesis all that more important. For each and every different situation never escapes the overall unity of reality and the continuity of the person living it. It

^{9.} A correlation with aspects of personality development of scientists is what B.T. EIDU-

certainly is valuable to open the possibility of analysis at the more detailed level of separate situations. To avoid the extrapolation of modernism, however, such analysis must always be augmented by synthesis. In other respects, situations are related, too.

There is now a waste of both effort and orientation. The modernist attitude dictates to completely give up one theoretical approach, and take up the next, almost without profiting from earlier results. It is the effort of apparently unpopular integration at the level of fundamental concepts that I undertake here. I don't mind when the essential 'novelty' of my contribution is evaluated as only comprising a reorientation toward the classical ideal of conceptual unity. For a postmodern age the paradox dissolves through an integration of the concept of unity *and* that of difference. An ontology with requisite variety will support multidisciplinary cooperation. Different disciplines can continue to make unique contributions without continuously changing their fundamental approach, or what is mistaken for it.

As I have already mentioned, the ontology of subjective situationism is actually a configuration of ingredients of mostly respectable age. I also critically investigate ingredients from studies on meaning and communication that are often applied in modern research on information systems, and discard most of them. For example, none of their producers has apparently been aware of VOLOSHINOV's dialogical theory. With that particular theory, for all of them except HABERMAS that is hardly surprising. For its translation from the Russian first appeared in English in 1973, that is, after the publications by AUSTIN, SEARLE and MEAD that are reviewed here. But even later there still does not seem to be a place for dialogism, or for whatever relationally oriented approach, in mainstream theory. My point here is that I myself really only stumbled upon it, not so much by pure accident, but still without any positive lead and at a stage of the manuscript where I thought it was finished (see note 29 in Chapter 3). But now that I do know about it, I want to stimulate a deserved interest in dialogism and in other richer-than-mainstream theories such as significs (MANNOURY, 1925, 1947, 1948, 1949), and by extension in the conceptual grounds that I present in this treatise.

That VOLOSHINOV mainly appears as commentator here in support of my own, already developed proposal for, conceptual grounds is the result of my late discovery of *Marxism and the Philosophy of Language*. Thus, such additions actually illustrate once again that the emphasis in this treatise lies on my constructive development of a design, i.e., on innovation, rather than on comments, critical or otherwise.

I apologize that my composition may have suffered from reworking the text even at the final stage but I definitely wanted to include his voice. ¹⁰ It is of much more than historical value. For references to VOLOSHINOV, and to many

others, for that matter, should also draw additional attention to the limitations of theories of language and meaning currently popular in academics and often influential in professional development.

1.10 part i: deconstruction of shared meaning

The direction of my interests in meaning took on a more specific shape when I read *Group Decision Support Systems, an inquiry into theoretical and philosophical issues* (1991) by W.J. SCHEPER. In its first half, SCHEPER applies the premise that different persons can have so-called shared, or identical, meaning. It is then more of a problem how to establish it. And for the solution of so-called messy problems – which is what group decision support systems might come in useful for – it is highly desirable that their shared meaning is developed. So, shared meaning is good, more shared meaning is better.

SCHEPER does much to redress his earlier modernist bias in the second half of his book. But that was after his text had already inspired me to treat the particular issue of shared meaning in a qualitative manner, rather than quantitatively. At that time, my ideas were that the degree of identical meaning has an optimum that is dependent on several variables. And the measure for the optimal set of shared meaning would not so much be what is actually shared but, on the contrary, what is *not* shared. Then, I already supposed that participants contribute most effectively and efficiently to a joint effort when they *complement* each other.

In search of relevant variables, I thought it nevertheless wise to stick to my original schedule for my own first half of research and its publication. It consisted of three strands that I wanted to integrate. The first is that of semiotics. Inspired long ago by R. STAMPER's pioneering *Information in Business and Administrative Systems* (1973), and based on further readings in structuralism, especially, I had discovered the value of semiotics for studies in information systems. That is documented in my book *Aspecten en Fasen* (1991). For this treatise, and in the spirit of ars inveniendi (VAN PEURSEN, 1993), I choose to con-

10. A discovery at an even later stage has been G. MANNOURY's *Handbook der Analytische Signifika* (1947 and 1948). See also note 3 in Chapter 9. The concept of significs, especially as developed by the Significs Movement in the Netherlands during the 1920s, appears to have many grounds in common with subjective situationism. What is especially lacking in

significs, though, is the *radical* orientation at the Schopenhauerean concept of the will (see Chapter 6) underlying subjective situationism.

The Bakhtin Circle of which VOLOSHINOV was a member, was active at about the same time as the Significs Movement in which MANNOURY was engaged.

centrate as much as possible on primary sources. That is why I include work by PEIRCE. The results are reported in Chapter 2.

Some additional remarks are in order about my sources. I cannot escape the impression that much of what is considered science is a largely self-contained process of academic secondary literature. I do not doubt its value for other purposes. But usually a reference just includes a name plus year of publication. It does not allow me to get an idea of what an author's particular position toward a reference is. And this is what is really needed for the design aspect of science. So, I then read it for myself. This is exactly what I have done for this treatise. I have read in-depth several sources that I find are taken for granted too much for modern theories of information modeling. The results are often surprising. I find myself contradicting what secondary literature on the same sources usually only indirectly contains, that is, without explicit regard for conceptual grounds.

Again, I admit to not at all having consulted secondary literature to exhaustion. But who can still claim s/he does? And as I have already indicated, the aim of this treatise is not an attempt at an authorative review of secondary literature in whatever specific discipline, thereby adding to the stock of secondary sources. My purpose is to create a theory-as-design. I believe the best place to look for inspiration is in earlier primary sources. In the cases of both SCHOPENHAUER and PEIRCE, I find my choice fruitfully confirmed. Of course, by commenting on their work, and on the works of several other thinkers, I create a secondary source, too. However, I derive my opinion as directly as possible from the primary sources. I acknowledge that my procedure does not prevent me from possibly repeating opinions, i.e., duplicating earlier interpretations of primary sources. I am partly comforted, however, by the realization that is has currently become practically impossible to establish complete overview in any discipline, anyway. It is therefore only logical that I abstain from even any attempt at interdisciplinary overview. Rather, I scan related sources and by way of making a preliminary inventory report on those that I find relevant. The absence of extended discussion with other secondary sources is as much, as I am fully aware, an affront to traditional science as it is, as I am fully convinced, too, a necessary limitation for arriving at the change of paradigm attempted here. An exception, actually, is the work of PEIRCE. I believe it has been severely misrepresented in several of the publications that I studied as a primary source, especially by ECO. Such contradictions I also report. However, I do so completely without the ambition for recognition of myself as a Peircean scholar. I only test an inventory of 'materials' for their soundness for inclusion in my design. What during tests prematurely breaks under realistic strain must be discarded, as every responsible engineer knows.

Returning to an introduction of the three strands that I set out to integrate,

after mentioning an interest in semiotics as the first one I continue with the second. This second strand I had already fully developed. The modeling approach that attributes different behaviors to a particular object, with each behavior determined by a particular situation, is documented in a part of *Informatiekundige ontwerpleer* (WISSE, 1999) and, extensively, in *Metapattern: context and time in information models* (WISSE, 2001). The last-mentioned book is composed (p xiii) "of five parts, each focused on explaining a specific hypothesis." Those hypotheses are (pp xiii-xiv):

- [(1) T]he recognition of multiple contexts results in a powerful approach to conceptual information modeling. By paying consistent attention to the aspect of time, the approach [called metapattern] is augmented even further.
- [...(2)] The metapattern is richer than purely object-oriented approaches to information modeling.
- [... (3) T]he metapattern offers a frame of reference for understanding and analyzing a variety of specific patterns.
- [... (4) T]he metapattern is eminently suitable for designing innovative patterns[, illustrated with a design case study] for financial accounting systems.
- [... (5) T]he metapattern helps increase uniformity in the structure for information systems, while simultaneously enabling the systems' pluriform behavior.

Chapter 3 of this treatise may be seen as the formulation of the ontology underlying the metapattern approach to conceptual information modeling. The metapattern technique is here summarized in Chapter 4. Its integration with my research on PEIRCE has proven fruitful. Whereas PEIRCE expresses dynamics of sign use by an irreducible triad of concepts, I progress the model of semiosis to an ennead. So, instead of his three concepts, I distinguish nine. The original three triadic elements of PEIRCE remain intact, but reappear as dimensions along each of which three more finely-grained concepts are positioned. At that stage of my research I really thought that I was well on my way to discovering relevant variables for explaining shared meaning in relevant detail.

Chapter 5 describes a study that I had originally planned for developing the semiotic perspective. What I hoped to discover were useful contributions to a constructive revision of the concept of shared meaning. Upon closer inspection, however, with *A Theory of Semiotics* (1976) ECO departs from PEIRCE's fundamental semiotic concept. He violates the *irreducibility* of the triadic relationship between sign, object and interpretant. ECO reduces the triad to a dyad. As this reduction characterizes much of modern semiotics and, as such, bears a limiting influence on theories of information modeling, knowledge representation, etcetera, a critique is warranted. I have therefore retained Chapter 5. Where applicable, I call my own conceptual scheme as it develops in Chapters 2 up to 4 into the service of criticism. In addition, a critique of

ECO's semiotic theory provides me with the opportunity to introduce some of the surprisingly balanced and important ideas of DE SAUSSURE (1857-1913), a pioneer in linguistics. I also quote from VOLOSHINOV as an illuminating critic of ECO's semiotics, in his case avant la lettre.

The study of SCHOPENHAUER was planned, and executed, as the third strand of Part i. It entails the coup the grace for any naive concept of shared meaning. My *Informatiekundige ontwerpleer* (1999) already squarely rests on the assumption of subjectivity of all knowledge. But I need SCHOPENHAUER to make the radical consequences of transcendental idealism crystal-clear. What I was originally looking for in his work were directions on different orientations of participants in whatever activity they jointly undertake. That would support a case of complementary efforts. What I come away with from SCHOPENHAUER's epistemology, however, is that differences between individuals are not only more characteristic, as I already thought, but even essential. The productive start of a behavioral theory is the assumption that there are nothing but differences between behaviors. As a consequence, shared meaning is a counterproductive concept.

1.11 part ii: compliance through exchange

All in all, Part i of this treatise has kept the structure I originally planned for it. I place emphasis on the individual sign user, first. That choice ends up even more relevant than I thought. As far as sign use, or semiosis, is concerned there *is* only the individual sign user.

What then, happens between sign users? Based on what I find is the surprising but inescapable outcome of Part i, in Chapters 7 and 8 of Part ii my corresponding theory of meaning is sketched. I call it an anatomy of meaning, for it only outlines a structure. From the anatomy's perspective, VOLOSHINOV's dialogical theory can clearly be recognized as closely related but lacking the psychological emphasis for added variety.

Freed from traditions holding that meanings exist exterior to, and thus are shareable by, participants in communications, my anatomy of meaning is strictly individualistic. Of course, as an exchange must be consummated, in an equally important sense my anatomy of meaning is through-and-through sociological, too. But what is invested in a sign as intended cause, *at that particular moment* all depends on the individual who produces the sign. And the particular effect it evokes *at that particular moment* all depends on the individual who acts as the sign's observer. It is a psychology of momentary behavior in an actual exchange *and* a sociology of the development of behavioral potential through exchanges.

I repeat that it is especially SCHOPENHAUER's conceptual scheme that spurs my radically intrapsychological assumptions. I simply apply the most fundamental of all his concepts. That is the will or, in the plural, are the interests. The will, or interests, of an individual person is prior to his intellect. In fact, his intellect is (only) instrumental to his (primary) interests. It aids an individual in his actions but, as SCHOPENHAUER remarks, not always with beneficial results. By definition, every individual acts in – search of – fulfillment of his interests.

An action may be carried out in – any configuration of – three different modes of causation, SCHOPENHAUER also informs. One of these modes seeks to elicit motivationally induced responses. It fits the nature of signs, or information, perfectly. It follows that one person will offer a sign in his exchange with another person for the purpose of gaining compliance with his own interests through the (re)action of the other person. All communication may be classified under this single approach. For even a so-called objective account directed at other is nothing but an attempt to convince the other about self's necessarily subjective idea of reality.

Chapters 9 up to 12 contain my discussion of publications by AUSTIN, SEAR-LE, MEAD, and HABERMAS, respectively. As with ECO, it turns out that their theories of meaning are all qualitatively different from the anatomy that I propose. They all presume, one way or another, shared meaning. As VOLOSHINOV calls it, they are committed to abstract objectivism. I apply my own newlyfound perspective, and that of dialogical theory, for critical appraisals of their works. It helps to uncover several premature contradictions which should be taken as an indication that concepts from monological speech act theory (AUSTIN, SEARLE) and the theory of communicative action (HABERMAS) must not be uncritically applied in the theory and practice of business information modeling.

The sequence of Chapters 9 through 12 results from the research orientation to offer comments on HABERMAS. He builds his own ideas on those of many others among whom I found AUSTIN and SEARLE on speech act theory, and MEAD on social psychology especially relevant as introductions to the theory of communicative action HABERMAS designed. The choice of treating AUSTIN (Chapter 9) before MEAD (Chapter 11) has admittedly been arbitrary. SEARLE (Chapter 10) who mainly elaborates speech act theory, however, needs to immediately follow AUSTIN. Directly or indirectly, these four authors have inspired the language action paradigm of information modeling. ¹¹ I have

11. Language action theory may be considered a branch of action theory and/or the philosophy of action. Limiting myself to—

what I recognize as primary texts on the principles of – *language* action theory as relevant for conceptual information modeling, I have

tried to discriminate between sense and nonsense in their conceptual schemes. Especially where my comments have turned out predominantly critical, they should aid in understanding – shortcomings of – of the language action view of information systems.¹²

The critical Chapters (nrs 5, 9, 10, 11, and 12) take up a large proportion of space while hardly contributing to the constructive development of my theory of semiosis & sign exchange. However, I decided against shortening them, moving them to an appendix, or even leaving them out altogether. I retain them in the main text. They serve the literally critical purpose of removing obstacles to more productive conceptual grounds of business information modeling. And the reader who does not need convincing can always skip those chapters. Then again, I especially consider the five critical chapters an incentive to consult primary sources¹³ in detail. VAN PEURSEN, outlining ars inveniendi according to E.W. VON TSCHIRNHAUS (1651-1708), mentions that (1993, pp 123-124, my translation from the Dutch)

the most important characteristic of [his] method of invention is that everybody must do it for himself, not by repeating what others have taught or said.

The irony of especially this quote from a secondary source should not be lost on the reader. There is a practical limit to consulting primary sources. For example, I did not proceed to read VON TSCHIRNHAUS in the original.

The publications of the authors featured in the critical chapters extend their

not explored extensively the wider field. Like language action theory, analytically oriented theorists occupy the field of action theory, with often an ensuing estrangement through emphasis on logical formalization. An overview of the more general action theory provide, for example, M. BRAND (editor) in The Nature of Human Action (1970) and H. LENK (editor) in Handlungstheorien interdisziplinär: Handlungserklärungen und philosophische Handlungsinterpretation II (two volumes, 1978 and 1979). A key assumption of such action theory is a rational concept of the will, or volition. It is therefore opposite to the Schopenhauerean concept I adopt, especially in Part ii on the anatomy of meaning, as a ground for my ontological design.

12. In the Netherlands, J. DIETZ (1992, 1996)

incorporates the language action view into a modeling approach.

13. The difference between primary and secondary sources is usually not clear. I suggest to consider a source primary when its author is mainly occupied with attempts at original theorizing, regardless of his degree of success. A secondary source, then, entails mainly comments (upon primary sources or upon other, earlier, secondary sources). According to this criterion, large portions of especially the work of HABERMAS are secondary in nature. He presents his own theory of communicative action, so to speak, in between commentary. Likewise, here I develop subjective situationism while constructively applying and deconstructively criticizing concepts from other sources.

influence to the theory and practice of information systems. Such critical evaluation was not at all planned at the outset of my research. It grew out of my curiousness for primary sources. What they say differs much from my expectations. However I find it does not matter scientifically it has turned out differently. Regardless, my results should be reported. As critical inquiries they are at this stage, I believe, necessary – and as far as I can judge, original – to remove obstacles for development of (more) productive conceptual grounds of business information modeling. I am aware that this goes against the preference of much of current academic practice, favoring increasing formalization through successive secondary sources. But with exclusive attention for continued formalization, innovation of a qualitative nature effectively stagnates (VOLOSHINOV, 1929, p 78):

Characteristically, what undergoes systematization is usually (if not exclusively) someone else's thought. True creators-the initiators of new ideological trends-are never formalistic systematizers.

My aim is to strike a balance. I develop some formalization, especially in visualization technique. I stop at the degree that I judge necessary and sufficient for the method of trial & error in proposing an "ideological trend" oriented at information modeling. Conceptual grounds and ideological trend – and paradigm, for that matter – are synonymous. To a similar degree I ground my criticism in order to prevent some other theories from being effective in my own design.

Chapter 13 stands somewhat apart. It shows how the theoretical designs may put to practical uses. From the earlier paragraphs in this Introduction it should already be clear that the emphasis of this treatise is theoretical. I therefore limit myself to examples. These are suggestions for applying the ontology/metaphysics of subjective situationism, including the anatomy of meaning whereby every sign is a request for compliance, to – some aspects of – business information modeling.

An appendix introduces KnitbITs[®]. It concerns software, currently at prototype stage, derived from the metapattern technique and to be applied for developing information systems with full variety in situations and time. It is an indication of a proof-of-concept, i.e., confirmation that the design of this treatise actually results in improved practical information systems.

1.12 an additional note on method

Up to this point I have already, throughout this introductory chapter, explained how I conduct my research and design. That *includes* explanation on how I report the theory of subjective situationism here in a manner that is

consistent with it. An additional note should help to clarify my 'reflexive method' even further.

I like to think that my method for conducting ontological research fits the classical tradition of the philosophical essay. The next chapter, on PEIRCE, shows that with sufficient "cognitive mass," even a limited supply of additional signs can fire a host of intellectual activity. The theoretical development continues in a similar vein throughout this treatise. It is the *scientific method* of the essayist to build a conceptual system through a process of writing trials (discovery and invention), evaluating them (justification), learning from errors, etcetera. It has an essential design orientation. Every sign that is produced in the process may set new dynamics of interpretation in action. It is actually all semiosis, but on a larger scale than is usually attributed to it.

I am fully aware that a confession to essay-as-method goes against the current grain in many academic circles. That used to be different, though, until approximately the beginning of the nineteenth century. Nowadays, a return is already accepted in other circles under the influence of, for example, JACQUES DERRIDA (1930-) and his deconstructivist approach to meaning. A major theme of his work is interpretive play between identity and difference (DERRIDA, 1967) which is precisely what subjective situationism sets out to conceptualize clearly.

How most finished treatises, by departing from an essayist track, are caricatures of the processes of their creation is acknowledged – with currently unconventional and admirable honesty, I would say – by S.J. GOULD in *Ontogeny and Phylogeny* (1977, p vii):

Although the result is, I trust, tolerably ordered, this book arose in a haphazard way. Its genesis and execution were probably typical of most general treatises. We rarely separate the logical and the psychological aspects of research and we tend to impute the order of a finished product to the process of its creation. After all, the abandoned outlines and unused cards are

14. The lemma *Derrida, Jacques* in *The New Encyclopædia Britannica* (15th edition, 1990, Volume 4, p 26) provides a condensed yet clear introduction: "Derrida's thought is based on his disapproval of the search for some ultimate metaphysical certainty or source of meaning that has characterized most Western philosophy. In his works he offers a way of reading philosophic texts, called 'deconstruction,' which enables him to make explicit the metaphysical suppositions and a priori assumptions used even by those

philosophers who are the most deeply critical of metaphysics." For this reason, DERRIDA's work is criticized for being only critical, not constructive. I value deconstruction as an often all too necessary prelude to construction; it is therefore definitely constitutive of construction. See quotations taken from MYERS (1961) throughout this treatise, and my own subjective situationism, of course, for concepts of metaphysics that avoid the elusive search for "ultimate metaphysical certainty."

in the wastebasket and the false starts are permanently erased from memory. It is for this reason that P.B. Medawar once termed the scientific paper a "fraud"; for it reflects so falsely the process of its generation and fosters the myth of rational procedure according to initial outlines rigidly (and brilliantly) conceived.

In the current treatise, the logical and psychological even coincide. The order and structure of semiosis is therefore optimal for presenting its result. To do otherwise would indeed amount to committing a fraud.

What GOULD leaves out is the distinction between science on the one hand, and academic institution on the other. In my view it is similar to the difference between religion and church. My interests are scientific and professional, rather than academic. A viable science attempts new, more encompassing ways of understanding. No justification will ever have any ground without discovery and innovation first establishing it. When academic institutions continue their bias toward evaluation and specialist formalization, they do not foster scientific innovation but conservation and inevitable decline.

When the essayist approach is considered unscientific by academic standards, I can only remark that the works I have reviewed, from PEIRCE to HABERMAS, should all be judged equally unscientific. For their authors are similarly involved – with in my opinion varying degrees of success, but that is besides the current argument – in theoretical innovation. Or, are they innovative designers without exception? An observation worth considering here is that the 'heroes' of this treatise, SCHOPENHAUER and PEIRCE, only received academic recognition long after producing their groundbreaking works. And their radical innovations are often still not properly studied and understood through academic evaluation. The same can be said about VOLOSHINOV. In contrast, the established academics MEAD, ECO, AUSTIN, SEARLE, and even HABERMAS will be seen to have fostered conservative theories while proclaiming original status for them.

Conducting my own trials, etcetera, I often return to even my most fundamental layer, that is, to axioms. When I can profitably make modifications I do so, even where it means rebuilding all that needs to rest on it. As I have already indicated, the last major revision before declaring this treatise finished was weaving in the perspective of dialogical theory as I learned it from VOLOSHINOV's Marxism and the Philosophy of Language. Finally, I am myself assured that the conceptual grounds as I present them here responsibly support the postmodern variety of individual life.

Regretfully, in many scientific disciplines it has become irregular to report on research in first-person singular form. Again it is helpful to consider that the authors reviewed here have no qualms about performing their discourse on fundamental concepts as a subjective genre. But of course, the favored impersonal style of – much of the rest of – modern academic science reflects

its particular ontology, that is, naive realism. My return to the classical essay, with the author explicitly standing for subjective opinions, is also designed to stress fundamental characteristics of *subjective* situationism. I point out once again that I designed the style of this treatise to be consistent with the ontology it presents. Another reason why VAN PEURSEN identifies VON TSCHIRNHAUS as a key figure in the history of philosophy illustrates my choice of repositioning fundamental concepts together in a triadic system of dimensions. Elsewhere such concepts are mostly considered disjunct. VAN PEURSEN argues that VON TSCHIRNHAUS inaugurates (1993, p 134, my translation from the Dutch) "a transition from ontology to epistemology, precisely as access to ontology." In *Experiencing and the Creation of Meaning: A Philosophical and Psychological Approach to the Subjective*, E.T. GENDLIN remarks on "psychotherapy and related fields" (1962, p 49):

There is widespread dissatisfaction with the present method's inadequacy in dealing with subjectivity, but subjectivity itself is not yet being employed as a reference of scientific concepts.

How I explain my personal writing in *Informatiekundige ontwerpleer* should help to clarify my design choice for this treatise, too (1999, p 11, here translated from the Dutch):

I emphasize that the text does not provide a linear report of completed research. And I did not practice empirical, positivist science in the sense of, especially, replicable experiments. Instead, [...] I give special attention to the individual intellect. This subjectivistic approach entails, by definition, that experiments by the intellect are irreplicable. It follows because the intellect is instrumental in both developing and executing the experiments on itself. Therefore, as part of every experiment – I might call it a process of thought that is consciously experienced, or is not – its very instrument changes, too. It is this assumption that destroys the ground for replication.

It definitely is a view of science that departs from objectivist canon.¹⁵ It is precisely for this reason that I believe it holds promise for addressing the vital question of information system and their stakeholders' success.

15. For psychology, S.S. RAKOVER devotes a large part of *Metapsychology: Missing Links in Behavior, Mind and Science* (1990) to the "enduring problem" that elimination from scientific concerns of "private behavior" presents. J. RUESCH observes in *Disturbed Communication* that (1957, p 189) "[t]he communication engineers define successful communication engineers define successful com-

munication as the establishment of identical information in sender and receiver. In the study of human communication, this criterion cannot be applied because neither participant nor observer can ascertain whether the statement of the first person has been completely understood by the second person."

part i

INDIVIDUAL SIGN USER

prelude 2

Designing an ontology for conceptual information modeling, what is a promising start? Does a science of information exist? If so, (al) ready-made building blocks for constructing my particular grounds might be discovered. There are even several disciplines referring to information as their core concept, ranging from signal transmission to library services. Upon cursory inspection it already perspires that such concepts of information are usually each quite limited. There certainly are no common grounds underlying them relevant for directing attention during conceptual information modeling.

One discipline claims a *general* orientation. It is semiotics. Since modern semioticians without exception mention PEIRCE as a primary source of inspiration, it is with his work that I make a start.

Frankly, I did not study all that much of the mass of texts that PEIRCE has written. Chapter 2 can even be seen as the result of my reflection upon a single sentence by PEIRCE. His targeted sentence establishes that information taken separately is not the core concept. Of course PEIRCE does not use information in his terminology. Sign is the label for one of his general concepts. In other words, a sign in isolation is not fundamental. Of key significance is the dynamic relationship holding between sign, object and interpretant. PEIRCE emphasizes that their relationship is irreducible. As three elements are involved, the core concept of Peircean semiotics is the triad.

The semiotic triad, however, does not exhaustively explain the sentence I have been studying so intensely. Indirectly, it also refers to a ground. How I handle the ambiguity PEIRCE leaves with respect to his concept of ground is where I definitely part company with established Peircean scholarship. I may add, probably before even joining it. For I am not pursuing interpretations of what PEIRCE himself, supposing that he did, might have meant by ground. Anyone who believes I make valuable suggestions on interpreting PEIRCE is of

course most welcome to do so. However, my express aim for studying PEIRCE is to collect and develop valuable materials for an ontology for conceptual information modeling.

My development beyond – or astray from, it does not matter – PEIRCE leads from his triad to a semiotic hexad. Guided by his original three elements I propose a characteristic ground for each of them. It is definitely not yet a finished ontology, but already shows promise for further development. I like to compare it with analytical geometry. With six non-overlapping formal axes, rather than three, an ontology offers opportunities for a proportionally higher resolution in perception and interpretation.

In Chapter 3, the hexadic elements are applied for a description of reality's assumed structure in objectified terms while attempting to honor the hexad's irreducibility.

chapter 2

DEVELOPING THE GROUND OF PEIRCE

The label of semiosis should immediately draw attention to the dynamic and systemic nature of sign use. Semiosis, or sign use, is always a process. It is, as CHARLES S. PEIRCE (1839-1914) describes it, "the action of the sign." And in addition to signs, use processes involve other constituents into a characteristic *irreducibility* of semiosis. It is (1906, 282)¹

an action, or influence, which is, or involves, a coöperation of *three* subjects, such as a sign, its object, and its interpretant, this tri-relative influence not being in any way resolvable into actions between pairs.

PEIRCE explains his theory of signs in Logic as semiotic.² It has been especially

- 1. This quotation is taken from *Philosophical mritings of Peirce* (1955, selected and edited by J. BUCHLER), in particular from PEIRCE's essay *Pragmatism in retrospect: a last formulation* (pp 269-289). The reference in the main text consists of the year at which the original manuscript is dated, which is 1906, together with the page number from BUCHLER's collection of PEIRCE's essays.
- 2. In: *Philosophical writings of Peirce* (1955, pp 98-119, selected and edited by BUCHLER). Quotations are taken here from Part I of *Logic as semiotic*, which part was compiled by BUCHLER as consisting of three selections. The first selection is dated at PEIRCE's manuscripts of 1897, the second mainly at

1902, and the third at 1910. Again (see note 1, above), it is these latter dates, rather than the publication date of BUCHLER's collection, that I mention for quotations. Page numbers, though, are from the collection of 1955.

PEIRCE's preferred terminology was "semiotic" rather than semiotics. I therefore use his singular form wherever I refer directly to his work. In all other cases, I resort to the nowadays common plural form, i.e., semiotics.

That semiotic is called a *logic* should be understood in its proper historical perspective. It is only later, through the work of especially GOTTLOB FREGE (1848-1925) and BERTRAND RUSSELL (1872-1970), that logic acquires a more restricted, modern, mathe-

matical meaning. Earlier logicians study, and try to formalize, the procedures of human thinking. It is in this sense, too, that HANS VAIHINGER'S *Die Philosophie des Als-Ob* (1911) may be read as a compendium of such traditional logic. However, such deeply human (also read: individual) logic is not only traditional for it is a prime characteristic of postmodernism.

I find the modern idea of scientific logic exemplified by Handbook of Logic & Language (1997) edited by J. VAN BENTHEM and A. TER MEULEN. It aims to provide an overview of mathematical treatments of language. As such, it certainly is a rich and valuable sourcebook. It clearly shows the increase in formalization, often undertaken under the heading of cognitive science in pursuit of so-called artificial intelligence. As a modern discipline, logic is now inaccessible for any nonspecialist (as I am, for sure). What I do recognize from – and please note the order in which logic and language appear in its title -Handbook of Logic & Language is that a formidable apparatus is developed by its contributors from, and subsequently applied at, sentences of a strictly propositional nature. See also Vagueness: A Reader (1996) edited by R. KEEFE and P. SMITH.

Especially from my experience of raising children I wish to remark that language is really *never* practically used for expressions as those theoretical examples suggest. I therefore have the strong impression that 'as a rule' unproductive (research) questions are addressed in logic in its highly specialized, modern form. As ROMMETVEIT remarks (1974, p.5): "[A] rapidly increasing number of scholars have become engaged in an increasingly complicated and formalistic exegis of sentences *in vacuo*. A major proportion of the

latter are made up by the linguist or the psycholinguist in his armchair, the most queer ones very often for the purpose of settling some internal controversy with respect to parsimony of formal representation and/or options of axiomatization." E. GELLNER concludes his Words and Things: An Examination of, and an Attack on, Linguistic Philosophy (1959) by stating (p 285): "The heaven of the linguistic philosopher, the ideographic study of particular expressions, where conceptual issues are said to arise in isolation from substantive ones, and where the analysis is claimed to be wholly neutral, is an utterly unreal realm[.]" Applying a Marxist perspective, A. NEUBERT points to the fallacy of semanctics in Semantischer Positivismus in den USA (1962). Criticizing what he calls the Fregean orthodoxy, in Has Semantics rested on a Mistake? (1991) H. WETTSTEIN argues for dissolution, rather than solution, of puzzles arising from narrowly logical analysis. I agree with R.L. ACKOFF that (1978, p 9) "[a] puzzle is a problem that one cannot solve because of a self-imposed constraint." My emphasis in this treatise lies on ontological design as (ACKOFF, 1978, p 10) "[i]t often takes a bigger push than a [logical] principle can provide to get over the hump of a self-imposed constraint."

A both level-headed opinion of and ambitious aim for logic is presented by GENDLIN (1997, pp 10-11): "Logic does not begin until after the terms (the units, the variables) have been generated, and this involves most of the assumptions we would need to examine. [...] The power of logical implications can be employed more knowingly, if [...] we also articulate [...] its situated context. To know how to do this would open avenues for thought and reevaluation in every scientific

influential in linguistic developments during the twentieth century. This might have occurred for the wrong reasons, though. PEIRCE himself is considered here as being, at least partly, the source of directing attention away from his original idea. For already early in his essay, he loses sight of the concept of ground that he lays out at its very start.³ A reconstruction helps to understand the all-importance of *ground*, and develop it for a(n even) richer explanation of semiosis.

2.1 the perspective of the user

The prose of PEIRCE is often dense and difficult. Some reorganization of his arguments will make it easier to follow his theory in outline. From the outset it should be recognized that he does not treat signs in their own right, at all, but considers sign *use*. The *user* is an abstraction⁴ which PEIRCE calls (1897, p.98)

a "scientific" intelligence, that is to say, $[\ldots]$ an intelligence capable of learning by experience

Actually, his theory is about the dynamics of sign use so that it may explain learning and, through the results of learning, conduct. K.E. BOULDING writes that (1956, p.6)

behavior depends on the image[,] where the image consists of subjective knowledge of the world.⁵

context, ways which do not now exist." In this treatise, I offer some contributions to the design of just such an opening for further inquiry.

3. It is important to know that the essays published as *Philosophical writings of Peirce* (see note 2 in this chapter) already are the result of some interpretation. For BUCHLER assembles textual passages from several of PEIRCE 's writings. Though BUCHLER accounts for the sources, selection nonetheless entails interpretation on his part.

4. PEIRCE goes to some length to describe what he considers (1897, p 98) "the faculty [of] abstractive observation." An abstraction is "a sort of skeleton diagram, or outline

sketch," that is next examined or observed.

"By such a process, which is at bottom very much like mathematical reasoning, we can reach conclusions as to what would be true of [the phenomenon in question] in all cases, so long as the intelligence using [the abstraction] was scientific." The additional complexity here is that PEIRCE is explaining the abstraction of a scientific intelligence by referring to ... a scientific intelligence.

Another complication is that he refers to truth which is a category he abstains from in his pragmatism.

5. Apparently unaware of semiotics, but with knowledge of social psychology and specifically referring to the work of G.H. MEAD (see Chapter 11 of this treatise), BOULDING puts To facilitate understanding of PEIRCE's essentially behaviorist model of sign use annex learning, a particular sign should first of all be assumed to preexist externally to the user (also read: learner). Figure 2.1.1 introduces the first two concepts in PEIRCE's argument: sign and user. The basic shapes of their schematic symbols have been purposefully chosen for convenience in composing the more elaborate figures shown later.

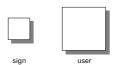


Figure 2.1.1.
Introduction of the concepts of sign and user.

An example of a sign is Figure 2.1.1 itself, of course. And the reader is an example of a sign user. However, a dyadic relationship between sign and user does not yet supply the requisite variety to account for the dynamics of the use-as-process. So, PEIRCE introduces object and interpretant (1897, p 99):

The sign stands for something, its object.

And

[the sign] addresses somebody, that is, creates in the mind of that person an equivalent sign, or perhaps a more developed sign. That sign which it creates I call the *interpretant* of the first sign.

This quotation immediately highlights that semiosis according to PEIRCE starts from a *given* outer sign. The question of who produced it in the first place, and why, falls outside the scope of his concept of semiosis. This bias is confirmed by his choice of terminology, i.e., especially of interpretant. It is the inner sign as an explanation, as a translation, of the outer sign.⁶

forward a suggestion (1956, p 148): "I want to raise the question partly in jest but partly also in seriousness whether the concept of the image cannot become the abstract foundation of a new science, or at least a cross-disciplinary specialization." The name he coins for this science is "eiconics."

6. This interpretation bias is consistent with early hermeneutics. It has become characteristic of academically mainstream semiotics. See for example *Introducing Semiotic: Its History*

and Doctrine (1982) by J. DEELY in which a distinctively behaviorist perspective – and references to authors promoting it – is lacking. See also DEELY's Basics of Semiotics (1990) where he argues that semiotics is not a method but a point of view (p 13): "The semiotic point of view is the perspective that results from the sustained attempt to live reflectively with and follow out the consequences of one simple realization: the whole of our experience, from its most primitive origins in sensation to its most refined

From the wider perspective of communication, or sign exchange, an outer sign can only be considered given to a particular sign observer *after* it has been produced by a particular sign engineer (where engineer and observer may of course be the same person; sign engineering is explained in the next chapter). VOLOSHINOV can be seen to apply this communication perspective right from the start of his theoretical development. He states that (1929, p 10)

[s]igns also are particular, material things[.]

Their representational nature VOLOSHINOV explains as follows (p 10):

A sign does not simply exist as a part of a reality—it reflects and refracts another reality. VOLOSHINOV also expresses his communication perspective succinctly (p 12): Signs can arise only on *interindividual territory*.

Especially the Peircean outlook offers a powerful set of basic concepts for developing a more encompassing theory. Further on in his essay, PEIRCE makes it clear that his idea of an object⁷ has a wide scope.

At this early point in my treatise, several of his terms need to be sorted out first. He mentions "somebody," a "person" and his "mind" to provide *examples* of the more general concept of a scientific intelligence. I call 'it' a sign user. Now anything relatively concrete may promote understanding of some-

achievements of understanding, is a network or web of sign relations." As such a point of view, I find it too limited. For it does not touch upon the purpose of such a network. With its emphasis on actual conduct the pragmatism of PEIRCE is a behaviorism. And this treatise provides many references to (more) behaviorally oriented theories of sign use. However, in the hermeneutic tradition a sign is considered merely a clue, i.e., a fixed piece of evidence which only needs to be detected and can - and with sufficient acumen always will - then be unrayeled. This explains the analogy with detective work underlying The Sign of Three: Dupin, Holmes, Peirce (1983) by U. ECO and T.A. SEBEOK (editors).

7. His extension is, again difficult to follow, element for element. I cite it here to indicate the wideness of scope (1910, p 101): "The [o]bjects – [...] a [s]ign may have any number

of them – may each be a single known existing thing or thing believed formerly to have existed or expected to exist, or a collection of such things, or a known quality or relation of fact, which single [o]bject may be a collection, or whole of parts, or it may have some other mode of being, such as some act permitted whose being does not prevent its negation from being equally permitted, or something of a general nature desired, required, or invariable found under certain circumstances."

The remainder of *Logic as semiotic*, and much its larger part, PEIRCE devotes to a classification of signs. Sign *types*, though, are *not* fundamental to semiosis as the process of triadic dynamics.

8. To avoid straining the reader with references to both sexes, though politically correct, of course, in a neutral sense only the masculine form is used throughout.

thing equally relatively abstract. Ultimately, though, no abstraction in its Peircean sense,⁹ that is, no opportunity for arriving at generally valid conclusions, should be lost in the process. And for the purposes of theory these additional terms are not required. PEIRCE's original abstraction should be maintained. It reads that in principle the interpretant is created within the sign user, regardless of whether the user needs a mind for it to occur. Figure 2.1.2 presents the concepts identified so far for semiosis.

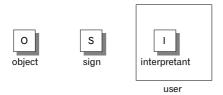


Figure 2.1.2. A user and the concepts of semiosis.

PEIRCE considers the relationship between sign, object and interpretant triadic, even *genuinely* triadic, for (1902, p 100)

its three members are bound together by [their relationship] in a way that does not consist in any complexus of dyadic relations.

A modern way to express this would be that sign, object, interpretant, and their interrelations constitute a system with properties not reducible to any of its subsystems. This triadic system is emphasized in Figure 2.1.3.

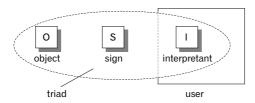


Figure 2.1.3. The triad of sign, object and interpretant.

2.2 dynamics of triads

What drives the process of sign use is that the interpretant can, so to speak, change into another role. By acting as a sign in its own right, subsequently another triadic relationship is formed. The object of the first triad 'returns' in

^{9.} See note 4 in this chapter.

the same capacity, and an interpretant is added. The interpretants of the first and second triad are different. Figure 2.2.1 shows how the first and second steps in semiosis are related.

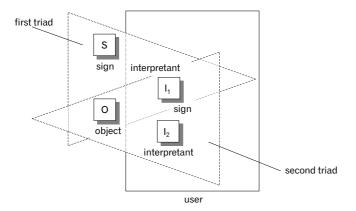


Figure 2.2.1.

Consecutive steps in semiosis revolve around interpretant becoming sign.

PEIRCE is actually not clear on whether it is the original object which is included in the second triad or not. He starts by stating that the interpretant, as sign, will assume (1902, p 100)

the same triadic relation to [the object] in which [the original sign] stands itself to the same [o]bject.

A few sentences on it reads that the object of the second triad consists not of the original sign but of

rather the relation thereof to its [o]bject.

I take it here that, whichever way, the original object continues to 'act' in the second triad:¹⁰

Every additional interpretant may assume the role of sign. In that capacity, it gives rise to yet another triad (1902, p 100):

All this must be equally true of the interpretant's interpretants and so on endlessly.

10. An interpretation that can often be inferred is that triadic dynamics are a process of association. Then, thinking one object leads to thinking another object, and so on. See, for example, *Introducing Semiotics* (1997, p 25) by P. COBLEY and L. JANSZ. Of course, I readily agree with the possibility of interpretive association. GENDLIN, writing about

experiencing, remarks that (1997, p 7) "its articulation is itself a further experiencing" which amounts to interpretive dynamics, too. However, I believe that PEIRCE intends triadic dynamics as converging on a, be it temporary, stable interpretation, i.e., on a conception of a single object.

The correspondence with VOLOSHINOV's conceptual development is striking (1929, p 11):

The understanding of a sign is, after all, an act of reference between the sign apprehended and other, already known signs; in other words, understanding is a response to a sign with signs. And this chain of ideological creativity and understanding, moving from sign to sign and then to a new sign, is perfectly consistent and continuous: from one link of a semiotic nature (hence, also of a material nature) we proceed uninterruptedly to another link of exactly the same nature. And nowhere is there a break in the chain, nowhere does the chain plunge into inner being, nonmaterial in nature and unembodied in signs.

Further on in Marxism and the Philosophy of Language VOLOSHINOV specifies that (1929, p. 38)

the units of which inner speech is constituted [...] most of all [...] resemble the alternating lines of a dialogue.

As I will make clear in Chapter 6 with reference to SCHOPENHAUER, my own position is that the beginning (interest) and the end (behavior) of the "chain" of "inner speech" are more productively *conceived of* as being of a *different* "nature." I agree that such beginnings and endings are relative, i.e., intermediate with respect to the overall process of living.

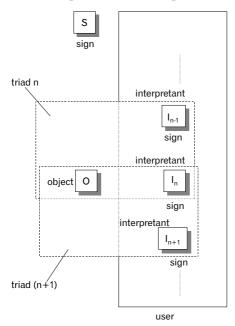


Figure 2.2.2.

Generalization of triadic step mechanism for dynamics of sign use.

The Peircean progression of interpretants, shown in Figure 2.2.2, can easily be formalized as follows. Let T_1 denote the first triad in semiosis. Then

$$T_1 = \{O, S, I_1\}.$$

And for all n > 1,

$$T_n = \{O, I_{n-1}, I_n\}.$$

This interpretive development, never touching the object it assumes, closely resembles the "trace" of DERRIDA (1967).

2.3 from start to finish

In *Logic as semiotic*, PEIRCE defines a sign as the trigger of a process of sign use. But he does not give any indication of the user's state before the start of such a process. Nor does he point out when a particular process of sign use is exhausted. In principle, he says, triadic development of a single process may continue indefinitely. So, how is an actual finish accomplished?

Clues as to how PEIRCE conceives of start and finish of sign use appear in *The essentials of pragmatism*.¹¹ As a preliminary proposition to pragmatism he states that (1905, p 256)

there is but one state of mind from which you can "set out," namely, the very state of mind in which you actually find yourself at the time you do "set out" – a state in which you are laden with an immense mass of cognition already formed.

Again, the user, appealed to by PEIRCE as "you," is presumed. This includes the user's "mind."

Then, a user's interpretant I_1 may be considered the result of a *meeting* between a sign S and his cognitive mass, or mind, M. The user's mind is of course changed by the additional interpretant. As BOULDING indicates (1956, p 7):

The meaning of a message is the change which it produces in the image.

By indexing the state of mind, M_0 can be assumed to exist before the sign use starts. And M_1 then indicates the state of mind which includes I_1 . Now the user, with his corresponding changes of mind, continues to influence the dynamics of triads. For n > 1 it can therefore be summarized that T_n marks

11. In: *Philosophical writings of Peirce* (1955, pp 251-268, selected and edited by J. BUCHLER). All quotations from this essay are from man-

uscripts of 1905. Page numbers, though, are from the collection of 1955.

the transition from M_{n-1} to M_n . Such a generalized transition, that is, a process, from one state of mind to another is shown in Figure 2.3.1.

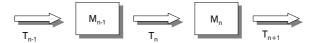


Figure 2.3.1. A sign user's consecutive states of mind.

A reconstruction of PEIRCE's ideas at the level of a single semiosis leaves an essential question unanswered. What is the user state – which is equivalent, here, to the user's state of mind – at the *ultimate start* of sign processes? His concept of semiosis explains how "an immense mass of cognition" might evolve from just a beginning of cognition.

So what is left, is the familiar question for the absolute origin. With what state of mind does a user start his very first process of sign use? The answer that makes it possible to proceed an inquiry or a design is equally familiar, of course. As a precondition, or boundary condition, the user must "set out" equipped with a given cognition content, however minimal. It should be clear that, as boundary conditions are axiomatic in nature, they cannot be proven. Rather, they make other proofs, conclusions, etcetera, rest on them. With such an assumption made explicit, PEIRCE's arguments are recognized as being relative, too. This does not detract from them at all. There is fundamentally no escape from assumptions. Especially the next chapter will establish dependence on assumptions in more detail and with more force.

An issue that PEIRCE does not deal with is that several processes of triadic dynamics may run simultaneously. At least I do not observe a 'sign' from which to conclude that he accounts for any interference.

Suppose a user has earlier observed sign S_1 and now, at time t_1 , triadic progression has reached interpretant I_p . Suppose, too, that the same user observes another sign, S_2 , at time t_2 , with $t_2 > t_1$. What happens to the user? Does the use of sign S_1 stop, i.e., is that particular process now suddenly finished at t_2 ? Or do both processes run, but completely in parallel, that is, isolated from each other?

Or, indeed, does interference occur? But then, any sequence of states of mind can no longer be attributed to a single process of sign use. In Figure 2.3.2, M_p is followed by M_q but it results from triadic dynamics originating from a different sign. How M as a whole develops is therefore to a large extent determined by the order in which signs are observed and subsequently processed.¹²

I favor the possibility of interference. As VOLOSHINOV states (1929, p 34): These units of inner speech [...] are joined with one another and alternate with one another [...] according to the laws of evaluative (emotive) correspondence, dialogical deployment, etc., in close dependence on the historical conditions of the social situation and the whole pragmatic run of life.

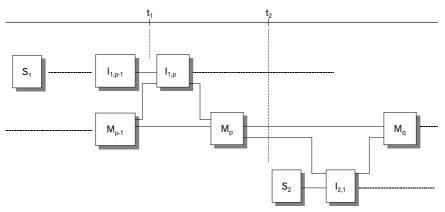


Figure 2.3.2. A user's mind development from interference of sign processes.

Returning to the Peircean perspective predominant in this chapter, a sign user or scientific intelligence *as mind* both shapes its interpretants, and is shaped by them. Interpretants are both integral elements (mind as set) and integrative elements (mind as function). This significantly complicates the matter of when a particular process of sign use reaches a finish. For, with M being the collection of *all* interpretants, how are different processes kept track of? Are they indexed, after all, each by its first interpretant, for example?

For the sake of following PEIRCE's argument, I assume that [a] multiple processes of sign use may be simultaneously active, [b] every interpretant contributes to the whole of the – mind/scientific intelligence of the – user, and [c] every process of sign use is allowed its own finish. These assumptions allow for a straightforward explanation of PEIRCE's concept of pragmatism.¹³

12. The importance of sequential order is also stressed by E. DE BONO in his excellent popular account *The Mechanism of Mind* (1969).

13. In response to how other people apply the term pragmatism he later favors pragmaticism as the label. As it is clear that I treat PEIRCE's ideas throughout, I maintain the term pragmatism, anyway. An introduction is given by A.F. STEWART in *Elements of Knowledge: Pragmatism, Logic, and Inquiry* (1993). My impression is that STEWART overemphasizes the grounds of realism in PEIRCE's thought.

As for formal notation, interpretants are doubly suffixed: $I_{s,n}$. The first suffix designates the process instance of sign use. The second numbers the interpretants for every process instance. This convention has already been applied in Figure 2.3.2, above.

In *The essentials of pragmatism*, PEIRCE characteristically focuses on – what I call in this reconstruction – the sign user. He argues a sign user would only (1905, p 257)

puzzle [himself] by talking of [...] metaphysical "truth" and metaphysical "falsity." [...] All you have any dealings with are your doubts and beliefs, with the course of life that forces new beliefs upon you and gives you power to doubt old beliefs.

He continues by saying that people should not strive after illusive truth but, instead, should try

to attain a state of belief unassailable by doubt.

In this text passage the key is available for determining the finish of a particular process of sign use. Regretfully, PEIRCE does not make interpretation easy by shifting terms where he seeks for new emphasis. With his choice for the term "belief" he suggests that its content guides a user's activities. Conversely, what a user doubts, he should *not* act upon. Earlier in the same essay, PEIRCE states as the core of his theory of pragmatism (1905, p 252)

that a *conception*, that is, the rational purport of a word or other expression, lies exclusively in its conceivable bearing upon the conduct of life.

There, of course, "word" and "expression" are examples of signs. What PEIRCE argues is that, given a particular state of mind, a belief is the ultimate content a conception may acquire. And a conception is rational when the user is a "scientific intelligence."

From *Logic of semiotic* it may also be concluded that the interpretant which finishes a process of sign use is a belief. What a conception-as-belief entails, can be harvested from *The essentials of pragmatism*. The advantages of such explicit integration¹⁴ of the semiotic of PEIRCE into his pragmatism become apparent later in this treatise. What follows next, is still developed in preparation. PEIRCE remarks that in (1905, p 258)

rational life [...] an experimentation shall be an operation of thought.

Apparently, such experiments are required to establish – belief in – a concep-

14. In his introduction *Charles S. Peirce.*Semiotisch pragmatist to the collection of essays titled *Het semiotisch pragmatische van Charles S.*Peirce (1991), editor H. VAN DRIEL remarks (p. 12) that most secondary literature on PEIRCE is devoted to his pragmatism. And whenever his semiotic does get treated, VAN DRIEL con-

tinues, it is almost always without reference to his pragmatism. It is, rather, PEIRCE's classification of signs that has drawn most attention of analysts. On the secondary importance of sign classification, also see the two closing sentences of note 7 in this chapter.

tion. An additional interpretant, then, would correspond to a changed concept. And every interpretant is the result of an experiment, conducted by and *inside* the user. Thus, the process of sign use is in important aspects a process of experimentation, too. It ends when the user (1905, p 252)

can define accurately all the conceivable experimental phenomena which the affirmation or denial of a concept could imply [and only then] one will have therein a complete definition of the concept, and there is absolutely nothing more in it.

That is, "nothing more" by and inside that particular user's "mass of cognition" at that particular point in time. Another user, or the same user at a different point in time, i.e., most probably with a different "mass of cognition," entertains a concept (also read: belief) that is somewhere between completely similar and completely different. Interestingly, VOLOSHINOV is theorizing along similar lines (1929, p 33):

[E]very outer ideological sign, of whatever kind, is engulfed in and washed over by inner signs — by the consciousness. The outer sign originates from this sea of inner signs and continues to abide there, since its life is a process of renewal as something to be understood, experienced, and assimilated, i.e., its life consists in its being engaged ever anew into the inner context.

The Peircean emphasis on the processes of experimentation within the user suggests how conceptual changes can occur by chain reaction. A single observation of an external sign may lead to a changed concept. Whatever has changed in M could act as 'original sign,' too, setting one or more additional processes of sign use in motion.

PEIRCE's insistence on comprehensive experimentation might very well be too strict. It should be remembered, though he does not explicitly say so, that a concept is supposed to refer to an object. When does – a particular stroke of – learning about an object O, based on the observation of a particular sign S, come to an end? It seems obvious to suggest, in modern cybernetic terms, that scientific intelligence, i.e., the sign user, includes a feedback mechanism. Using whatever criteria, the difference between consecutive interpretants may be measured. Roughly, suppose a lower threshold value exists, a limit dependent on the user (L_u). A process *instance* of sign use then comes to an end whenever such a difference reaches a value below the threshold. Its formally symbolic expression reads

$$I_{n} - I_{n-1} \le L_{u}$$
.

So far, reconstruction of PEIRCE's semiotic has still not covered or, rather, uncovered the *ground* which I announced lost at the outset of this chapter. However, a lot of other ground has already been prepared. One result, among others, is a clearer, more formalized approach to, and extension of, PEIRCE's triadic dynamics. Some more groundwork needs to be done before PEIRCE's *ground* is reached.

I present PEIRCE's theory of signs in a way which makes it easily possible to appreciate the difference between pragmatics and semantics. PEIRCE evidently is a pragmatist. In fact, he all but invents the category in a philosophical sense. He starts out with the bearer of conduct. That is, with "you." His "you" is a sign user who arrives at beliefs and doubts that are *applied in conduct*. It makes his emphasis on the *use* of signs perfectly understandable.

Semantics aims at explaining the *meaning* proper of signs. It tries to establish meaning as an independent precondition for use. However, this departure from actual use often is problematic, requiring complex but ill-fated repairs. Such problems actually led me to design subjective situationism as an ontology annex epistemology annex semiotics. This treatise therefore proposes a concept of meaning that differs from the mainly dyadic approach of tradi-

15. His pragmatic philosophy makes his biography especially relevant. From the excellent Charles Sanders Peirce, A Life (1993) by J. BRENT may be learned the individualistic origins of his conceptual scheme. As BRENT reports, PEIRCE fails with many of his ambitions and plans. For example, he never receives an appointment to a permanent academic position. Grounded in his upbringing, (p 340) "the builder, almost the creator, of his character was [...] his father," a major problem was that (p 239) "[he] seems to have had no understanding of the part he played in his own destruction; he could find no reason for his failure except the faults or ill-will of others." Another, related, problem is that his extravagant life style, causing structural debts he cannot repay. Both the accomplishments and tragedy of PEIRCE I find credibly summarized as follows (p 203): "At the end,

he stands there in tatters, surrounded by the melancholy debris of his life, contrite and apologetic, asking our [...] indulgence. But all the while, this poor fool, behind the scenes and between the acts, has been building piece by piece the armature of a most marvelously intricate universe, so beautiful it transfigures him amidst the wreck of his afflictions, and we gratefully see the signs around us with new eyes." BRENT concludes that (p 347) PEIRCE "was the first to chart, with surprising rightness, the elements and form of a single, seamless world of thought, the infinite universe of signs and its mysterious and commonplace power to represent the Real." As I begin to illustrate in Chapter 6, my own candidate for deserving such philosophical credits is SCHOPENHAUER who precedes PEIRCE by about half a century.

tional semantics. As far as my concept of meaning is concerned, Part i merely prepares the ground. Part ii of this treatise is titled *Anatomy of meaning*. There, Chapters 7 and 8 put meaning forward as sign exchange. The sign engineer and the sign observer act *as different individuals* in a particular exchange. They apply correspondingly characteristic sign structures to create, respectively interpret a sign.

At this point it is relevant to show briefly that the semantic perspective entails a reduction. It is a shift from dynamic sign use to static meaning. Semantic meanings are taken as something like external, fixed resources. They are generally available to a community of users. The semantic perspective leads to an impoverished semiotics. Dynamics in engineering and observation disappear from view, and so does the emphasis on the individuality of the sign user.

Center stage of the semantic paradigm is, indeed, occupied by the concept of meaning. Definitions of meaning are plentiful. As I said, semantic definitions all rest on a reduction. For without regard for the developmental nature of reaching a satisfactory interpretant through a unique instance of semiosis, meaning is taken to exist a priori to sign use. That is, meaning occurs in an almost absolute sense, rather than as a construction on the part of the sign user.

It should be absolutely clear that the term *meaning* is introduced here on purpose. With an active interpreter all but removed from its perspective, I prefer to abstain from the use of *interpretant* when discussing semantics. Meaning, however, is also problematic. Much of this treatise, in fact, is devoted to support a quite fundamental change beyond semantics. In a pragmatic sense, I argue for a change of interpretant, that is, from the meaning of meaning to the interpretant of interpretant.

For now especially the overall contrast between PEIRCE's dynamics of triads on the one hand, and the static of the so-called semantic triangle on the other hand, is highlighted. This triangle appears with many different terms. ¹⁶ Figure 2.4.1 presents it with object, sign and meaning as its constituting elements in a single triadic relationship.

16. Any textbook on semantics will present the semantic triangle, for example *Semantics: 1* (1977, p 96) by J. LYONS who refers to it as "the triangle of signification."

A name often encountered is "semiotic triangle," as in *The Cambridge Encyclopedia of Language* (1987) by D. CRYSTAL. Because CRYSTAL does not mention PEIRCE, at all, he

cannot warn against the confusion that may occur from the adjective "semiotic." Here, semiotic is reserved for sign use in, and integrated into, the pragmatic sense. Then, the perspective in which meaning, not sign use, appears as starting point yields, not a semiotic, but a semantic triangle.

It is remarkable, to say the least, that the

The classical semantic triangle does not go back to PEIRCE's theory of signs. Actually, his variety stripped of dynamics would look as shown in Figure 2.4.2.

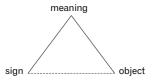


Figure 2.4.1. Classical semantic triangle.

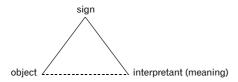


Figure 2.4.2. Triad according to PEIRCE.

The main reason for drawing a dotted line between object and meaning in the Peircean view is that he writes that (1910, p 100)

[t]he [s]ign can only represent the [o]bject and tell about it. It cannot furnish acquaintance with or recognition of that [o]bject.

In other words, it is in his nature that a sign user never directly knows an object. All that the sign user pragmatically – which seems PEIRCE's equivalent for: rationally – knows are his very *own* interpretants. A (more) direct 'contact' is supposed to exist between sign and interpretant, and between object and sign, respectively.

Semantics is not concerned with the impossibility of direct knowledge. Its axiom is to look at phenomena in their capacity to 'stand for' other phenome-

semiotic of PEIRCE is completely overlooked by CRYSTAL, and that in a work of encyclopedic ambition. It confirms VAN DRIEL's observation as to the lack of attention attributed to that semiotic work (see note 14 in this chapter). So, how influential has PEIRCE really been in linguistic development? The answer to this question lies beyond the scope of this treatise. See note 13 in Chapter 7 for a clue.

Unknown to PEIRCE, but already containing core concepts of later semiotics, was *Tractatus de Signis* by JOHN OF ST. THOMAS (1589-1644), or JOHN POINSOT, originally published in 1932. It was only rediscovered and brought into relationship with modern thought in 1938 by J. MARITAIN. This observation is made by J.N. DEELY who arranged an English translation from the Latin (1985).

na. As the sign is *not* the object – and this by definition of what semantics *is* – the classical semantic triangle shows a dotted line between precisely those two concepts. Now it is meaning acting as go-between. With meaning given, on the one side there is a direct relationship *with the sign carrying the presupposed meaning*. And on the other side exists a direct relationship with *the object appearing as meaning*.

Figure 2.4.1 yields a simple but effective frame of reference for recognizing some major problems with the program of semantics. They revolve around multiple meanings of one sign, and a single meaning of a multitude of signs. The second category, synonyms, is actually easily solved through references between signs, whenever needed. However problems of the first category, that of homonyms, cannot be solved inside the boundaries of the semantic triangle.

According to the classical semantic triangle, a homonym does not pose a problem to the link between meaning and object. For once the right meaning has been sorted out, it automatically 'means' that the corresponding object is unambiguously assigned. See Figure 2.4.3.



Figure 2.4.3. Localization of ambiguity from homonym.

For homonyms to be resolved, semantics has to look outside its program. Pragmatics is the rich relative who can help out. This is where PEIRCE's *ground* is needed for gaining a firm stand regarding multiple meanings.

2.5 the reappearance of an idea

Early on in *Logic as semiotic*, PEIRCE attempts to describe a sign (1897, p 99):

[It] is something which stands to somebody for something in some respect or capacity. Figure 2.4.2 of a single triadic, semiotic relationship may be augmented with

Figure 2.4.2 of a single triadic, semiotic relationship may be augmented with the first part of this quotation. This is shown in Figure 2.5.1.

What is missing, in Figure 2.5.1, are the last words from the description. Again, they read:

in some respect or capacity.

I can hardly overstate the importance of these few words. PEIRCE himself

elaborates where he says that a sign (1897, p 99)

stands for that object, not in all respects, but in reference to a sort of idea, which I have sometimes called the *ground* of the [sign].

So there it finally is, the ground that I announced at the outset of this chapter. A sign is (1897, p 99)

connected with three things, the ground, the object, and the interpretant.

It is obvious that one plus three make four. Yet on the very same page of his essay, PEIRCE continues to explain his semiotic as a dynamic process of *just* triadic relationships. Without any comment, he altogether leaves his ground out of the subsequent equation . It has simply disappeared completely.

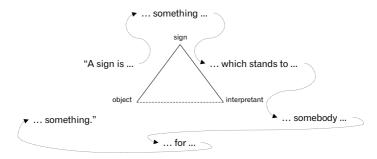


Figure 2.5.1. Projection of peirce's description onto triad model.

From the perspective of the rigor that PEIRCE wants to establish through his pragmatist logic, it looks like an astonishing omission. I assume he does it on purpose. Or? As evidenced by his own words, he definitely first takes the trouble of conditioning the object being interpreted through the sign. Why? Is he thinking of different appearances that an object can make? This is likely because, in fact, he does comment on how the ground may be interpreted as an idea, i.e. (1897, p 99),

in a sort of Platonic sense.

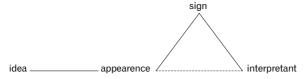


Figure 2.5.2. Platonic idea as candidate for PEIRCE's original ground.

An approach to how PEIRCE reasons is to substitute the two concepts of idea and appearance for the single concept of object. This brings the number of

elements involved in semiosis back to four, bound together in a tetratic relationship. This view of semiosis is modeled in Figure 2.5.2.

The problem is now as to what extent (1910, p 100)

[t]he [s]ign can [...] represent the [o]bject and tell about it.

Where PEIRCE introduces his *ground*, he suggests that a sign limits an interpretant to a particular (Platonic) appearance. But by referring to an idea, he does not specify a constraint for both sign and interpretant. Rather, he opens the view to what lies beyond a particular appearance. Does he really believe that sign use leads to the idea, as meant by PLATO? Suppose that PEIRCE does. Then more than a sign telling about an appearance is involved. For an appearance would, in its turn, need to be telling about an idea. Is he aware of the two-step mechanism? Is PEIRCE convinced that sign use overcomes the constraints of a sign representing an object "in some respect or capacity?" Does he see it as experimentation to investigate different appearances?

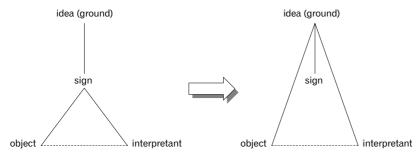


Figure 2.5.3. Idea as concept as candidate for peirce's original ground.

Then again, perhaps splitting PEIRCE's object into appearances and idea is a severe mistake in interpretation. For there is also much to be said for an interpretation according to which he sees, not the object, but the sign as grounded.¹⁷ A multi-step mechanism is still present, however. Is the sign

17. B. VAN HEUSDEN takes up this interpretation in *Halve tekens* (in: *Het semiotisch pragmatische van Charles S. peirce*, 1991, ed. VAN DRIEL), concentrating on artistic semiosis. The title of his contribution is probably translated best as *Partial signs*. A work of art, VAN HEUSDEN suggests, is an icon, one of the types in PEIRCE's sign classification. He states that (p 79, my translation from the Dutch) "[a]n icon is only a partial sign: it does provide a refer-

ence but it does not yet [...] lead to an interpretant. The *ground* fails." VAN HEUSDEN concludes that (p 85) "[b]eing an icon, a work of art is an unfinished, or 'partial,' sign, which forces us to look for meaning. The artist does not create meaning. Instead, he creates a *problem* of meaning."

It is probably that VAN HEUSDEN limits his attention to art appreciation only, i.e., to a specific example of semiosis, why he stops telling about an idea, with the idea subsequently telling about an object? Does the idea occur in the course of the triadic dynamics as an interpretant, resulting from experimentation by the sign user? Figure 2.5.3 tries to capture this triadic shift between steps of the process of sign use.

I am certainly not at all the first to inquire into more detail after what PEIRCE himself might hold as ground. Interpretations are widely scattered, though. For some divergent examples, see ECO (1959-1977), NÖTH (1985) and HOOKWAY (1985). In *The Thought of C.S. Peirce* (1950, pp 1-7), T.A. GOUDGE suggests that PEIRCE shows "discrepancies" due to his conflicting "sets of premisses" of "naturalism" and "trancendentalism," respectively.

2.6 from triads to pentads

Whichever way PEIRCE is interpreted, problems are encountered as long as ground is left out of the semiotic equation. My own approach for further conceptual development departs from belief¹⁸ in independent objects.

A unity is assumed to exist between an object and what – if only inspiration – may be drawn from PEIRCE as being its ground. The next step is to abstain from belief in ground being a general quality, such as a Platonic idea. Instead, there may exist *multiple* grounds for an object.

Situation, then, is a better word. Indeed, I believe PEIRCE's qualification of "some respect or capacity" connotes better with situation than with ground. An object appearing in whatever particular situation, then, is simultaneously similar and different from appearances elsewhere. This joint emphasis on similarities and differences underlies the formal integration of ground into my model of semiosis. I take a direct cue from PEIRCE by extending his triad.

I add the assumption that differences do *not* exclude similarities. From an integrative perspective they may very well complement each other, be compatible. But then of course the question is how differences and similarities are properly coordinated. Once again the answer lies in recognition of *relative* ground. *Always* seeing an object *in* a particular situation frees an object from having only a universal, absolute "respect or capacity." On different grounds, that is, in varying situations, an object will show differences besides what an object's similarity in all situations. Chapter 4 argues that for purposes of modeling it is optimal to keep at a minimum what an object is believed to have in common across situations.

When an object is by definition situational, a sign always pertains to the unit

short of explicitly integrating ground into the dynamics of sign use, in general. 18. I use the concept of belief, of course, throughout in a Peircean sense.

of both a situation and an object, i.e., to their combination. Now a sign can only be attributed with these characteristics of refering to situational objects because the sign user experiences a corresponding difference through his interpretants. In fact, a wealth of research exists strongly suggesting that at least human cognition is largely based on the duality of foreground and background. Or as it is labeled in literature on cognitive psychology, on the duality of figure and, indeed, ground. P.H. LINDSAY and D.A. NORMAN, for example, observe that (1972, p 10)¹⁹

[t]he tendency to attend to and organize selectively the data provided by sensory systems is a very general characteristic of all perceptual experiences. [What data are] extracted [...] becomes *figure*. All other [data] in the environment become *ground*.

They add the Kantian argument that (p 13)

it is difficult, if not impossible, to prevent the organization of information [... p 14] for the perceptual processes impose organization upon it.

So, without the one, the other cannot be experienced. Substitute object and situation for figure and ground, respectively, and the extension of PEIRCE's semiotic is at once firmly connected to modern developments in cognitive psychology. The operative term is "connected." And for my design I see no need to venture beyond the general concept of intelligence. It is, for example, irrelevant for this treatise whether an individual sign user 'develops' interpretants in/with his consciousness, unconsciousness, or both. Such categories are too finely grained for my purpose.²⁰

The model of triadic dynamics offers too little variety to account for situational objects. Or at least it should be read a sign covers a situational object rather than an independently existing, absolute object. And with an interpretant seen to distinguish between object and situation. That is precisely my hypothesis. I assume that PEIRCE's original interpretant is composed of elements which correspond to the distinction made (sic!) between situation and object. In a triadic relationship, mediated by the sign, the interpretant is the counterpart of the object. Allowing for situation-as-ground, the b-interpretant, standing for (back)ground interpretant, is taken to mean the whole of

19. Human Information Processing (1972). See also Perception: From sense to object (1982) by J.M. WILDING who writes that (p 60) "the figure is seen as separated from the background [..., the figure] is treated as a unity or whole and is the focus of attention." Of special interest to this treatise is that WILDING views figure as corresponding to objects (p 21): "[O]ur experience is of a selected and organized

world of separated, stable and identifiable objects and distinct events." See also *Indeterminacy and Intelligibility* (1992) by B.J. MARTINE.

20. For intriguing speculations I refer to *The Unconscious as Infinite Sets: an essay in bi-logic* (1975) by I. MATTE BLANCO.

the situation. As the counterpart of object I propose the concept of figure or foreground interpretant. Of f-interpretant, for short. Without any dynamics shown, Figure 2.6.1 summarizes the elaboration from three to five concepts in semiosis. (Figure 2.6.1? Figure against ground? It is an illustration of multiplicity that the same term *figure* figures here engineered from different interests of the author, aiming at different observations by the reader.)

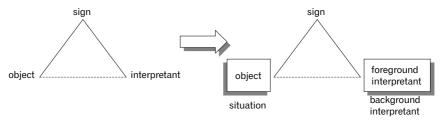


Figure 2.6.1. Adding dual ground: from triad to pentad.

As a result of adding concepts, the dynamics of sign use are no longer characterized by a sequence of triads. Instead, sets of five are involved, that is, pentads. This extended model explains a correspondingly richer variety of semiosis. Still, I take the development inspired by PEIRCE's ground a step further.

2.7 hexadic dynamics

The right-hand side of Figure 2.6.1 shows five elements. The logic of a sixth element is easy to recognize when changing the static perspective into a dynamic one. In a sequence of Peircean triads I_{n-1} preceeds I_n . In its turn, the latter is followed by I_{n+1} , etcetera (see Figure 2.2.2, above). At this stage I merely require consistent application of the distinction made in the previous paragraph between foreground and background. So, instead of a single I_n there are f- I_n and b- I_n .

Figure 2.7.1 sketches how any two consecutive steps in the process of sign use are related. Of course, f_n and b_n together may be called an integrated interpretant when considering them as the result of a sign use step, and a sign when the next step starts. But, then, the move from two ingredients to one single ingredient remains to be accounted for.

Let the object be denoted by O, and the situation by E. Why E? Because S already stands for sign. And E for environment is close enough to situation.

In this way, for all n > 1, the hexad H_n consists of

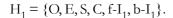
$$H_n = \{O, E, f-I_{n-1}, b-I_{n-1}, f-I_n, b-I_n\}.$$

With just S, the first pair of interpretants, f-I₁, b-I₁, is not determined through a hexad but a pentad, as follows:

$$P_1 = \{O, E, S, f-I_1, b-I_1\}.$$

Is this irregularity inherent of the dynamics of sign use? Or should this starting pentad be converted into an hexad, too?

The obvious place to look for is *around* S, the original sign. Highlighting the regular nature of the sign use, the original sign might also be called a nil interpretant, or I_0 . Still from a pentadic point of view, it stands to reason correlating S as nil interpretant with foreground. Thus, S equals f- I_0 . But when a foreground variety exists in the world of original signs, where is the background equivalent? Is there a real use for a b- I_0 ? With sign as text in the widest possible sense, vice versa, it is only logical to view b- I_0 as context. When C stands for context defined this way, the starting pentad P_1 is eliminated in favor of a starting hexad, as follows:



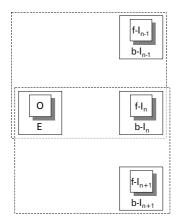


Figure 2.7.1.
From one step to the next: two-part interpretant becomes two-part sign.

A static view of sign use, based on hexads, elaborates on the model shown at the right in Figure 2.6.1. The development into a hexad is shown in Figure 2.7.2.

Introducing context allows direct specification of the changing roles of f-I_n and b-I_n, respectively. Thus, the background and foreground interpretants resulting from one step constitute the context and sign for the next. Figure 2.7.1 is augmented accordingly, yielding Figure 2.7.3.

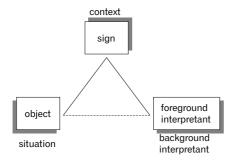


Figure 2.7.2. Hexad: every element of the original triad is grounded.

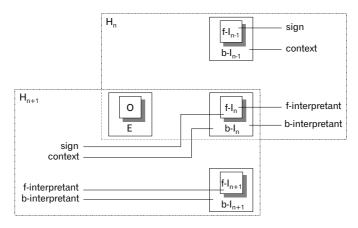


Figure 2.7.3. Dynamics of sign use based on hexads.

I make both my extension and departure from PEIRCE even more explicit by sketching his original triad connected to another triad. The additional triad is composed of the elements that have *all* been developed here from his single(?) *ground*. Figure 2.7.4 shows how a hexad results.

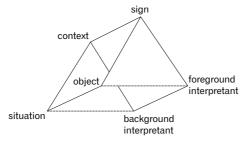


Figure 2.7.4.
Two connected triads make a hexad.

The semiotic hexad is already sufficient to corroborate another of VOLOSHI-NOV's – for whom the word figures as the quintessential sign – statements from *Marxism and the Philosophy of Language* (1929, pp 79-80):

The meaning of a word is determined entirely by its context. In fact, there are as many meanings of a word as there are contexts of its usage. At the same time, however, the word does not cease to be a single entity; it does not, so to speak, break apart into as many separate words as there are contexts of its usage.

Earlier in this chapter, I raised some questions about what PEIRCE exactly wants to say with the sentence (1897, p 99):

A sign [...] is something which stands to somebody for something in some respect or capacity.

What does he want to condition by "in some respect or capacity"? Is he qualifying the object? Or the sign? Or the interpretant? The way his *ground* is developed here negates the mutual exclusion of such interpretations. Instead, every element of PEIRCE's triad is given a characteristic ground: object in situation, sign in context, and foreground interpretant in background interpretant. His principle of a process of sign use is maintained but hexads, not triads, are involved in its dynamics. In the next chapter I apply the hexad for ontological design.

21. VAN HEUSDEN (1991, see note 17 in this chapter), though already going beyond PEIRCE, associates ground with just sign, leading him to redefine the original sign as a partial sign. Indeed, a text is always partial, requiring context to constitute a whole. In

the same way, an object may be considered partial, too. A whole only exists when object is joined by situation. And also partial, then, is a f-interpretant that for wholeness needs a b-interpretant, vice versa.

prelude 3

The step from triad to hexad introduces relationships along dimensions. For the three elements of the original triad are replaced in the hexad by three element pairs. Each original element may now be considered a dimension containing such a pair. Thus, in the hexad, the background interpretant and foreground interpretant occupy the ideal dimension. The real dimension is occupied by situation and object, while context and sign shape the information dimension.

The next step is to apply this dimensional articulation for the purpose of recursion. Basically, it is what Chapter 3 accomplishes for the ontological design of subjective situationism. For example, start naively by considering the real dimension in isolation. Do the concepts of situation and object entertain absolute roles in their relationship? Why not see a role as relative? It permits a shift of roles.

Suppose a role is broadened. This happens when an object shifts to a situation (and reality's horizon narrows correspondingly). The hexad's dimensional articulation requires, however, one or more objects for a situation. A shift from, say, x being an object to x being a situation can therefore only occur through *immediate* recognition of objects in what is now situation x.

Shifting a role in the opposite direction lets situation x become object x. Now as object, it immediately entails a situation.

Including *all* elements of the hexad, the character of recursion can be added to the model of semiosis. It thereby explains additional dynamics, i.e., through recursion. In Chapter 3, it is especially role shifting of elements/concepts along dimensions which results in an ontology with greatly increased variety. Still only consisting of six basic variables, the ontology at this stage shows already a promising potential for incorporating *relevant variety* in conceptual

information models.

Chapter 3 also addresses the special position in knowledge of ontology, or metaphysics. And a large part surveys some earlier attempts to recognize variety, undertaken with various degrees of ontological awareness. Though similar concepts abound, elsewhere the conceptual *configuration* of subjective situationism with its 'double dynamics' – first of Peircean semiosis through irreducibility, second of concept recursion through shifting – has not been discovered.

The importance of Chapter 4 in the ontological design lies in the extension from semiotic hexad to ennead.

chapter 3

SUBJECTIVE SITUATIONISM: POSTMODERN ONTOLOGY

Chapters 3 and 4 closely relate to Chapter 2. Overall, I report on my conceptual development. As development, these chapters are an informal confirmation of the relevance of PEIRCE's model of sign dynamics. One interpretant leads to another, etcetera.

I read the beginning of *Logic as semiotic* for the first time many years before starting to write this treatise. To be honest, what I did, then, was trying to read it. I don't remember that I understood much of it. But apparently I kept a notion at the back of my mind¹ that PEIRCE is probably also trying. He tries to communicate something fundamental about signs.

Later, I designed a formalized yet flexible approach for – the activity of – conceptual modeling of information systems. I call this approach: metapattern (WISSE, 2001). A key characteristic of the metapattern is the recognition of, say, situatedness of behavior. And I consider behavior a broadly applicable concept: behavior is any collection of properties.

Why I call the modeling approach *metapattern* is motivated by the so-called pattern movement in software engineering. I position conceptual information modeling apart from modeling for actual construction (see § 1.1). The *meta* indicates that it involves the *approach* – conceptual engineering – to developing such conceptual models/patterns.

The pattern movement in software engineering takes its key concept of pattern from architecture, usually referring to the work of C. ALEXANDER (1964, 1977 and 1979). For conceptual modeling I find an even more appropriate ancestry in *Mind and Nature, A Necessary Unity* (1979, p 11) by G. BATESON who

1. When I write "at the back of my mind," I hope the reader appreciates this as figurative speech. I am making no suggestion here, at

all, as to the way information is structured in – the mind of – a sign user in general, and myself in particular.

specifically mentions the concept of metapattern. He views it as "a pattern of patterns." Taking his cue directly from BATESON, in *Metapatterns* (1995) T. VOLK presents a *set* of concepts, indeed much like building blocks for architectural design. His main metapatterns are sphere, sheet, tube, border, binary, center, layer, calendar, arrow, break, and cycle. My metapattern is labeled with a noun in the singular. It operates at a higher level of abstraction than the – collection of – metapatterns of, for example, VOLK.

In the next chapter I explain how the metapattern for conceptual information modeling actually works. At the present stage, it is only important to know that I no longer presume a sign to exist in isolation. There *always* is a particular context. And with multiple contexts possible, a full degree of freedom is added to modeling information.

What is an information model? In any case, it is a sign, too. But I do not like to restrict myself too much with definitions. When I have a nagging feeling that the optimal solution is blocked by a specification, instead I prefer to abstract differences away. I consistently find it a dependable tactic out of – too much – uncertainty, and continue to apply it. So, loosely, I take information and sign as equivalent.

From this generalization I decided to return to several texts,² now equipped with my metapattern. That is how I came to a renewed reading also of *Logic as semiotic*. I credit it to the metapattern that, this time around, I did focus on just a few words almost dangling at the end of a sentence. It is the sentence by PEIRCE that is featured extensively in Chapter 2. I repeat it here (1897, p 99):

A sign [...] is something which stands to somebody for something in some respect or capacity.

Now, the metapattern can easily be misunderstood as just a(nother) method or technique. I could of course dutifully outline the metapattern's symbols, rules for their configuration, etcetera. But then I would probably fail to show why my attention was especially caught by the word sequence "in some respect or capacity." It is a failure because it does not grasp that I designed the

2. Two other texts were on my 'list,' viz., A theory of semiotics (1976) by UMBERTO ECO (1932-), and Die Welt als Wille und Vorstellung (Part I originally published in 1818; second edition, with Part II added, in 1844: third edition in 1859) by ARTHUR SCHOPENHAUER (1788-1860). The latter book is also available in English as The World as Will and Representation (originally published in 1958). I thought I could now make 'metapattern

sense' of ECO, too. My research into his theory is documented in Chapter 5. As for SCHOPENHAUER, in spite of his admonishment that a reader reads his books at least twice, I felt that I understood him right away. Nevertheless, he got his second reading from me, after all. In Chapter 6 I show his surprising relevance for actual concerns about meaning.

metapattern as a *challenge* to modeling paradigms without requisite variety.

To increase my chances of successfully conveying my interpretation, I start by presenting the metapattern's principles, or axioms. Starting with its symbols lacks grounds. Attention to grounds is necessary because the metapattern is *not* built upon a particular established, already familiar, ontology. Communicating it is far more problematic as the metapattern *itself* incorporates a different ontological configuration of concepts. The foundation that largely *is* the metapattern is a metaontology, even. It follows when being and behaving are taken to only sensibly occur in particular situations.

This chapter concentrates on the metapattern-as-(meta)ontology: subjective situationism. The next chapter contains a description of the metapatternas-technique. How I present both (meta)ontology and technique here is, as suggested by the very first sentence of this chapter, influenced by my reconstruction of PEIRCE's theory of signs. As documented in the previous chapter, by also departing from it I have developed his concept of ground. The result is a model of the process of sign use as, not of triadic, but of hexadic dynamics. In turn, the metapattern did not remain completely untouched. Conversely, I acquired a deeper understanding by applying the hexadic mode of sign use to concepts (also read: interpretants) developed earlier. So my return to PEIRCE made me also return to my own work³ and develop it further. With such dialectics in perpetual flux, of course I can only report here on the metapattern as I view it at the time of writing this treatise. Then again, though I only provide a summary, this bipartite sketch of the metapattern is also new and improved. I now aim to present it complete with speculative foundation (this chapter) and in hexadic terms or even, as developed in the next chapter (especially see Figure 4.5.2), in enneadic terms.⁴

3. My earlier documentation of the – development of the – metapattern consists, first of all, of the essay *Multicontextual paradigm for object orientation: a development of information modeling toward fifth behavioral form* (1999). I originally wrote it in Dutch in 1993 and translated it into English in 1995. The English version is published in *Informatiekundige ontwerpleer* (WISSE, 1999). My translation into English of the Dutch title of that book reads: A design discipline for information systems. Its Chapters 24, 26, and 27 also contain material on the metapattern, as does all of my book *Metapattern: context and*

time in information models (2001).

4. The reader is invited, as a scientific experiment in the Peircean sense, to become fully conscious about the interpretant arrived at after consuming the sign "new and improved" in what that same reader had established as that sign's context. Are you irritated? Amused?

The complex nature of such an experiment is evident when the reader realizes that he now includes his consumption of this note as a precondition. It is useless, for example, to ask the reader to conduct the experi-

3.1 an experimental perspective

I once again turn to PEIRCE for inspiration. In *The essentials of pragmatism*, he starts his arguments by setting experimentalists apart from other persons. An experimentalist, writes PEIRCE, is somebody who (1905, p 251)

has his mind moulded by his life in the laboratory to a degree that is little suspected. He suggests a wide chasm separates the experimentalist from everybody else, i.e., from anybody without the experimental attitude. Indeed (1905, p 251),⁵

he and they are as oil and water, and though they be shaken up together, it is remarkable how quickly they will go their several mental ways, without having gained more than a faint flavour from the association.

If only those other people could relate to experimentalists, PEIRCE continues, they would discover that (1905, p 251)

whatever assertion you may make to him, [i.e., to an experimentalist,] he will either understand as meaning that if a given prescription for an experiment ever can be and ever is carried out in act, an experience of a given description will result, or else he will see no sense at all in what you say.

In my opinion, with this statement PEIRCE is foreshadowing the *Tractatus logi-co-philosophicus* (1921) of LUDWIG WITTGENSTEIN (1889-1951) who in his final sentence urges that the unspeakable should remain unsaid. ⁶ PEIRCE does not reach such a draconic, positivist conclusion which, by the way, WITTGENSTEIN recalled in his later, more mature work.⁷

What PEIRCE seems to be saying between the lines is that his own words will most likely be misunderstood, or even neglected, because (1905, p 251)

those other men [are unqualified] to take skilful soundings of the experimentalist's mind. Or is he? He does present himself squarely as someone familiar, from an early

ment before and after having consulted this note. See also § 1.12 for some remarks about the impossibility of replicating a thought experiment under identical conditions.

5. This quotation is not in any way meant to preempt Part ii where I develop an anatomy of shared meaning. What it does suppose to mean becomes clear as this paragraph proceeds.

6 The *Tractatus* was finished in 1918 and first published in 1921. In German, WITTGEN-STEIN's famous last sentence is (p 115):

"Wovon man niet sprechen kann, darüber muß man schweigen."

7. Philosophical Investigations (1953). See also Wittgenstein's Definition of Meaning as Use (1967) by S.J. G. HALLET who writes that (p 76) "[i]t is important to notice [...] that what Wittgenstein criticized was always an atomic, simplified meaning, an isolated element in the total speech situation. No such item survived criticism. It was not adequate to what is required of meaning. Use, on the other hand, is something complex and varying, and so immune to the same sort of criticism."

age on, with "laboratory life." But he also writes that it (1905, p 252)

did not prevent [me] from becoming interested in methods of thinking.

Thus, he claims being a philosopher, too. Quite rightly, as a matter of academic fact, for he studies philosophy. PEIRCE also teaches it for some time. It is therefore only natural that (1905, p 252)

in the writings of some philosophers [... I] sometimes came upon strains of thought that recalled the way of the laboratory. [...] Endeavouring, as a man of that type naturally would, to formulate what he so approved, [I] formulated the theory [of pragmatism].

As already quoted from PEIRCE (1905) in the previous chapter (see § 2.3), "the conduct of life" is based on "conceptions" resulting from accurate definition of "all the conceivable experimental phenomena which the affirmation or denial of the concept[ion] could imply." Pragmatism declares that such experiments yield "a complete definition of the concept[ion]." PEIRCE includes the view that those experiments are themselves conducted through dynamics of triads. In the previous chapter, I showed how my further development of his concept of *ground* led to a hexadic model of an experimental step in the course of arriving at a – temporarily final – foreground and background interpretant.

It is, however, not my intention to repeat the previous chapter. What I want to bring out is precisely the emphasis that PEIRCE puts on, say, the experimental flavor of his pragmatism. I rephrase it here as an emphasis on observation. This helps to qualify the Peircean relationship between on the one hand the sign user, and on the other hand the object which the sign is assumed to stand for.⁸

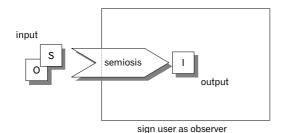


Figure 3.1.1. Sign user in observation mode.

In his capacity of an observer, the sign user is predominantly passive toward the sign and, indirectly, toward the object. Such passivity is paradoxical, for at the same time the sign user is very actively occupied with interpretation. But at least as PEIRCE has it, all of semiosis occurs *within* the boundaries of the "sci-

8. For the time being, I refrain from introducing situation and context into the expla-

nation. They are not yet required at this stage.

entific intelligence." In my hexadic view, that is where the dynamics are triggered to internally construct – yet another – foreground and background interpretant, etcetera. The intelligence, or mind, does its 'work' without changing either the original sign or the object *outside* it. Again, during every step of the process of sign use, observation leaves (outer) sign and object untouched. In terms of process, the sign – and with it, the object – is the input, and the interpretant is the output. This is shown in Figure 3.1.1.

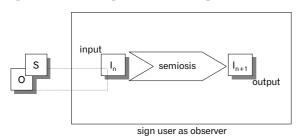


Figure 3.1.2. Passivity toward the intelligence's exterior world.

Figure 3.1.2 sketches some of the process dynamics of sign use. The passive stance of the Peircean observer regarding his exterior world is absolute during all subsequent steps, i.e., in all steps but the first of his process of sign use.

3.2 an engineering attitude

I don't consider myself an experimentalist, as PEIRCE does. I am an engineer. Anyway, information systems engineering is what I studied and still practice. Does this touch of autobiography mean that I want to oppose engineers, myself included, to other people? Do I proclaim an incompatibility to exist which I myself have overcome? Am I nevertheless stating a lack of confidence, as PEIRCE does? Do I doubt that I get my meaning across?

It is exactly questions like these, but with general implications, that Part ii treats. There the focus is on sign exchange and on a corresponding anatomy of meaning. Here, I just contrast the engineer with the experimentalist.

Above, I sketched a caricature of the experimentalist by casting him as an observer, only. My caricature of an engineer is that he is active in his outside world, as Figure 3.2.1 shows. He does not leave objects unchanged. On the contrary, he modifies them, creates new objects. And he deletes objects, too. The interpretant is, so to speak, what he starts from (Ist), striving to implement a corresponding object-as-sign (Soll). Faithful to PEIRCE, an engineer can only learn about his external construct through a(nother) sign. It drives his feedback.

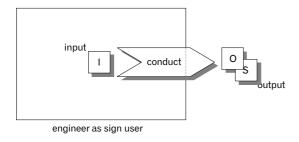


Figure 3.2.1. Sign user in engineering mode.

In Figure 3.2.1, the process of constructing an object is labeled conduct. The association with the Peircean concept is fully intentional. Adding the perspective of the engineer, however, illuminates that PEIRCE does not elaborate on actual conduct, i.e., he did not extend his theory to behavior of the 'owner' of the "scientific intelligence" outside that intelligence or mind. I recognize his pragmatism as strictly oriented, not at explaining such actual, externally oriented conduct, but at explaining the structure of the basis of conduct, i.e., the beliefs and doubts (1905, p 257) developed internally by the "scientific intelligence." This makes Peircean pragmatism also an ethics or, rather, a metaethics.

I continue to take conduct to mean: actual conduct. That is, specific behavior. But, then, observation is – an instance of – conduct, too. For I consider conduct to entail any *exchange* between a sign user and his external world. To the extent that the sign user is motivated to understand the world without changing it he primarily acts as observer. When he attempts to change the world in any way his engineering attitude has gained the upper hand.

These two attitudes can never be completely separated. I presume that *all* exchange has aspects of both observation and engineering. It is their proportion which may vary, from – always in the sign user's impression, that is – all to nothing for each aspect. It is well known that, for example, at the level of quantum mechanics in physics the experimenter (also read: observer) is an insoluble part of his experiment. He is therefore also irrevocably engineering the experiment while it takes place. This is not at all incompatible with other experimental situations. They should be considered *special cases* occurring within a larger, more general *framework* allowing varying degrees of both observational and engineering involvement (just to mention the aspects which are relevant to my ontological development, here). Figure 3.2.2 provides an overview of how observation mode and engineering mode may be combined in a single process instance of sign use.

At least in his essay The essentials of pragmatism, PEIRCE migrates his notion of

the experimentalist to the workings of the "scientific intelligence." But experiments do not take place either outside the sign user, or inside him. The focus should instead be on the exchange. An experiment, or any instance of conduct, for that matter, occurs both inside and outside the sign user. Recognizing only one of the extreme cases (either/or), makes blind to the fundamentally complementary relationship of sign user and his world (and/and). As I said before, Figure 3.2.2 outlines the variety of proportions, possible between observation and engineering in the course of exchanges.

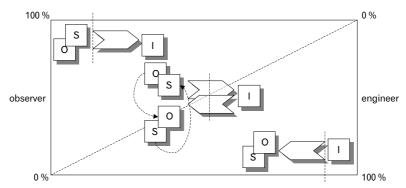


Figure 3.2.2. The space of modal mixes for sign use (limited to observation and engineering).

The emphasis on exchange also suggests that the – internal – dynamics of sign use need not necessarily converge. In § 2.3, I proposed the idea of a threshold value. Whenever the difference – according to whatever measure – between consecutive interpretants falls below that value, the process instance halts. It now makes sense to introduce a second threshold value. In contrast to the lower, it is a higher threshold. Its contribution is that the process also stops whenever two consecutive interpretants *exceed* such a value. So, in addition to feedback based on the lower threshold, such as (with b for bottom)

$$I_{n} - I_{n-1} \le L_{u, b}$$

control⁹ of a process of sign use also involves checking whether or not (with t for top)

9. As N. WIENER explains in *The Human use of human beings: cybernetics and society* (1950): "For any machine subject to a varied external environment to act effectively it is necessary that information concerning the results of its

own action be furnished to it as part of the information on which it must continue to act."

When such control is understood as decision making, also the work of H.A. SIMON is

$$I_{n} - I_{n-1} > L_{u, t}$$

When the second comparison holds true in the mind, arriving at a satisfactory interpretant is practically deemed impossible. The sign user can start a new, externally oriented exchange. He sets up an experiment with fresh objects and – which is what he could only experience – signs. Engineering such an experiment makes a new observation possible. ¹⁰

3.3 explicit axioms

What PEIRCE hints at when he places experimentalists apart from other people is, as I call it, their incompatibility. Superficially there may not be any differences noticeable. If so, there must be something – more – hidden from perception. This treatise can serve as an example. I am confident that I invite criticism. I am only too aware of many assumptions so far left unexplained, or even unspoken. It is the essential nature, dilemma even, of much communication. Explaining my assumptions can never starts ex nihilo. For which are the assumptions underlying, precisely, the assumptions to be described? Is there a practical, yet responsible way out of such infinite regress?

very relevant. In Administrative Behavior (1945, p 76) he proposes different ways to qualify the rationality of a decision. His perspective, though, is still the ideal of objective rationality. But in practice, he says (p 79) "[i]t is impossible for the behavior of a single, isolated individual to reach any high degree of rationality. The number of alternatives he must explore is so great, the information he would need to evaluate them so vast that even an approximation to objective rationality is hard to conceive." SIMON continues to develop "the limits of rationality." He concludes that (p 108) "[h]uman rationality operates [...] within the limits of a psychological environment." And, of course, this "environment" is precisely what PEIRCE calls "intelligence," accompanied by the adjective "scientific" when it is (1897, p 98) "capable of learning by experience."

With J.G. MARCH, SIMON extends his ideas on the "cognitive limits of rationality" in *Organizations* (1958).

10. To the best of my knowledge, the perspectives of observation and engineering have not yet been integrated this way in an approach to sign use. Still, these attempts at modeling cognitive dynamics should not be taken too seriously as contributions to cognitive psychology proper. No doubt, higher order dynamics are involved. I include my 'experiments' [a] in search of specific boundary concepts, and [b] to provide an example of developing such – in this case – interdisciplinary concepts. The role of boundary concepts in meaning is explained at length in Part ii.

In strictly logical positivist science the problem is not even acknowledged. Phenomena (also read, in a wide sense: objects) exist without ambiguity and only need to be properly labeled. Definitions are all important. Science is like taking inventory of reality, applying the a priori definitions. When the proper procedures are observed, original statements about the objective inventory are the *truth* about reality. Still following accepted procedures, derived statements are then equally labeled true. That is why mathematical, or symbolic, logic has acquired such importance in *logical* positivism. It is seen as a guarantee to verify the claims that are made to truth. Positivist logic is assumed to lead to the truth when the predicate – which is an initial statement about an object's particular property – is 'true' and subsequent symbolic procedures are properly 'observed.'¹¹

This is to a large extent a treatise about positivist science. I consider it a constructive critique. For in order to save what is valuable, positivism's assumptions must be critically assessed. But what are they, actually? For example, does the world really consist of neatly separated objects? Does an object have universal continuity? Are the truth claims made by logical positivism really based on universal validity of such assumptions?

The enormous success of positivist science must not necessarily be taken as proof that its assumptions are optimal. What may be concluded, is that they often hold on the limited fields at which the positivist approach is applied. That is, they *work* for relatively simple, small-scale problems. But traditional

11. My scant sketch of logical positivism is of course a caricature, too. For a serious introduction the reader may consult Logical Positivism (1981) and Essential Readings in Logical Positivism (1981). The first book is written by O. HANFLING, the latter edited by him. That metaphysics is always present is also made clear by G. BERGMANN in The Metaphysics of Logical Positivism (1954). Elsewhere, BERGMANN remarks humorously (1959, p 54): "I do not have to prove, as they do at Oxford, that all metaphysics is nonsense." MYERS remarks that (1961, p 186) "the opponents of philosophy itself, encouraged by the failure of one grand system after another, have boldly declared that metaphysics has no present and no future."

The pioneer of experimental psychology

WILHELM WUNDT (1832-1920) also writes System der Philosophie (1889). Though he considers himself a positivist, WUNDT even gives (p v) metaphysics a central position in his system. He comments that such emphasis bewilders both his opponents and allies. But he adds (p vi): "Dass die Aufgabe der Wissenschaft nur unter Zuhülfenahme von Voraussetzungen gelöst werden kann, die selbst nicht empirisch gegeben sind, ist ein den Erfahrungswissenschaften bereits geläufiger Gedanke." (My translation reads: "It is already commonly accepted in the experiential sciences that their task can only be accomplished with the help of assumptions which, in their turn, are without empirical ground.")

positivism fails as problems grow more complex. Again, most assumptions are saved when they are integrated into a larger, explicit ontological framework.

A typical positivist, or modern, solution for improving upon positivism would yet again start from the premise that something is either true or false. So, by its own reasoning, if positivism is not true, it must be false. In postmodern¹² thinking, such a conclusion is too hasty. Why not maintain logical positivism? But then, also for its own protection, do not give it room for scientific hegemony. Respect and apply its strengths, recognize and avoid its limitations. Properly constrained, it can take its optimal place among other approaches. As with observer *and* engineer being aspects of the sign user, there will undoubtedly be a characteristic positivist element in any conduct, scientific or otherwise.

It is possible to integrate positivist contributions when the approach's basic set of assumptions are repositioned as just one instance besides many others that *all* fit encompassing dimensions. This design is of course the engineer in me at work. I do not accept that different instruments need to be constructed where, applying proper abstraction, a single instrument can handle all variety.¹³

I act responsibly, especially when I seek scientific recognition of the results of my efforts, when I explicitly state my axioms for an encompassing ontology. But why didn't I state them at the outset of this treatise? It is mainly to avoid the impression that I aim for truth in the positivist sense. However, I strongly believe the axioms I will presently report. It is belief according to PEIRCE's pragmatism. That is another reason why I present them here, and not before. My axioms are the result of much experimenting, that is, of much observation *and* engineering. And they will continue to be so, of course. After my introduction to PEIRCE, I may assume that this meaning is now fully clear.

Then, finally, what are my axioms? I start from the experience of *exchange*. What I call my very own 'I' is one participant in a continuity of existence experienced through exchange instances, some consciously and most no doubt unconsciously. All the other participants are 'not-I.' Together we are reality, or the world.

12. Further on, it will become clear that postmodern may be substituted here by situationist, yielding that such a conclusion is too hasty according to situationist theory, or thinking. 13. It is the combination of engineer and mathematician that I embody. This way, the overall theme of this treatise is explained by me having received my training at [1] the department of information science, of [2] the faculty of mathematics at [3] a university of engineering technology.

In relation to not-I, I feel the privileged participant. It is the privilege of having a different status. There is no moral value implied, though. I am not morally superior of inferior to all that I consider as not-I. Again, I just feel *different*. It is the experience of a boundary. Not-I crosses it to I. And I cross it to not-I. It is what, here by definition, exchanges are for.

At this point I can already assume that anyone professing himself a positivist will feel uncomfortable with such outright subjective axioms. Indeed, when science is supposed to provide objective knowledge, my account of 'my' axioms definitively looks silly. But is it, really? Isn't avoiding any account what is unscientific? Isn't ignoring subjectivity what is really irresponsible? I don't feel embarrassed at expressing the essentially subjective nature of conceptual grounds. I will therefore continue in the same spirit. My account can not be positively proven, and 'I' also do not expect it to be. Nobody's account can. For some branches of psychology this is already familiar ground. Comparing it to physical sciences, for example R.J. LIFTON states in *The Life of the Self* (1976, p 24):

Depth-psychological work is simply not, in its very nature, comparably precise in concepts or observations, nor comparably susceptible to proof or disproof. It is radically less predictive and notoriously more complex in its many-layered, unmanageable variables.

I do not want to argue here about the precision possible in physical or natural sciences. What I find relevant is that LIFTON proceeds to insist for depth-psychology upon (p 25)

a complete autonomy from positivistic definitions[.]

He adds:

Depth psychology [...] must draw upon the individual and collective experience of its era in evolving its concept of the self; and then, in a subtle chain (or web) of cause and effect, turn that self on the self—apply it to the understanding of the individual.

The result often looks unfamiliar to positivist eyes. My own account, as I have already said, is certainly no exception. I continue it.

I am a configuration of all sorts of instruments to live in the world (DAWKINS, 1976). One of my instruments is intelligence (SCHOPENHAUER, 1813, 1818). It is precisely this intelligence which, in fact, — in fiction, not in fact, actually (VAIHINGER, 1911) — makes me think that I am different from not-I. Sometimes I even think that all that I amount to is my intelligence, with all the rest being not-I. But soon enough, my intelligence knows better, again. I must have received, and processed, a sign from one or more of my other 'instruments,' alerting me to our essential alliance. But, still, I can never be absolutely sure whether there is a real I. I am pretty sure, though. Sure enough to believe in I.

My intelligence does not really mind (pun intended) that it does *not* really (another pun?) very well understand the world where it is closest at hand. Its

range of focus, 'me' being somewhat farsighted, seems away from its own center. ¹⁴ It is quite well adapted for making out differences – further – beyond I. This whole I-thing, and I also call it *all that subject business*, is far too integrated, anyway, to make properly organized sense of.

My intelligence likes objects. It has an insurmountable problem, though. It cannot directly experience objects (PEIRCE, and of course many others). Now I come to think of it, maybe that is why my intelligence likes them so. For it could turn out very disappointing when it really met one. What my intelligence probably likes about objects is precisely its *distance* to them.

What I get through *as intellectual experience* is something I call information. A sign is the same thing. But I don't believe, fundamentally so, that signs are all that not-I is about. Again, that is why I *believe* in objects.

I actually believe that many objects are subjects, like me. Such beliefs rest on my capacity of *empathy* (see Chapter 6; it also explains that the variety of information is largely dependent on the interests of the subject).

Figure 3.3.1 shows how some of the concepts mentioned are thought – yes, of course, by me – to relate to each other. Of course, it is not so much that an object unequivocally emits information to a subject. Rather, the subject's interpretant or "reality construct" (HOLZNER, 1968) leads him to believe in the existence of a corresponding object.

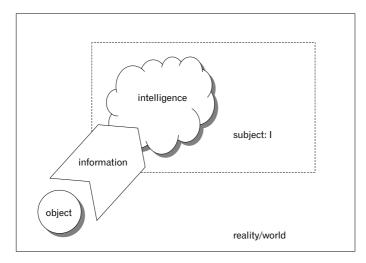


Figure 3.3.1.

Overview of some foundational concepts.

14. This coincides with an observation often made about intellectuals. They are consid-

ered so farsighted that their morals do not apply to themselves, at all.

As I said, subjective intelligence never directly meets what is beyond the exchange. I nevertheless like to speculate¹⁵ what might be 'on the other side.' Actually, I have learned that I had better like it. For I have to do it, anyway, to make sense of my life.

What do I speculate that not-I involves? I have just said: objects. Frankly, I don't believe this anymore. For that belief has kept me – please note, of course this 'me' is 'I,' too – running into those long, seemingly endless cycles of interpretation, experimentation, etcetera.

One day it hit me. I don't believe in a "crisis of the self" (R. BARGLOW, 1994), anyway. But I could never make sense out of the change of a particular object while it remains the same, too. Or, inversely, when an object keeps what I view as its identity while changing. My problem was that I could not explain that duality annex synthesis with familiar either/or assumptions. How I understood my information was that, *and* the object is characterized by sameness, *and* by differences.

What finally struck me was that object is too stable a concept to be independently, that is, in isolation, able to resolve *both* the opposing *and* binding forces of continuity and change. What I need are two variables, instead of the binary one that in hindsight I now recognize so clearly as insufficient.

Enter situation. Both object and situation are extremely common terms. However, speculating on their dynamic relationship led me to the resolution of forces. The core concept should not be object, or situation. What is critically variable, I presume, is *behavior*. It entails a shift of focus which I recognize as also underlying F.H. ALLPORT's "theory of event-structure" (1955, p 665):

[T]he distinctive reality of phenomenal aggregates is now seen to lie *not* in these ultimate and uniform particle-elements, but in their *cyclical ongoings and in the diverse cycles, systems, and orders to* which, by their events of encounter, they give rise. It is these relatively enduring and myriad structures of ongoings and events, rather than the compounding or aggregation of "particles," that provide the phenomena of nature in all their uniqueness and variety.

But does not behavior presuppose 'something' that *does* the behaving? An object, after all? In this respect, role is a synonym for behavior. A single *object*, as keeper of sameness, can practice several behaviors. It may exhibit all sorts of differences, or perform all sorts of different roles. What determines a behavioral difference for an object is its particular involvement with(in) a *situation*.

These are my axioms. It is a set of concepts for which I do not even attempt to provide any positive proof. That is what they are axioms for, or grounds, or

15. For an overview of such speculations throughout history, see *Speculative Philosophy* (1972) by A.J. RECK. A wonderful treasure

trove is the *Handbook of Metaphysics and Ontology* (1991) edited by H. BURKHARDT and B. SMITH.

basic assumptions. Figure 3.3.2 sketches a development of concepts reconciling, as a system, continuity with change.

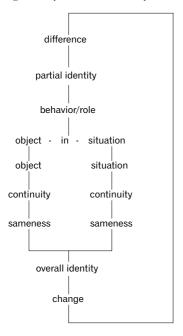


Figure 3.3.2. An attempt at relating the concepts of continuity and identity.

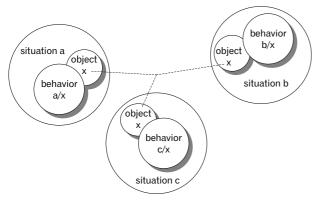


Figure 3.3.3. Same object, different behaviors/roles.

I emphasize that it is precisely two concepts both associated with continuity, i.e., object and situation, which in combination make differentiated recognition of change possible. Figure 3.3.3 sketches the different behaviors/roles of

an object x in situations a, b, and c, respectively. The Hegelian account of HAAS reflects such a dissemination-without-loss-of-relatedness of a single identity into a multitude of partial identities (2000, pp 97-98):

Multiplicity means a way of being many, many ones. Being many does not mean "having many predicates" or "having many as a predicate"; rather, as a concept, being many is the "ways" in which being both is and is not many. To be many as many is to be without one [...]; but as such, being many is not just many – for it is also its negation, that is, one.

Elsewhere, HAAS directs my interpretation once again to both the tension between psychological and sociological outlooks, and to the possibility of their mutual reinforcement (p 147):

Each component is identical with itself in comparison with the others, but each can make this comparison, be self-identical, self-sufficient, only insofar as it is in relation with the others – identity is based on difference, difference is grounded in identity, and multiplicity means that which is summarily constructed from differences[.]

Axioms, which is their nature, are elementary to my additional assumptions, etcetera, all the way on to hypotheses, comments, opinions, conclusions, proposals, etcetera. So, I will return to them throughout the treatise where I feel I need their fundamental support to be explicitly available.

There are three remarks I right away make here. The first is that, indeed, positivist axioms are encompassed by my situational variety. For when an object's behavior is taken as invariant across situations, rather than as variant, there is also no need for different situations to be recognized. In this simple manner, the way to practicing positivism is always left open.

Secondly, now that I have made an attempt to express my axioms I hope that any earlier causes for confusion are sufficiently resolved. Or whatever critique has undoubtedly become more focused. Disagreements at the axiomatic level are also treated extensively in Part ii on the anatomy of meaning, even especially so in the critical Chapters 9 through 12.

My third remark, here also directly following the statement of my axioms, is the most fundamental. This set of axioms not only allows, but stimulates recognition of behavioral variety by a single object. I value this insight very much. Grounded in empathy, it is extremely simple to respect other 'objects' as subjects in their own right. Every social creature does so naturally as a participant in personal relationships. This respect is now extended by force of axioms to scientific activities. It consider it a worthy development of, for example, PEIRCE's "scientific intelligence."

16. Such an approach becomes second nature to a mathematician. For example, why separate one- and two-dimensional systems? Their integration is possible when the one-

dimensional system is a special case of the two-dimensional system. What it takes is to fix the second variable at a specific value. The axioms presented above together constitute the skeleton of an ontology. I call it *subjective situationism*. Questions about this situationism no doubt arise immediately. In the current paragraph I formulate three questions that are both obvious and logical to myself, and provide my answers.

First question: Does it not already exist? Or, how *innovative* is it? As an engineer I recognize that the evaluation of applications for patent rights gives some general direction for answering such questions. J.J. DE REEDE argues that (1937, p 115, my translation from the Dutch),

roughly, innovations may be sorted into two main classes. There are innovations which clearly manifest a distinct surplus when compared with the single nearest object previously known; the emphasis in the evaluation should then simply be upon this surplus. With other innovations it appears impossible to point out such a generally valid difference; there will be different differences, each depending on the particular object included in the evaluation. Combining characteristics from the two main classes, more specific types of innovations

So, does subjective situationism uniformly stand out? Or should it be compared to a host of other theories, with each comparison highlighting one or more particular differences? As often practiced for patent applications, I adopt a mixed strategy. The wealth of intellectual 'objects' forces limitations upon any researcher attempting evaluation. I therefore can never really know for certain how original, or not, subjective situationism is as a theory. However, I can give some indications by looking at *several* other approaches.

Many theories deal with complexity, variety, subjectivity, etcetera. I am only aware, though, of a few other theories that *synthesize* the perspective of the knower (idealism) with what exists anyway (realism) more or less in the manner described here for subjective situationism. My capacity for recognizing related developments, however, has greatly improved *after* I reached my own results. It confirms the emphasis VAN PEURSEN (1993) puts on engaging in the ars inveniendi. I don't think I can claim any of my ingredients as my original innovation. The more publications I study from the perspective of subjective situationism, the more I can acknowledge similar contributions. And I am happy to oblige whenever I make a related discovery.

But do I at least offer a unique synthesis? Is my configuration new? And, as a consequence, do the ingredients acquire new properties in their novel configuration (also read: situation)? I am equally unsure. For example, I learned about VOLOSHINOV's *Marxism and the Philosophy of Language* (1929) after I thought I had actually completed the manuscript of this treatise for printing. This also applies to *Systematic Pluralism: A Study in Metaphysics* (1961) by MYERS. I believe my theory is still different from those theories in several important

Is subjective situationism innovative?

ways. But there is practically never conclusive evidence that my synthesis is indeed original.

Why is it impossible to achieve certainty about originality, or the lack there-of? With an ongoing explosion of scientific publications, it is practically impossible to research all literature when trying to establish such a claim. Instead, I practice due diligence. I find confirmation that, indeed, situation is a widely used concept. As relevant for answering the first question, for example I learned about the so-called ontology of situations (B. WOLNIEWICZ, 1991).¹⁷ It is a semantic theory that recognizes, exactly as situationism does here, situations as an ontological category. What is different, though, is that (p 842)

the concept of a situation [is related] to that of truth. [... N]ot the whole of reality is relevant to the truth-value of a proposition, but only some part of it. A *situation* is any such part capable of establishing the truth of some proposition.

As founders of such situation semantics with a strong orientation at logic are considered K. JON BARWISE (1942-2000) and JOHN PERRY. They have jointly authored *Situations and Attitudes* (1983). It believe their early situation theory, as it is also called, is indeed still formally truth-oriented. It is therefore a speculation in predominantly naive realism. As its label situation semantics indicates, they limit their concepts to semantics, only.

(My brand of) situationism is not developed starting from traditional formal logic. In fact, I regard any protracted formalization with suspicion because limiting attention to form is ultimately anti-realist. BARWISE, however, sets out to design an improved approach to answer specific *logical* problems. He ends his launching article *Scenes and Other Situations* (1981) by remarking (p 31):

I hope to have shown how some mildly puzzling features of perception and [naked imperative] perceptual reports have a relatively straightforward explanation.

Together with PERRY, BARWISE subsequently broadened the range of the theory's application. I see their situation theory as an attempt of (closer) integration of logical positivism with analytical philosophy annex natural-language philosophy. ¹⁹ Next, I attempt the briefest of summaries of their theory. Any

17. I am referring to the lemma *Situations* that WOLNIEWICZ contributed to the *Handbook of Metaphysics and Ontology* (1991, pp 841-843; see also note 15, above).

18. Situations and Attitudes (1983). Its authors place the concept of attitude in their semantic framework, too. The difference between our approaches may be explained by their interest in the language system and how it

produces meanings while I orient myself principally at behavior.

19. Elsewhere in this treatise I treat analytical philosophy as equivalent with logical positivism. This is of course a simplification (M.J. CHARLESWORTH, 1959; see also the forceful understatements of B. BLANSHARD in *Reason and Analysis*, 1964; G. RADNITZKY compares philosophies of science in *Contemporary*

more elaborate treatment of such a complex conceptual scheme is beyond my scope. 20

As what it has developed into, situation theory is now generally concerned with so-called information flow. Information is theorized as flowing from one particular situation to another. Language is supposed to fit the general pattern as just a special case; an utterance is a situation, too. The resulting situation (also read: interpretation by an agent) occurs because it has a type that is linked to the type of the originating situation. The concept of meaning entails the type-level relationship between situations. This is also called a constraint which 'directs' the information flow. The concept of attitude refers to the types of situation that the observing agent applies (BARWISE, 1986, p 55):

[I]n our theory, meaning is a product of constraints that hold between types of situations, constraints to which an agent is attuned.

In situation theory, I encountered many ideas similar to subjective situationism as I present it here. ²¹ BARWISE, for example, states (1981, p 26):

When I look around I cannot see a single thing-in-itself, some sort of ideal physical object stripped of its properties and its relations with other objects. What I do see is a scene, a complex of objects having properties and bearing relations to one another. The properties and relations are every bit as important to what I see as the idealized thing-in-itself. In fact, what really counts is the whole complex of objects-having-properties-and-bearing-relations which constitutes the scene.

Schools of Metascience, 1968). But I detect the same underlying attitude. G. MARKUS calls it (1975, p 1) "the anti-subjectivist turn." See also VOLOSHINOV's criticism of abstract objectivism in linguistics (1929), quoted in § 5.7.

The occurrences of natural language used as models for analytical philosophy all seem cast from a strictly empirical mindset which of course predetermines an empirical outcome. Indeed, this makes many sentences problematic. By extending the scope to include situations, situation theory offers elegant solutions for several of those logical puzzles. But still, the scientific attitude does not yet really change.

20. I admit to other obstacles to a comprehensive treatment of situation theory. Despite disclaimers by its proponents to the con-

trary, details of the theory are expressed in a formal language that I do not find accessible. It only makes me concentrate harder on assumptions, skipping what are the difficult parts for me. But I do not accept that as a reason why I have so far not been able to construct a consistent structure for myself of situation theory. Probably, my assumptions and those underlying situation theory are (still) too far removed from each other. Though I recognize its improvement over previous systems of logic, it also seems to me that situation theory itself lacks consistency.

21. See note 20, above, why I experience obstacles to conduct a detailed synthesis. An attempt would undoubtedly pay off but it should be undertaken by an interdisciplinary group of 'theory designers.'

He continues (p 27):

Any part of the way the world M happens to be I call a *situation* in M. *Scenes* are visually perceived situations. The central notion in the theory is that of a scene or other situation s *supporting the truth* of a sentence ϕ in M.

This legacy of formal logic has continued to determine the development of situation theory. Again, it is BARWISE himself who suggests in *Logic and Information* that (1986, p.41)

we logicians have suffered from the inventor's paradox. That is, in investigating the semantics of ordinary language, we have been trying to do too little and so have not been able to do even that. We have been concerned solely with the truth conditions of sentences, the conditions under which a sentence can be truly asserted. We have not been concerned with the more general problem of accounting for how sentences can be used to convey information and, as a result, have not been able to get even the truth conditions right. [...] It is not attention to truth conditions that I want to call into question but the attempt to develop a theory of truth conditions or some other model-theoretic analysis of logic, inference, and linguistic meaning isolated from the flow of information.

BARWISE and PERRY add a fictional interview, with and conducted by themselves, to the 1999 reissue edition of *Situations and Attitudes*. Though the interview is playfully titled *Shifting Situations and Shaken Attitudes*, their "brand of realism" (p xlii) remains basically unchanged. Though the inventor's paradox is not called upon this time, they indicate a yet wider scope (p lvii):

It's just that what we need is a realist theory of action, one that relates action to information about the environment in which the action takes place.

This finally creates the position (also read: situation) from which to specify the essential difference between their situation theory and my subjective situationism. Apparently they are still influenced by logic as a truth-method that is independent of actors, i.e., universally valid. For BARWISE and PERRY are not sufficiently shaken to shift their axioms toward recognition of every actor's uniqueness. I believe that the principle of subjectivity is absolutely necessary for a comprehensive theory of action. The actor's environment is indeed crucial. But what about the actor himself? Both social and psychological (f)actors are required in an encompassing, richer explanatory system.

This assumption I actually find more *realistic* than what BARWISE and PERRY propose. In any case, it is 'just' a different "brand of realism." The founders of situation theory maintain that "[i]t is not attention to truth conditions that [they] want to call into question." My conceptual grounds are erected from the opposite opinion, i.e., an encompassing theory must, at least initially, discard explanations for narrower cases. For those are all too often too simplistic to account for greater complexity. That is why I neglect issues of metaphysical thruth and falsity (PEIRCE) altogether. A theory should address relevant variety right from the start. As ground for a behavioral theory it should then be

taken that an act is essentially not aimed at being truthful, whatever that may mean, but simply at getting one's way in an environment (SCHOPENHAUER).

Acts are committed in all shapes and sizes. Regarding analytical philosophy it surprises me that the analysis of acts of so-called ordinary language concentrates on *anything but* 'real life' sentences. The model of study usually (still) is the propositional statement. The emphasis is put on *how* a reality external to both participants in communication is understood from it. It is not on *why* the sign is produced in the first place. Situation theory is right to draw attention to the context of a particular sentence. It would require a different axiomatic system, though, for it to be developed consistently into a more comprehensive theory such as subjective situationism.

Another difference can also be explained from the biases of both theories. Situation theory is 'satisfied' to differentiate between situations. It therefore operates at the level of the configuration of (BARWISE and PERRY, 1983, p.8)

the basic building blocks of the theory; individuals, properties and relations, and locations.

These are conceived of as invariants or, as we shall call them, *uniformities* across real situations; the same individuals and properties appear again and again in different locations.

That is, a particular configuration of such building blocks suffices to specify a situation according to situation theory.

My purpose with distinguishing situations only starts with an awareness of such configurations. I assume a special kind of "uniformity" for an object (BARWISE and PERRY: individual). Placing an object in different situations allows for an unequivocal inventory of its correspondigly different behaviors. The behavioral differences are expressed through an object's *situated* properties (including relations). Belonging to a particular object, a property is therefore *not* a "uniformity," nor is any of its relations. On the contrary, they are special by definition of the situational differentiation of an object's behavior. My conclusion is that subjective situationism, supported by the straightforward mechanism of situation/object recursion, yields more detailed models than situation theory.²²

I repeat a particular emphasis of subjective situationism. As its point of departure it presents the T as an active and subjective interpreter of reality. This *includes* the choice of situations as crucial activity. The axiomatic nature of the subject, too, allows for dynamics of what the T understands as – existing as – situations.

When belief is substituted for "truth-value of a proposition" in the quotation from WOLNIEWICZ with which I started my discussion of situation theo-

22. I have already admitted to experiencing difficulties with situation theory's formalism. However, I understand enough to recognize

that the additional behavioral details could easily be included. Could an "anchor" (DEVLIN, 1991) be used for that?

ry, an expression results appropriate for subjective situationism results:

[... N]ot the whole of reality is relevant to a [belief], but only some part of it. A *situation* is any such part capable of establishing a [belief].

Of course, this is again belief in its Peircean sense. PEIRCE, as already explained in the previous chapter, focuses away from metaphysical truth. It enables him to see that a belief *is* a proposition, but in a sense that is different from metaphysical truth. Rather, its utility is directed at conduct. In a collection of his essays, BARWISE states in the Introduction that his "views of language and logic have changed considerably over that [intermediate] period" (*The Situation in Logic*, 1989, p xiii):

It now seems to me that the best way to understand what situation semantics is trying to do is to look at it as relaxing a certain simplifying assumption in the study of language and logic. The key insight, it seems to me, is that speech, writing, thought, and inference are *situated* activities. That is, they are activities carried out by intelligent, embodied, limited agents, agents situated in a rich environment that can be exploited in various ways. As such, these activities are always taken from an agent's perspective within that environment, and they are about other portions, generally restricted portions, of that environments, portions to which the agent is somehow, directly or remotely, connected. And being activities, they have impact, they change the environment within which the agent operates. Indeed, if they had no effect, there would be no point in them. [p xiv T]his way of looking at things shifts attention from truth to information. [... T] he study of valid inference as a situated activity shifts attention from *truth preservation* to *information extraction* and *information processing*. Valid inference is seen not as a relation between sentences that simply preserves truth, but rather as a situated, purposeful activity whose aim is the extraction of information from a situation, information relevant to the agent.

I repeat my evaluation that "relaxing a certain simplifying assumption in the study of language and logic" is necessary but stil *insufficient* for arriving at a consistent theory which BARWISE so eloquently announces. A radical departure is required. Still, even though starting from different perspectives, I find the potential for convergence of the later situation theory of BARWISE and my own subjective situationism promising. As I have already indicated, I don't pursue it in this treatise. I restrict myself to taking an inventory of — what I recognize as — related developments. I aim to assess whether or not other (known) theories are (very) similar. The survey of situation semantics/theory confirms that I should continue to follow an essentially pragmatic, rather than semantic, orientation for my own theoretical design. ²³

A pioneer of situation theory in the philosophy of language may be considered WITTGENSTEIN. He coins the phrase language game (1953). When this is

23. A simple way to contrast subjective situationism with situation semantics is to call the

former: situation pragmatics.

read as a situation being a game field, with the language users as players, situationism is quite similar. WITTGENSTEIN also suggests (p 5e) that one language game may be enveloped by another. This recursion is a prime characteristic of the metapattern, as the next chapter will show.

Building upon the work of BARWISE and PERRY, KEITH DEVLIN develops a preliminary mathematical treatment of situation semantics in his book *Logic* and *Information, Volume I: Infons and Situations* (1991).²⁴ It revolves around the

24. DEVLIN also contributes the lemma *Situation Semantics* to the *Handbook of Metaphysics and Ontology* (1991, pp 840-841; see also note 15, above).

From the title of the paperback reprint of Logic and Information he drops the number indicating it as the first part of an encompassing publication. DEVLIN originally plans a second book (Preface to the paperback edition of Logic and Information, 1995, p xiii) "in which some of the details of the mathematical theory would be described." My impression from later books by DEVLIN (1997, 1999) and from a book coauthored with D. ROSENBERG (1996) is that he doesn't so much get "sidetracked" (as he explains in the Preface, 1995, p xiii) but gains the realization that such an endeavor is fruitless. Especially Goodbye Descartes (1997) manifests his grown awareness of issues beyond formal logic (p 191): "[W]hereas logic sets out to provide the theory of reasoning, the role played by logic and its extensions in studies of communication is very much that of a tool that is used in the analysis – just one tool among several." In the same vein, he remarks that (p 180) "[t]he suggestion that much human activity is not based on rules has enormous implications for the logicians' rule-based view of human thought." But he stops well short of offering a fundamental redesign of situation theory reflecting his accumulated views. Though DEVLIN argues for a different perspective, he does not actually develop and apply it. While refraining from extending formalism, his now largely informal presentation of situation theory remains constant (p 207): "In many respects, situation theory is an extension of classical logic that takes account of contexts." It sounds as if DEVLIN is unwittingly echoing for example VOLOSHINOV when he remarks that (1999, p 37) "the key to obtaining information is *always* to be found in the context, not in the representation." To logicians, apparently (1997, p 278) "[i]t is all relatively new."

Together with J. SELIGMAN, J. BARWISE continues on his path of formalization in their book *Information Flow: The Logic of Distributed Systems* (1997). However, the term *situation* does not serve their purpose anymore for what becomes an increasingly mathematical treatment.

Other publications much in the same tradition that underlies situation semantics/theory are Conceptual Structures: Information

Processing in Mind and Machine (1984) and

Knowledge Representation: Logical, Philosophical,
and Computational Foundations (2000) by JOHN

F. SOWA. All such expositions are still firmly
grounded in – and therefore defined by –
logical positivism, analytical philosophy and
philosophy of language from which the current treatise aims to establish a fruitful departure, at least at a metaontological level.

Early work on conceptual models for

concept of an infon, DEVLIN's coinage for an item of information. At a formal level anyway, some correspondence might be established between his approach – and situation theory in general – and my own metapattern. Then again, comparing the metapattern with for example the graph-oriented formalism developed by A.F. PARKER-RHODES in *Inferential Semantics* (1978) probably shows up more interesting similarities. I don't pursue such comparisons. My interest lies here with design of improved conceptual grounds. I am not engaged in a detailed criticism of traditional symbolic logic as a closed tool which often even counteracts application of more productive grounds. The tool of logic, however, is DEVLIN's professed preoccupation (1991).

A genuinely different perspective is precisely what JOHN DEWEY (1859-1952) achieves much earlier. It is difficult, however, to discover his seminal ideas. Modern authors such as BARWISE, PERRY and DEVLIN regretfully do not refer to DEWEY who writes, for example in *Logic: The Theory of Inquiry* (1938, p 892)²⁵ that

[i]n actual experience, there is never any such isolated singular object or event; an object or event is always a special part, phase or aspect of an environing experienced world – a situation. The singular object stands out conspiciously because of its especially focal and crucial position at a given time in determination of some problem of use or enjoyment which the *total* complex environment presents.

He continues that (p 894)

[d]iscourse that is not controlled in reference to a situation is not discourse[....] A universe of experience is the precondition of a universe of discourse. Without its controlling presence, there is no way to determine the relevancy, weight or coherence of any designated distinction or relation. The universe of experience surrounds and regulates the universe of discourse but never appears as such within the latter.

information systems has especially been done in Sweden, with BÖRJE LANGEFORS as its major proponent. See for example Information Systems Architecture (1975) by B. LANGEFORS and B. SUNDGREN, Theory of Data Bases (1975) by B. SUNDGREN, Information and Data in Systems (1976) by B. LANGEFORS and K. SAMUELSON, Systemontwikkeling volgens ISAC, de ISAC-methodiek (1978) by M. LUNDEBERG, G. GOLD-KUHL and A. NILSSON, and Information Modeling (1983) edited by J.A. BUBENKO.

25. The quotations are taken from *Intelligence* in the Modern World, John Dewey's Philosophy

(1939) edited by J. RATNER. The page numbers refer to his compilation. DEWEY's original *Logic: The Theory of Inquiry* is published a year before.

As T. BURKE remarks in *Dewey's New Logic* (1994, p 22): "In particular, the notion of a situation [...] is a full-fledged technical notion in Deweyan logic. Dewey was able to employ this notion as a device for introducing factors of context as well as direct reference into logic and into his philosophical views at large." My own device for precisely those purposes is the semiotic ennead, introduced in § 4.5.

And, according to DEWEY (p 895),

[o]ne cannot decline to have a situation.

What surprises me – no doubt the surprise occurs because I am largely ignorant of the field – is to discover a parallel with molecular biology. In his engaging popular introduction *Signs of Life: The Language and Meanings of DNA* (1994), R. POLLACK applies a semiotic perspective (p 12),

allowing us to argue for the validity of a multiplicity of meanings, or even for the absence of any meaning, in a stretch of the human genome.

He adds (p 118):

context is [...] critical to the meaning of a gene[. ... A] gene may mean two completely different things in two different cells or even in the same cell at two different times.

And (p 138):

[M]any traits worthy of study are not the result of one gene's expression but the combined consequence of many genes working together.

POLLACK therefore concludes (p 176):

[A]bove all, the human genome is multiple.

As I expect, situation is a recognized concept in the field of social psychology. L. ROSS and R.E. NISBETT, drawing on the work of K. LEWIN, write their book *The Person and the Situation* (1991) from their conviction of (p xiv)

the power and subtlety of situational influences on behavior. [... W]hat has been demonstrated through a host of celebrated laboratory and field studies is that manipulations of the immediate social situation can overwhelm in importance the type of individual differences in personal traits or dispositions that people normally think of as being determinative of social behavior.

But there is also

the need to take into account the subjective nature of situational influence, that is, to recognize the extent to which people respond to their own "definition" or "construal" of the situations that stimulate [...] their behavior.

These two factors are both important for an explanation of meaning. They figure prominently in Part ii. Here, I merely report on related developments to what I call subjective situationism. In fact, ROSS and NISBETT already use situationism as a label (p 4) "to recognize the importance of situational factors in affecting behavior." And they recognize the subjective element in what HOLZNER (1968) calls "reality construct." So, ROSS and NISBETT do not restrict their situationism to objective "situational influences," but they concentrate on human behavior. See also Frame Analysis, An Essay on the Organization of Experience (1974) by E.F. GOFFMAN. 26

26. The concept of frame is also applied in artificial intelligence annex cognitive science (M. MINSKY, 1975). Similar concepts have been developed, such as script (R.C. SCHANK

and R.P. ABELSON, 1975; R.C. SCHANK, 1984), schema (M.A. ARBIB, E.J. CONKLIN and J. HILL, 1987) and story (R.C. SCHANK, 1990).

I present situationism as a *general* ontology, that is, any behavior is considered as a collection of – dynamic and static – properties of a *situational* object. And through including processes of sign use my proposal for (subjective) situationism *integrates* the subjective experience that the sign user has of his objectified reality. This integration is essential. ROSS and NISBETT still maintain that (p 11)

the personal and subjective meaning that the actor attaches to [a] situation [...] challenges the theoretical and practical value of the doctrine of situationism.

Again, conflict turns into synthesis on the basis of PEIRCE's insight that the sign stands for an object. ROSS and NISBETT appear to consider situationism as a partial doctrine. Despite their recognition of "the subjective nature of situational influence," ultimately it is 'only' about the existence of objective reality. A sociological concern with "emergence and relativity" already finds an expression with P. MCHUGH in *Defining the Situation: The Organization of Meaning in Social Interaction* (1968, p.4):

[A] society cannot be conceived to be socially organized without reference to the experiences of members, and [...] the definition of the situation is a way of depicting those experiences.

Extending PEIRCE's work on transcendentalism, I put subjective situationism forward as an overall doctrine. It encompasses variety of both objectified reality and subjective intelligence. In a similar vein, though it seems with a more limited concept of ontology, H. PARRET (1983, see especially p 8)²⁷ writes of "semiotics as a paradigm." E. LASZLO arrives at a synthesis as follows(1966, p 233):

[S]ince metaphysics presupposes realism and meaning presupposes scepticism, and scepticism and realism are non-contradictory, meaningful metaphysics is possible.

H.A. MYERS states (1961, p 182):

Systematic pluralism is an epistemological theory, although one of its consequences is that epistemology and metaphysics are one.

A consequence of subjective situationism, precisely, is that not just "epistemology and metaphysics are one" but equivalence holds for semiotics, epistemology and metaphysics.

One of the immediate, highly practical benefits of the elevated place for subjective situationism is that the concepts of situation and context need no longer be confused.²⁸ For they have each been given a distinct position in the hexad of sign use. Elsewhere, the terms of situation and context are mostly

27. PARRET writes illuminatingly on the relationship between linguistics and philosophy of language (1979).

28. An even hyperbolic terminology is often used, for example by DEVLIN who writes (1999, p 71) "context situation." The (more) rigorous distinction between situation and

used intermittingly, as if referring to equivalent concepts or, even, to an identical concept.

Often, the embarrassment of verification consists of admitting that one's own contribution might, after all, not be all that original. Luckily, this is more than offset by the discovery of community at work.²⁹ My search for theories related to subjective situationism has led to additional and often productive discoveries. From more general perspectives that I gained, I can also point out significant conceptual coincidences in and differences between disciplines

context this treatise supports is still generally lacking. In Discourse analysis (1983), G. BROWN and G. YULE emphasize (p 27) "that the discourse analyst necessarily takes a pragmatic approach to the study of language in use. Such an approach brings into consideration a number of issues which do not generally receive much attention in the formal linguist's description of sentential syntax and semantics. [... F]or example, [...] the discourse analyst has to take account of the context in which a piece of conversation occurs." Of course I agree with their emphasis. However, they continue to group the "issues" as "context of situation," but fail to explain the nature, if any, of nonsituational context. They refer to (p 46) "preceding text" as "cotext." The latter term also appears with K.J. ONDARRA who sketches "a framework in verbal communication" (1997, p 46): "[W]e will have to account for [utterances] in a given context bound co-text."

In my ontological annex epistemological annex semiotic scheme (see especially Figures 2.7.4 and 4.5.2) derived from PEIRCE's triad, situation is a concept along the realist dimension and context is a concept along the sign dimension. As such, situation and context are both different concepts and irreducibly related. And context and cotext may be treated as synonyms.

29. Again, I acknowledge that similar answers have in fact been developed elsewhere, and earlier. Here, I especially refer to dialogical theory. Enjoying what I then believed was my completion of the manuscript, in the summer of 2000 I was browsing in a well-stocked bookshop where I literally saved a copy of A.H. WOLD's (editor) The Dialogical Alternative, Towards a Theory of Language and Mind (1992) from a hidden corner. I can only stand amazed, once more, at the difficulties a genuinely different, and definitely richer, theory encounters to get widely accepted. Why does WOLD still deem it necessary to write, with unwarranted modesty, of an (p 2) "alternative to mainstream models within linguistics, psycholinguistics, cognitive psychology and cognitive science" when the alternative is so clearly superior? At least, I find its merits easy to recognize after my own efforts at an anatomy of meaning (see especially Chapters 7 and 8). I am therefore happy to have learned about dialogical theory in time 'in my world' to acknowledge its precedence over what follows here, even when I don't alter my treatise except for mentioning it right here (and in note 16 in Chapter 7 where I could still fit it in). Actually, unwittingly I may have made some fundamental contributions to dialogism. For as an 'alternative' subtitle for this treatise I can suggest: conceptual grounds of dialogical theory.

29a. This last-minute note serves to acknowledge another precedent. Pursuing my interest in significs, in the early spring of 2002 I discovered from De Hollandse Significa (Van Gorcum, 1990; originally published in 1985 in German as a Habilitationsschrift) by H.W. SCHMITZ how basically similar my anatomy of meaning (see Part ii) is to the concept of communication which L.E.J. BROUWER develops around 1900. Only much later would BROUWER learn about significs and join the Signifische Kring.

On the relevance of significs, see especially note 3 in Chapter 9. Not yet mentioned there, because I only read it shortly before my manuscript went to press, is v. welby's What is Meaning? (1903; reprinted in 1983, John Benjamins) in which she presents the first booklength exposition of significs.

which underwent quite separate developments. For example, DEVLIN does not seem aware of the work of ROSS and NISBETT, vice versa. And, as just another example, J. GREENBERG presents *The theory of social situations: An alternative game-theoretic approach* (1990) really without any reference outside his own field which is mathematical game theory.

What distinguishes much of science therefore is an incapacity to cross disciplinary boundaries (BLOOR, 1976). Situationism as a (more) general ontology can help to fruitfully integrate important contributions. From the wider perspective they are given an interdisciplinary turn.

Again, the first question is: Does subjective situationism already exist? No, elsewhere I have not discovered its configuration of concepts. Yes, for example, present are the beginnings of a formal resemblance with situation theory. And ROSS and NISBETT even use the terminology of situationism to indicate the foundation of their theory of social psychology.

When I take terminology as a point of entry, I wind up at information about the Situationists. In *Demanding the Impossible, A History of Anarchism* (1992), P. MARSHALL documents that the Situationists (p 549)

came to prominence during the May-June events in France in 1968[. ...] They originated in a small band of avant-garde artists and intellectuals influenced by Dada, Surrealism and Lettrism. [...] At first, they were principally concerned with the 'supersession' of art, that is to say, they wished like the Dadaists and the Surrealists before them to supersede the categorization of art and culture as separate activities and to transform them into part of everyday life. Like the Lettrists, they were against work and for complete *divertissement*. [... p 552] Pseudo-needs would be replaced by real desires, and the economy of profit become one of pleasure. [...] Above all, they insisted that every individual should actively and consciously participate in the reconstruction of every moment of life. They called themselves Situationists precisely because they believed that all individuals should construct the situations of their lives and release their own potential and obtain their own pleasure.

Nowhere, though, do I recognize my *radical* synthesis of situational objects as subjective interpretants. What already comes close in many respects is the remarkable³⁰ *Science and Sanity, an Introduction to Non-Aristotelian Systems and General Semantics* (originally published in 1933) by ALFRED H.S. KORZYBSKI (1879-1950). His concepts include, among others, non-identity, non-elementalism, multiordinality, and structural differential. Especially using the metapattern technique, introduced in the next chapter, KORZYBSKI's conceptual

30. Academically established scientists usually portray KORZYBSKI as an unscientific eccentric. I believe that proper acknowledgements are due. KORZYBSKI is rather more than a fool. Of course, his ideas are nonsense

when viewed from a different perspective. Anybody's ideas are. From the perspective of subjective situationism they make quite a bit of sense. scheme may be mapped closely onto subjective situationism. It is just odd, with SHIELD's (1999) analysis of homonymy in the philosophy of ARISTOTLE in mind, that KORZYBSKI is so outspokenly "non-Aristotelian." ³¹

How, and where, *exactly* all such theories correspond, and differ, still needs to be decided. My aim is to provide a starting inventory of references. This already suggests that synthesis across a wide range of disciplines constitutes a genuine opportunity for interdisciplinary scientific development. Drawing up only such a preliminary inventory of relevant work already reinforces my impression that ideas are hardly ever exchanged across disciplinary boundaries. The predominently parochial approach to science is actually the main reason why taking inventory is both difficult and necessary. It is difficult because no interdisciplinary structure of references exists. Only by patient browsing do I discover many highly pertinent sources.³² Then, once the connection to a particular, existing discipline is established, intradisciplinary references abound again. In most cases, I don't follow up on those. My interest is to point out where – some – boundaries can be productively crossed.

What matters for this treatise is that the ontological design is off to a start that promises a result with requisite variety. I cannot discover anything similar or, better still, more promising for conceptual grounds for information modeling. I therefore continue my development, including my terminology, of subjective situationism. The name evokes a strong ontological flavor which is precisely what I intend to communicate.

Second question: Why is it necessary? I present subjective situationism here, in Chapter 3, as the – ultimate – foundation for sign use. Such grounds entail a belief in the Peircean sense. The next chapter decribes the metapattern as an

Is subjective situationism necessary?

- 31. How also ARISTOTLE's ideas have been reworked while they are handed over is documented in *Aristotle Transformed, the ancient commentators and their influence* (1990) edited by R. SORABJI.
- 32. I cannot recommend highly enough the practice of regularly visiting as wide a variety of used-book shops as possible. Again I refer to BLOOR (1976) and BARNES (1977) for support of my argument that books that is, when they get published at all fail to gain acceptance if they are perceived to be out of line with prevailing interests. What happens to such books? They usually get disposed of

quickly, subsequently stocking the shelves of antique bookshops. Anyone looking for ideas that are literally out-of-the-ordinary is therefore well advised to optimize the chances of discovery by frequenting locations where their carriers naturally converge. Once a particular trail is discovered, it usually provides a new set of references. When I am too impatient to trust my luck visiting bookshops in person and possess a somewhat more specific clue, I can now quickly find almost any book through websites that sellers of second-hand books organize. Having the Internet available makes me all that more impatient.

external tool, or technique, for sign users. His own intelligence is of course an internal tool for sign use.

A user plus his tools has to match the variety of the purpose of his use. Quite simply put, *life* is the purpose of his sign use.

What is often extremely complex³³ is the user's life itself. Any external tool for sign use must contribute as much as possible to control life's variety. Here, variety is meant in the sense that W.R. ASHBY (1956)³⁴ develops, leading to his well-known Law of Requisite Variety. It states that only variety can control variety. For example, when a car needs to be brought to halt within 50 meters but the brakes are not up to that task, the driver clearly lacks the control variety as required by the situation variety.

I follow the central tenet of Gestalt psychology. Stated in my own words it holds that, through his intellect, an individual sign user is equipped with the capacity to experience reality through something particular, a figure, standing out against a (back)ground. Experiencing nothing but an ocean of particulars would immediately overwhelm anybody. Making the distinction between figure and (back)ground is a powerful ordering mechanism.

But there are more ways for a sign user to organize information. For an example I take a bag of one hundred marbles. When I lay the marbles out along a straight line (also read: dimension), what results is a single row of 100 marbles long. I can also use a two-dimensional scheme. When I go about the task laying them out symmetrically, I end up with a matrix of ten by ten marbles. The point is that I first incur a cost by adding to the complexity of the *structure* of organization. But then it brings me a gain through a – geometric – decrease of the extension along the separate dimensions. Inversely, a so-called Cartesian product yields a set containing a number of elements that is equal to the result of *multiplying* numbers of elements of constituting sets.

Seen in this light, an ontology is generally an investment in basic cognitive organization. It may be compared to a properly laid out foundation of a building. Infrastructure is another generic term with similar implications. What I don't want as a house owner, for example, is that every time I install a reading lamp I have to break down the entire house in order to tap in to the necessary energy supply. Electricity sockets are proactively constructed at certain likely

33. What is simple, and what is complex, is of course a relative measure. It should always be taken from the perspective of the individual sign user.

34. An Introduction to Cybernetics, W.R. ASHBY (1956).

35. There is an ontology at work here, too. It is the assumption of a reality of which the sign user is both part and engineer/observer.

36. See, among others the chapter *The Elimination of Metaphysics* (pp 123-148) in *Logical Positivism* (1981) by O. HANFLING. The

locations for energy consumption. Too many sockets make initial design and construction overcostly. And too few are overcostly when resources need to be added at a later stage. The problem is of course that nobody is ever completely sure about what he needs in the future. That is why any foundation is a trade-off.

An ontology is really not different. For the purpose of business information modeling I find it a poor ontological design to assume reality to consist of absolute, mutually independent objects. For all variety must then be absorbed along just a single dimension. It may work for a very simple life but I think it is clearly insufficient for human survival in postmodern society.

I propose a more complex ontology. It comes at a cost. In return, I expect subsequent explanations for actual sign use – and life, in general – to become (much) simpler or, rather, (much) less complex. So, I don't believe it is absolutely necessary to apply a richer ontology. I want to reach a higher level of comfort about my intellectual foundation. Subjective situationism offers a full extra degree of freedom for organizing interpretants. I am happy with my investment for I subsequently need to expend less effort during processes of sign use. So, (sign) engineering the rest of this treatise is greatly simplified, I believe, through my investment in this chapter presenting a more complex ontology. I hope the reader agrees from his observation perspective.

I avoid stating that subjective situationism is a necessary ontology. Such a claim would have a normative ring to it that contradicts the very axioms of this ontology. For the recognition of myself as subject helps to respect others as subjects, too. I believe it follows that everybody has to judge for himself what he finds necessary, or not.

Third question: But is it science? From my previous answer it is already clear that I find nothing more fundamentally scientifc than speculations of an ontological nature (and on ontological nature). Like PEIRCE, I don't believe in — my access to — metaphysical truth. There is also no such thing as metatruth, etcetera. At least, it is pointless to speculate on any truth. That is why it is always so important to make assumptions clear. And why it is so rational, again in the Peircean sense, to change assumptions (also read: beliefs) when they are no longer adequate for conduct (also read: life).

Logical positivists 'believe' that metaphysics and ontology are not science.³⁶ They are completely right to state that a metaphysical expression cannot be verified. I even go further. The reason a proposition is metaphysical/ontological is precisely *because* it cannot be subjected to our experience. Rather, I project it into my experience, thus creating opportunities for further, correspond-

Is subjective situationism scientific?

upshot is that it is difficult (also read: impossible) to argue about the nature of belief

with someone who believes that he does not hold beliefs.

ingly organized experience. An axiom is an article of faith.

A thinker who paves the way for logical positivism is GOTTLOB FREGE (1848-1925). As M. HALLETT (1991, p 355)³⁷ recapitulates FREGE's position, the axioms of a science should be fundamental truths about the basic objects of that science. This leads to the position that one should know what the sense and the reference of a term are before one can frame axioms which contain that term.

DAVID HILBERT (1862-1943) recognizes this as an untenable belief about axioms. HALLETT continues that

Hilbert claimed that we don't need to do this, that the axiom system as a whole acts as an implicit definition of the key terms in it[s own system].

I completely agree that fundamental interpretants are systemic, rather than absolute. Therefore, a system of axioms *is* an ontology. For indeed the "system as a whole" serves to provide a foundation for further sign use.

Maybe it takes the attitude of the engineer to radically think about ontology in terms of a tool. For example anthropologists, accustomed as they are to different cultures, professionally view religion as instrumental.

I consider the concept of ontology privileged in the sense that constituting axioms are undicable. I do *not at all* argue that subjective situationism ought to be the privileged ontology. Again, I present it as a tool. When a better tool is available, it deserves, for my own good, that I apply it. In fact, I deserve that I apply it. This scientific attitude I find aptly summarized by PAUL FEYERABEND (1924-1994) who is popularly known by his slogan "Anything goes" (1975).³⁸

Fundamental improvements are most difficult to achieve. "Anything goes" is therefore particularly relevant when attempting to come to grips with essen-

37. Lemma *Hilbert, David* in: *Handbook of Metaphysics and Ontology*, (1991, pp 354-358; H. BURKHARDT and B. SMITH, editors).

38. Against Method (1975). Writing on sociology in Abandoning Method, and referring to the 1970-article from which FEYERABEND later also takes the 1975-book's title, D.L. PHILLIPS puts forward (1973, p 154): "The reason why method is so central to sociology, and the reason why it is the major factor which distinguishes the writings and assertions of the sociologist from those of the layman, is that sociology, like any other discipline, requires some explicit, shared, agreed on criteria for evaluating the work of those within the discipline, the sociology is the sociology.

pline. [...] By placing a heavy emphasis on correct method, all members of a scientific community are assured a kind of collective protection [.]" PHILLIPS continues (pp 156-157): "But concern with method also stultifies the individual, dampens his strongest passions, and molds him to the requirements for membership in the scientific community. Most of all, however, correct method may block him from confronting experience and restrict his imagination. It limits possibility, it prevents him from realizing what might have been, and while it provides security, it eliminates certain sources of excitement from his intellectual life."

tial difficulties. E.T. GENDLIN puts it as follows (1962, p 20):

A new inquiry or step of investigation requires defining new variables. It is perfectly all right to term this portion of the scientific labor "prescientific." It is not at all permissible to omit this portion of the labor from the total endeavor of science. The role of theory is different from that of testable propositions. Theory has the role of *leading to* testable propositions. [... T]he requirement that one be "scientific" *before* one has devised variables is deadly. It means we can never *extend* science. It means that to get to our aim we must already be there[.]

Ontological speculation is really *not* vague. It should *not* be stigmatized as a past-time for drop-outs who are afraid of hard, decent scientific work. On the contrary, axiomatic speculation requires the courage to confront and respect life's fundamental uncertainty, and not disregard it. I really don't find it at all surprising that thinkers are mostly remembered, and considered great, especially on the merits of speculative contributions.

But doesn't subjective situationism amount to an immorality? It would when situations are thought of as isolated fragments of experience. But that is *not* how they are assumed here. For the 'I' is a special kind of center.

3.5 a special kind of ontology

A measure of both elegance and instrumentality is reflexivity. It is to my engineering mind, anyway. So, to what extent does situationism apply to itself?

I focus on the relationship between I and not-I. According to situationism their relationship is not invariant. It varies, which should now be easy to accept, with the situation. The consequences however, are significant. For it may be imagined, as shown in Figure 3.5.1, that the I of situation a is completely disjunct from the I in situation b.



Figure 3.5.1.

The 'I,' and by definition 'not-I,' too, occupying different places in different situations.

This is not an unwanted property of the theory. But *complementary* to the appearence of 'I' in different situations, a continuity must also be assumed to exist. WITTGENSTEIN's often-quoted view on what obviously separate phenomena may nevertheless have in common is appropriate here. There exists, he writes (1953, p 32°),

a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail. [...] I can think of no better expression to charac-

terize these similarities than "family resemblances."

- [...] and this can be said to give [something] an indirect relationship to other things we call the same name.
- [...] as in spinning a thread we twist fibre on fibre. And the strength of the thread does not reside in the fact that some one fibre runs through its whole length, but in the overlapping of many fibres.

Pertaining to 'I,' its place in the world can change significantly over time and as situations differ. Figure 3.5.2 indicates that a condition for continuity of 'I' is established when some of its properties 'survive' transfer from situation a to a subsequent situation b.



Figure 3.5.2. Minimal overlap for continuity of 'I.'

A shift such as Figure 3.5.1 depicts therefore lies well within the possibilities that subjective situationism allows. Why not? It is only required that *consecutive* existences of 'I' show minimal continuity in properties.³⁹

39. With increasing situational variety, however, what feels as an enduring identity seems correspondingly difficult to maintain. Psychotherapeutic reports on postmodernity mostly emphasize – the potential of – personal suffering. In Subject to ourselves: Social Theory, Psychoanalysis and Postmodernity (1996) A. ELLIOTT writes that the (p 121) "confusion and loneliness connects directly to the surface-centredness of contemporary life, to postmodernity - with its fragments of mediated experience, its communicational and computational dislocation of human social relationships. [...] This fluid, dislocating cultural experience is full of contradiction, particularly as regards self-experience. Postmodern culture inaugurates a multidimensional set of radically discontinuous social contexts, in which the fragmented and dispersed subject is wedged uneasily between

reflexive self-actualization and capitalistic pressures that promote narcissistic, materialistic self-enclosure [... T]he inner core of the self is depleted, experience and meaning are torn apart."

Closely related, the problem of scope is central to ethics, too. Though without an explicit metaphysics or ontology, in *The Abuse of Casuistry, A History of Moral*Reasoning (1988) A.R. JONSEN and S. TOULMIN argue from what I recognize as a situationist perspective. They differentiate between classical casuistry and situation ethics (p 272). What their terminology might confuse is that the former, not the latter, corresponds to situationism as I present it here. For (p 13) "[w]hen properly conceived (we claim), casuistry redresses the excessive emphasis placed on universal rules and invariant principles by moral philosophers and political preachers

With 'I' residing *simultaneously* in different situations⁴⁰ its location is already a minimal shared property by default.

The family resemblances WITTGENSTEIN suggests act as a persistent identity of the 'I' throughout its life. Indeed, I can always be held accountable for what I did – where 'doing' includes abstinence of action, too – in any situation. Inversely, subjective situationism makes me even more aware of my responsibilities. Actually, they now appear more explicitly in my *situational* beliefs. What is highly appropriate behavior in situation a may be unfit, illegal even, for situation b.

Radical application of subjective situationism implies that I can even use different ontologies for different situations. I would even turn it around, saying that a different – understanding by me of a – situation is called for whenever I favor a different ontology. I therefore agree with GENDLIN who argues in *How Philosophy Cannot Appeal to Experience, and How It Can* that (1997, p.5)

this variety is not a problem to be solved. It is not an obstacle to be removed. That there are many schemes and centers, and that the organization from each can break down, is a central insight without which philosophy would be naive.

alike. Instead we shall take seriously certain features of moral discourse that recent moral philosophers have too little appreciated: the concrete circumstances of actual cases, and the specific maxims that people invoke in facing actual moral dilemmas. If we start by considering similarities and differences between particular types of cases on a practical level, we open up an alternative approach that is wholly consistent with our moral practice." The purpose of their book is to present (p 10) "a real alternative [... to the] subtle kind of tyranny [...] of unchallengeable principles." Casuistry is introduced as an ageold (p 10) "reasonable and effective set of practical procedures for resolving the moral problems that arose in particular real-life situations." As another example of a situationally grounded argument, in The Ethical Dimension (1965) E. SHIRK explicitly presents "a contextual foundation for ethics." Underlying the need for discrimination is that (p 14) "any kind of experience is subject

to being ethically evaluated and assessed. Life itself involves the preference of some things above others; it is an evaluational interaction between man and his world. Everywhere and on all sides the human animal is constantly assessing, choosing, and selecting; for experience itself is composed of this very process." It is the same unified approach that is characteristic of the anatomy of meaning presented in Part ii of this treatise.

40. It may, again, seem contraintuitive to allow simultaneous situations. But then, why not? The investment in the foundation is already made. It is a small extra effort to point out its availability. Whether it is ever put to 'work' is another matter. My own experience indicates that, sooner or later, such possibilities at the ontological level are always consummated. It must be remembered that an ontology is a tool, not a truth statement. When the tool is flexible, it pays to investigate what more opportunities it offers.

In Metaphysical Aporia and Philosophical Heresy, s.D. ROSS concludes (1989, p 344):

Metaphysical truth is local and inexhaustible, realized in an inexhaustible multiplicity of local metaphysical works, some affirming inexhaustibility, some denying it. What remains is to be able to say, somehow, if only aporetically, what the truth of aporia amounts to. This, however, is the task of metaphysics itself. In the metaphysical theory here, aporia is locality and inexhaustibility.

Because situationism accommodates – a multitude of – situational ontologies, ⁴¹ it helps to consider it a metasituational ontology. In situationist terms this amounts to metaontology. H.A. MYERS already develops a similar concept in *Systematic Pluralism: A Study in Metaphysics* (1961, p. 7):

Systematic pluralism suggests, in place of the ladder of perfection, the figure of the metaphysical wheel, with an infinite number of spokes representing the systems which may approach the hub, the metaphysical object, from every possible point. The sciences and branches of knowledge, thus, are perspectives. [...] One of them is not more real than another experientially; and the truth or reality of one cannot be determined by another. They are perspectives of a metaphysical object, but this metaphysical object is no more real than they; indeed, when we come to talk about this metaphysical object, which at first thought might seem to be the reality behind the analytical perspectives of it, it in turn becomes a perspective.

See also S. ROSENTHAL (1986) on "perspectival pluralism." The nature – pun intended – of metaphysical emphasis has therefore shifted (MYERS, 1961, p 25):

Thus, although it was necessary to say when philosophy was in its beginnings that the permanent element in metaphysics is its object, vaguely expressed as Nature or the world of

41. What might seem a paradox is that this treatise presents a reflexive ontology. That is, it is itself inevitably situational. For including situation as an operational variable, it is also metasituational, i.e., a metaontology.

Strictly specialized ontologies, that is, *particular* situational ontologies are actually extremely common. Attempts are easily recognizable when they are titled 'philosophy of ...,' or even 'ontology of ...' or 'metaphysics of ...' For example, D.R. KOEPSELL has written *The Ontology of Cyberspace* (2000). Contrary to my expectation upon starting his book, though, he does not deal with structure but remains fixed on separate object categories.

The subtitle Lam, Philosophy, and the Future of Intellectual Property captures his particular interest more closely. He views the current ontological status of software legally problematic. It leads KOEPSELL to argue for eliminating the difference between patent law and copyright law. For (p 111) "a single intellectual property regime [... c]opyright might serve as a model." I agree with – the need and possibility of – a convergent design. I believe it is equally possible, however, to merge patent law and copyright law by extending one of the grounds for patentability from use or so-called technical effect to potentially commercial or economic effect, or even social effect.

being per se, it is now possible to say that the enduring element of metaphysics can be seen as the formal structure of knowledge, the being as such of systems. [... T]he ontological order [...] is not something outside experience, outside thought. It is rather the attempt to express the permanent aspect of meaning and experience synoptically viewed. Hence the criterion of truth comes more and more to be the systems of thought; propositions are meaningful when they are homogeneous with a system; they are true when they agree with the conditions of that system, false when they disagree with it. [... p 72] Difficulty arises only when each of the systems claims to be the only possible revelation of the essence of reality. [... p 76 T]o think of reality as identical with one system [is] the cardinal error of modern systematic metaphysics. [... p 115] The problem of systematic knowledge, which ought to be approached without prejudice, is too often overshadowed by an untimely interest in a highest good, in an ultimate or highest reality, and in progress toward an ethical goal. [... p 152] There is no possible system of all systems, for such a system would in turn be an individual, that is, unite particularity and universality, and, as such, would break down, as numberless others have, into another perspective. [...] The goal of metaphysics is [...] to understand the structure of perspectives. [... p 174] An adequate conception of the situation of knowledge implies breaking down the division between the relative and the absolute, between the particular and the universal, and requires for its expression a terminology which presents these elements as both distinguishable and united. [... p 183] Reality may be approached from infinite points of view, but the world does not fall apart into mere points of view. Every system approaches reality from an angle determined by its categories, but every system is in the end a perspective of a world common to all. Each and every system implies a world common to all, and systematic pluralism does not mean an infinite series of atoms of knowledge falling into an epistemological void. A situation, then, may be considered equivalent with a "system" as determined by a unique collection of "categories." Where I disagree with MYERS is that he maintains a focus on truth and thereby on the requirement for "system" as (p 26) "an impersonal rather than personal criterion." He distinguishes truth from value (p 124):

The criterion of the truth of a proposition is the system of which it is a homogeneous element; the criterion of the value of propositions is not an impersonal perspective; it is rather the personal perspective, the individual himself.

From his own assumptions MYERS is of course right to predict (p 26) "when the reference of propositions is purely personal, confusion reigns." For he argues from the premise that philosophy is about knowledge in its own right. Or? He also writes (p 142):

[I]f individuals are active, there are marks of evaluation, not expressed in propositions, but in action, in the attraction and repulsion shown by individuals toward things experienced. Elsewhere MYERS criticizes the view that (p 145) "the only task of knowledge is to get away from the personal perspective, that its only pitfall is the particularity of human beings." And he remarks that (p 163) "[i]mpersonality, in

respect to knowledge, means universal personality in matters of meaning and value rather than lack of personality." What MYERS does not do (yet), is reverse his approach and subsequently apply such insights *as ground*. In her book *Charles Peirce's Pragmatic Pluralism* (1994) S.B. ROSENTHAL argues for a similar position for PEIRCE.

But surely "perspectives" of a different order emerge when knowledge is radically seen relative to action, even instrumental for it (for action also read: behavior). With *only* personal and behaviorally relevant perspectives, the concepts MYERS proposes for truth and value in fact coincide. As I show in Chapter 6, the "prejudice" MYERS wants to avoid even acquires the nature of a knowledge ground through SCHOPENHAUER's concept of the will.

My view of subjective situationism as a metaontology also resembles the antifundamentalist position of "metaphysical pluralism" which s. CLARKE outlines in *Metaphysics and the Disunity of Scientific Knowledge* (1998). As with MYERS, however, or consider for another example HAAS (2000), the concept of situation is not rigorously applied to ground differences.

Subjective situationism proves itself a vantage point for recognizing ontological suspicions in the same direction. For example ⁴² M. PELÁEZ-NOGUERAS and J.L. GEWIRTZ (1997) suggest that (p 39)

behavior-analytic theory is undergoing a paradigm shift. It may be moving to a new stage, in which adventurous researchers wish to contribute toward solving everyday practical problems and toward a greater understanding of human interactions.

This statement concludes their own contribution, titled *The Context of Stimulus Control in Behavior Analysis*, to *Environment and Behavior* (1997) edited by D.M.

42. Another example is P.A. ROTH's Meaning and Method in the Social Sciences (1987). His subtitle reads A Case for Methodological Pluralism, with the main argument being that the case of methodological exclusivism is untenable. He makes no attempt at designing an explicit ontology, though. What stops ROTH short might be his idea that social sciences are essentially different from physical sciences. He still seems to think that what he calls the unity-of-method thesis applies to the latter. I find that for example the different hypotheses of light-as-wave and light-as-particle, respectively, suggest situationism for physics, too.

In addition, my position is that the subjec-

tive nature of knowledge makes any such methodological distinctions between social and physical sciences counterproductive. There are many publications, notably by physicists themselves who acknowledge the fictional nature of their theories. Examples are Ordnung der Wirklichkeit (1942), Physik und Philosophie (1959) and Der Teil und das Ganze (1969) by WERNER HEISENBERG (1901-1976). Some other books that provide the argument that the (physical) world should literally be taken figuratively are Physics as Metaphor (1982) by R.S. JONES and Inventing Reality, physics as language (1988) by B. GREGO-RY.

BEAR and E.M. PINKSTON. Not venturing beyond their idea of science, and still aiming at traditional truth-value, the editors elaborate as follows in their introduction to the chapter by PELÁEZ-NOGUERAS and GEWIRTZ (p 2):

We would like to find scientific principles that are always true, everywhere and every time, but contextualism teaches us (among others things) how unlikely it is that such principles exist. Almost every principle we know is true not everywhere, but ony sometimes. There are places, and times, when some other principle is true instead. That does not mean the absence of lawfulness; it signals instead the operation of another law, one we should learn as well as the first. Thus, when we overstate a principle, such as, "Behavior comes under the control of stimuli that signal its functional consequences," contextualism teaches us to restate it immediately as, "Behavior comes under the control of stimuli that signal its functional consequences, except when it does not." That restatement recognizes reality; it also tells us to find the conditions "when it does not" and then understand why those conditions alter the principle. That will give us a new, larger, and more inclusive principle. That is the most valuable path science can take.

The ambition with the ontology of subjective situationism is even greater. It does not draw a line at scientific endeavors. A benefit is that the problem of the demarcation of science dissolves.

Subjective situationism *is* pluralism. It also *is* relativism but without loss of foundation for accountability and liability. The family resemblances underlying T across situations see to that. The enriched foundation, with situation as a separate category, enables the sign user to consciously manage a much greater variety of superstructures. Thus, subjective situationism may profitably be used as a structured approach to postmodernism in all its variety. Isn't postmodernism subjectively and dynamically situational through and through? It is more easily understood from the perspective of an ontology that postulates situation as a separate dimension for ordering experience. It is also easier to conceive in terms of situations that modernism and postmodernism are not opposites. Rather, the latter encompasses the former. For postmodernism requires a conceptual foundation at a deeper level than modernism. Similarly, situationism encompasses logical positivism. Special cases are – by the very nature of situations – necessary and should be applied where it can be done so responsibly and it is useful.

The dynamics of postmodernism consist of movements by which a boundary is attempted to be *both* instituted *and* transcended. It is difficult for a "scientific intelligence" to comprehend. What results is a more fundamental insight into complementarity of reality. So far, I have proposed that there is I and not-I. Can they be more than complementary? Can I be not-I, too? I don't believe so (which is an essentially modernist view, of course; didn't I just confess to the difficulties of a "scientific intelligence"?). I and not-I are mutually exclusive parts of reality. But I cannot be all of reality. I also do not want to be

all of it for what, then, would I need situations for? My belief in situations precludes any idealist hyperbole. But I admit that I like to experience the reverse, i.e., that not-I is I. That is when the intellect takes time off. As a mathematician I am inclined to call it a situation with zero ontology. It is 'just' a special case derived from a general, more variable model. I describe in the next chapter how to construct practical information models inspired by (subjective) situationism. There it also becomes clear what the concept of information model implies in this treatise.

3.6 situations objectified, too

I have tried to show in the previous paragraph that postmodernism entails joint analysis and synthesis. The 'I' has a predisposition for differentiation. Differences make analysis possible. I disconnect(s) from not-I. Analysis, however, is oriented at conduct. And conduct, to which the 'I' equally predisposes, is an act of synthesis. It is simply how I reconnect to not-I.

This essential duality of analysis and synthesis may be generally presumed. It has led for example in § 3.5 to some extended notions about the relationship between I and not-I. Here, such duality is taken as a guide to inquire into the relationship between situation and object.

So far, situation has been treated as an ontological category, disjunct⁴³ from object. Their difference serves analytical purposes well. But would it not help synthesis to presume that situation and object are similar, too?

It can, in fact, be quite simply included in situationism that situation *is* also an object. The resulting mixture of difference and similarity is, as always, hard to express. An appreciation of such synthesis-around-duality is probably helped by reformulating situation as background object, and object as foreground object. Such terminology is cumbersome, though. That is why I normally continue to speak about situation and object.

Subjective situationism is a realism in the sense that it presumes existence of one world: reality. I am living in this world. Subjective situationism is therefore an idealism, too, i.e., in the sense that I objectify reality. It is typical of post-modernism that no paradox is experienced by the assumption that a subject is the precondition, not of reality's existence, but, rather, of reality's objectification. Essential for subjective situationism is that subjective objectification is not limited to objects. What it holds is that I objectify dyads of foreground object and background situation, that is, of object proper and situation. It is

43. It is tempting to stress this point by writing *completely* disjunct. But the adjective dis-

junct of course implies that any overlap is absent.

impossible for me to experience an object without an enveloping situation. Equally impossible is to experience an objectless situation. They are inseparable, at least by definition of – the ontological tool of – situationism.

As a mathematician I am obviously invited by the objectified nature of situation to wonder about the implications when a situation is considered an object in its own right. Being an object, it clearly requires a situation in which it can occur. Actually, what accompanies such a level shift must be a change in point of view⁴⁴ by the subject.⁴⁵ One such recursive step is shown in Figure 3.6.1.

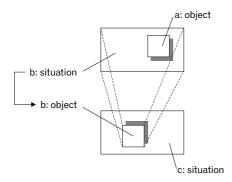


Figure 3.6.1. Recursion in reality.

The objectification of – the category of – situation certainly yields an elegant mechanism for upward recursion. What does not feel⁴⁶ right, though, is the prospect of an infinite series. For situationism to be productive as an ontol-

44. Point of view is a long-established concept in narrative theory. See *Literary Terms* (1960) by K. BECKSON and A. GANZ. More recently it is expanded by the conceptual pair of perspective and voice. See *Contemporary Literary Theory* (1992) by J. HAWTHORN. My interpretation is that a particular perspective rules the overall interpretation – both the author's intention and the reader's meaning – of the story. Voice, then, pertains to a certain part played in the story. I highlight a similar distinction in the next chapter. In any constructed sign, perspective and voice meet. Loosely interpreted, perspective is an overall

picture of reality in which pictures of interpretants are injected as voice. I frame their dyadic relationship in terms of sign and contout

I find literary theory, in general, a source of inspiration for the development of an adequate theory of information modeling.

Especially my book Aspecten en Fasen (1991) contains many traces of such interest.

45. As I said before, I don't entertain any pretense at explaining intellectual behavior at the level of cognitive psychology. However, I do suggest joint areas of interest. ogy, what can be pointed at as the ultimate situation, i.e., the situationless situation? My proposal is consistent as I start from subjective situationism as the *foundation*. The ontology *is* the boundary of upward recursion. When the visual direction of recursion as shown in Figure 3.6.1 is reversed, the recursive level shifts between situation and object may be generally sketched as in Figure 3.6.2.

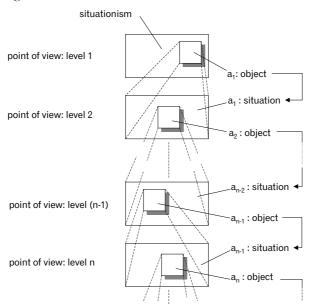


Figure 3.6.2. Decomposition of reality through situation/object recursion.

The reversal leading to Figure 3.6.2 'automatically' shows that downward recursion is also implied by subjective objectification of reality into dyads of situation and object. For in the other direction, what is considered an object at a particular level (n-1) appears as a situation at level n. When an object is seen as a *property* of a situation, and when a level shift turns a situation into an object, such downward recursion provides the opportunity for a progression of property identification. I do not propose an upper limit for n. It is possible

46. I am fully aware that it is, at present anyway, highly irregular for a researcher to bring his own feelings into scientific play. But that is really how it feels when I am developing speculative theory. I therefore take science seriously by reporting them faithfully. The

scientific requirement for including subjectivity should become clear when the point of view (see note 44, above) is changed from logical positivism to encompassing subjective situationism.

to add details as the subject requires for his conduct.

Rounding up this stage of design of (subjective) situationism as a mathematically consistent *system*, the ontology itself constitutes the point of view at zero level. It consists of both the zero situation and the zero object. There 'exists' only a single instance of the zero situation, and thus of its situationist confluent, i.e. of the zero object.

In the next chapter I present the metapattern as a visualization technique. Differentiation of multiple behaviors of an object receives special attention, that is, an object's roles in different situations as already introduced in Figure 3.3.3. Rationally modeling such multiple behavior is, after all, the raison d'être of situationism.

prelude 4

What Peircean semiotics contributes is not just the triadic relationship between sign, object and interpretant. The key insight of PEIRCE, applying a systems view, is to regard their relationship as *irreducible*. It follows that his concept of semiotics also entails ontology. And epistemology. Or, the other way around, ontology is epistemology is semiotics.

The semiotic hexad (see Chapter 2) is of course equally irreducible. For it retains PEIRCE's original elements, but now as a triad of *dimensions*. Thus, the convergence of ontology, epistemology and semiotics remains. Chapter 4 presents an articulation in addition to the step from triad to hexad. An intermediate element is included for each dimension. The result is an ennead, i.e., a system of nine irreducibly related elements arranged along three dimensions.

The extension to a semiotic ennead results from copying the formal arrangement of concepts that underlies the metapattern, an approach to conceptual information modeling I designed earlier (WISSE, 2001). An overall metapattern-based model consists of related nodes. Every specific node, or signature, *connects* a specific context *to* a specific intext. That is, in fact, all it does, but it is crucial. The introduction of elements whose *only* service is *relational* is precisely why the step from hexad to ennead is important.

So, a signature mediates. The consequence for information modeling is pervasive. What is modeled are not whole, independent objects. Instead, situationally relevant behaviors of an object are distinguished. Because the metapattern lets signatures be laterally connected, too, what a model reflects about a traditional whole object is traceable through the relevant set of connected signatures. This is subjective situationism's solution for reconciling the concepts of identity and difference, i.e., for disambiguating multiplicity. This reconciliation is brought about by the three *strictly relational elements* of signature, focus and object. Their paradoxical nature, i.e., relationship and element com-

bined, removes paradoxes elsewhere.

A context stands for a situation. A signature stands for an object in a particular situation. And the intext hinges through the signature on the context. As such, it stands for a *particular* situational behavior of the object.

I completed the design of the metapattern before setting out on this treatise. In hindsight, the metapattern already supplies a formal articulation of concepts along two of the three semiotic/ontological/epistemological dimensions. The elements along the real dimension are situation, object and behavior. Along the information dimension, or sign dimension, the corresponding elements are context, signature and intext. Restoring straightforward relationships, for arriving at the ennead a third element has been added to the ideal dimension which now consists of background interpretant, focus and foreground interpretant.

With three instead of two elements along a dimension, the opportunities for shifting conceptual roles (see Prelude 3) have increased. Shifting from one dimension to another is also possible. It happens when a sign is studied as an object in its own right. Or an interpretant as an object, etcetera.

By explaining the metapattern, Chapter 4 makes a twofold contribution to the design of subjective situationism. First, the metapattern is integrated with the hexad resulting in the semiotic ennead. Second, especially the metapattern allows models to reflect multiple situational behavior of objects. It is therefore used to develop concepts, and present them, in the remainder of the treatise.

Ontological design is resumed in Chapter 6. Chapter 5 is a critical intermission; it can be skipped without risk of losing track of the constructive argument of the treatise.

chapter 4

METAPATTERN: MODELING AS ENNEADIC SIGN ENGINEERING

This chapter provides an introduction to the metapattern as a technique for information modeling. It helps to clarify the ontology of subjective situationism as I have developed it so far. In turn, I use the metapattern throughout the rest of this treatise for further ontological design. Later on, I also put it to work for critical assessment of assumptions underlying other approaches to business information modeling.

I designed, and will no doubt continue to design, the metapattern in response to an interest in growing complexity of – computerized – information systems, especially the requirement for adequate conceptual models. The metapattern therefore emphasizes reusability (WISSE, 2001). It adds precision through the combination of a finely grained concept of time stamping and a recursive, simple but formal concept of context. The metapattern is particularly valuable for aligning complex and variable requirements, even across a multitude of organizations with different processes. The concepts of context and time are critically important, allowing for adjustment of models to time-induced and/or situational changes. Especially conceptual models must account for change to maintain their integrity.

Elsewhere, I describe the metapattern's basic concepts, their structure, a comparison with 'traditional' object orientation, and a host of practical modeling cases See *Metapattern: context and time in information models* (WISSE, 2001). Written for an audience of professional practitioners rather than scientists, *Metapattern* deliberately passes over ontological considerations. I have taken up ontology for this treatise but refer to *Metapattern* for my pervasive treat-

1. See my book *Metapattern: context and time in information models* (2001), Part I, for a comprehensive description. I emphasize that I fin-

ished the manuscript of that book *before* embarking on this treatise.

ment of the concept of time. Concentrating here on context, while explaining the technique of the metapattern in this chapter, subjective situationism is further developed as an ontology annex epistemology annex semiotics. Once again I emphasize that concepts appear in a different configuration; the meanings of familiar terms change accordingly.

4.1 model as sign type

Building upon the previous chapters, I first make (more) explicit what I mean by a model. Model? Why don't I 'just' refer to PEIRCE for the appropriate sign type?

Many commentators of PEIRCE's theory of signs concentrate on, and often elaborate upon, his sign classification.² Academically, it has certainly been taken up as an important theme. As I find myself increasingly baffled, though, C. HOOKWAY's remark comes as a relief (1985, p 125):

A familiar feature of Peirce's theory of signs is a variety of complex and bewildering classifications of different sorts of signs.

At least I am not alone with my puzzlement. For some time I superficially attributed my failure to grasp his sign classification(s) to me being an engineer, rather than the experimentalist PEIRCE professes himself to be. Now I accept it must be something *underlying* PEIRCE's classification. For it really starts with difficulties with his ontology of firstness, secondness and thirdness.³ And

2. Impressive in both depth and width are E. MERRELL's books *Semiosis in the Postmodern Age* (1995) and *Peirce, Signs, and Meaning* (1997).

As I have already mentioned, it is nowadays impossible to gain absolute certainty about being original. However, nowhere do I discover what I consider the more fundamental development of PEIRCE's ground such I present here in Chapter 2, and extend in this chapter (see § 4.5). MERRELL, too, does not trace back to this ground but makes instead an intricate play out of the original classification of signs in PEIRCE. In my view, such an expansion of sign use in triadic rather than hexadic terms makes subsequent development of most matters unnecessarily complex. In comparison, situationism pro-

vides a relatively simple, straightforward ontology. It is especially the concept of context that MERRELL and other authors use ambiguously, i.e., as referring to both context of sign – which is my own specific, unambiguous meaning – and situation of object.

3. See the essay *The principles of phenomenology* (1880-1910) as compiled, and included in, the collection *Philosophical Writings of Peirce* (1955, pp 74-97) by J. BUCHLER. I believe my ennead (see § 4.5) takes me in a different direction than PEIRCE. Or, rather, it lets me continue from a different perspective. The fundamental difference is that of PEIRCE's realism whereas I favor transcendental idealism (see also Chapter 6).

next, what I encounter in secondary sources only increases my doubt about the productive uses his sign classification can be put to. I just don't recognize a

Let me engage in some speculation, at least equaling the obscurity of PEIRCE's notions which has been a source of bewilderment with many commentators (see for example GOUDGE, 1950). Given his numbered classification scheme, I naturally place first-order concepts inside the objectified reality as constructed, or whatever, by the individual's intellect. Then my second-order classification can more closely resemble PEIRCE's original interpretation. With my first- and second-order application, nine combinations result. I suppose that in such an extended and transposed Peircean universe, from realism to transcendental idealism, first-firstness is constituted by pure focus. And first-secondness is the relationship, through that particular focus, of a foreground interpretant with its corresponding background interpretant. It becomes even more complex with first-thirdness. It follows from my scheme that it is the set of interpretants mediated by all directly related foci. Again, all this pertains to the objectified reality of an individual. As a model, it suggests a reality that is organized as second-firstness (pure object), secondsecondness (specific behavior of situational object), and second-thirdness (an overall object's integrated behavior in all relevant situations). The sign, mediating between firstness and secondness, encompasses thirdfirstness (signature), third-secondness (signatured intext in context), and third-thirdness (all configurations of intext-context that are derived from the same identifying signature).

There certainly is some system in this mapping from PEIRCE's metaphysical categories onto my semiotic ennead. I doubt its

usefulness, however. And frankly speaking, I might be far off with my application of his numbers. In general, that metaphysical strain of PEIRCE does not contribute to my argument. Vitally important, though, is the triadic character of semiosis, and his embryonic suggestion of ground. Those concepts have inspired the development of the *enneadic* model of semiosis, outlined later in this chapter.

Actually, I believe a contradiction arises between the Peircean concepts of semiosis and the triad on the one hand, and those of first-, second- and thirdness on the other.

T.A. GOUDGE (1950) attributes discrepancies in the thought of PEIRCE to his conflicting frames of reference (transcendentalism versus naturalism).

As PEIRCE's special greatness I recognize his insistence that the triad is *essentially* irreducible. Irreducibility holds that no subsystem can be viably analyzed in isolation. Here, PEIRCE clearly is transcendental. But doesn't he also attempt, after all, reduction through his ontological categories? There, it is PEIRCE the naturalist (or realist). He confuses where he strives after a synthesis of approaches which is logically impossible (and that is why it is equally impossible to grasp conceptually).

I squarely favor his triadic 'wholeness,' only replacing it by enneadic 'wholeness' for explanation. Any reference to firstness, etcetera, muddles the issue. At the most, firstness, secondness and thirdness are simplified views occurring when bracketing elements of the triad (later: ennead). They are not its constituting elements.

purpose, not as I do for especially the irreducible semiotic triad and the related pragmatism of PEIRCE. My purpose, that is.

Again, what I look for at this stage of the treatise is to explain what a conceptual model is. Where does it fit the scheme PEIRCE designed for sign types? Or does it, actually?

I attempt to give a tongue-in-cheek flavor of the problems created, rather than solutions suggested, by his sign classification. For inevitably almost every practical sign is next seen to occupy several classes. Then, what do – such – classes *as classes* help?

Is a model a "symbolic rheme," perhaps? I am just venturing a guess, but that would make it a sign of class eight. Then according to PEIRCE a model would be (1903, p 116)⁴

a sign connected with its [o]bject by an association of general ideas in such a way that its [r]eplica calls up an image in the mind, which image, owing to certain habits or dispositions of that mind, tends to produce a general concept, and the [r]eplica is interpreted as a [s]ign of an [o]bject that is an instance of that concept.

Does is help? Or does a model simply belong to class five? That would make it an iconic legisign which (ibid)

requires each instance of it to embody a definite quality which renders it fit to call up in the mind the idea of a like object.

All in all, based on permutations of his basic categories of firstness, secondness and thirdness⁵ PEIRCE distinguishes "ten classes of signs." He also explains the workings of a sign belonging to a particular 'higher' class by referring to signs from 'lower' classes. I don't pretend to understand him there. But for just a while I continue to communicate the flavor of his approach. An iconic legisign, for example (ibid),

[b]eing an [i]con, it must be a [r]heme. Being a [l]egisign, its mode of being is that of governing [r]eplicas, each of which will be an [i]conic [s]insign of a peculiar kind.

I sense a logic, but fail to grasp it. For explaining what a model is I require grounds that I am comfortable with myself. If I may say so, I proceed in an even more Peircean way than PEIRCE himself does. I return to his *ground*, in particular to my subsequent development of it which results in understanding

4. See *Logic as semiotic*. This quotation is from a selection BUCHLER makes from PEIRCE's manuscript of 1903.

5. M. MARKOVIC remarks that PEIRCE has (1961, p 173) "noted more distinctions among signs and developed a more intricate classification than anyone before or after[.]"

I understand PEIRCE's mathematically elegant procedure, once the threefold premise of his ontology is established. I also change perspective between contents and form, vice versa. My development of situationism, in the previous chapter, provides many examples.

sign use as hexadic dynamics, rather than triadic dynamics.

In § 3.2 I mentioned the difference between observation and engineering. The engineering attitude draws attention to the fact that, or actually to the *situation* where, signs are not only read but also constructed. The sign user in engineering mode is therefore an active sign developer. From the model of hexadic dynamics, however, it must be concluded that what he produces is not an isolated sign. It is, by the very nature of – the assumption of – hexadic dynamics, a persistent combination of sign and context.

But, then, is not context a sign nature, too? It is. The difference applies between foreground and background, a difference which simultaneously secures their cohesion. Indeed, a situation is a background object from the perspective of the foreground object. Similarly a mental ground (b-interpretant) is the background figure to the mental figure (f-interpretant).

This really is a key point. For the engineered sign consists of both context and ... sign. This overlap in terminology is stretching the postmodern attitude too far. Without explicitly shifting levels of abstraction it is impossible that a particular element (sign) is equal to the set (sign) when another element (context) is present which is non-empty by definition.⁶ Figure 4.1.1 depicts this ambiguity.

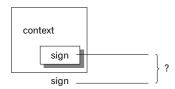


Figure 4.1.1. Sign as an ambiguous concept.

There is only one solution without the constant need for reference to different situations. For precision either the set-level concept or the element-level concept (or both) must be renamed, leading to different names. I favor retaining *sign* at the level of the set. There it keeps its widest reach. Yet, it is a departure from using sign at the elementary level of which Figure 2.7.4 is the outstanding example.

Why didn't I get my terminology straight, right from the start? I feel an earlier introduction of this shift would have risked losing the reader. At all stages, I want to remain on as familiar grounds as possible. Of course the current risk is one of delayed confusion. However, I continue to deal through gradual

6. Whenever I write "by definition" it is actually more instructive to read it as: by subjecexposition with the dilemma of communicating innovation, designing it so that I make myself clear enough at every step.⁷

What, then, should be the new name for what I originally called sign at the elementary level? I have chosen *signature*, for reasons that emerge from this chapter. As shown in Figure 4.1.2, a sign consists of a signature in a context.



Figure 4.1.2. Introducing the label of signature.

The change of terminology is so important that it is necessary to update Figure 2.7.4. Figure 4.1.3 replaces it.

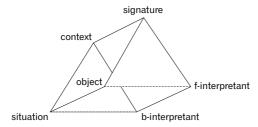


Figure 4.1.3. Introducing signature: update in terminology.

Construction of a sign should naturally be considered from the point of view of the sign user actually doing the constructing. Making sense out of his sign engineering, then, is to start from his ontology. It is to assume that the interpretants involved are about whatever he believes as reality. By the way, it is important to recognize that here no proof of this last statement is required. For it is one of the very axioms of subjective situationism, underlying sign use as a unique process of hexadic dynamics.

Sign construction will mostly occur unconsciously. Whatever sign he constructs, a sign observer may later analyze as a particular synthesis of signature and context standing, as is the nature of a sign, for an object in a situation. But also the engineering sign user himself may already make a conscious effort to

7. Another advantage of shifting meanings is that it provides a first-hand example of what happens during modeling. It very much is a process of trial and error, of communication strategy, etcetera.

represent – his understanding of – both object and situation, that is, *including* their relationship. As MYERS puts it in *Systematic Pluralism* (1961, p 135):

For in taking the universal aspect as well as the particular aspect of the individual into account, we think of him as a perspective of the metaphysical object. [... p 136] Hence, the view of the individual as a personal perspective gives us true concrete universality, the synthesis of the particular and the universal. [... p 162] Reality comes to us, not as one system representative of the metaphysical object, but as infinite systems, each uniting a particular with what is common to all. But that common element, the metaphysical object, cannot be isolated; any attempt to do so must at once result in uniting it with another particular, producing thereby another system.

According to hexadic dynamics, the obvious way to create the most comprehensively articulated sign from the sign user's perspective is to develop a signature representing the object, a context representing the situation, and include the signature in the context so that it may stand for the object's existence (with)in the situation. At the basis of these dynamics lies the correspondence between f-interpretant and object, and b-interpretant and situation, respectively. These latter statements are again not hypotheses eligible for empirical tests. They are axiomatic. Figure 4.1.4 shows both the correspondences and the containments of the concepts from the hexad.

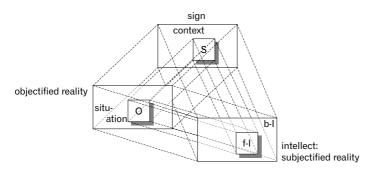


Figure 4.1.4. Hexadic concepts: correspondences and containments.

I repeat that the engineer is the observer of his own developed sign, too. This is implied by the dynamics of consecutive steps where the b-interpretant and f-interpretant resulting from one step are the context and signature progressing into the next step in the process of sign use.

At last I can summarize my concept of model. Any sign 'stands for' what the sign user considers objectified reality. That is always *his* reality, and as objectification it is therefore essentially subjective.

Then a sign is a model when it results from an effort by its engineer to

express (his) objectified reality according to a rationalized ontology. The rationalization imposes a conceptual *structure* on instances. Whether a sign engineer is conscious or not, and if so, to what extent, of the underlying structure *when producing an instance* is quite another matter. In Chapter 6 I argue for limits of rational signs, including models of course.

With subjective situationism, the minimal difference assumed in reality is that between a situation and an enveloped object. It follows that the minimal difference constructed onto a model should be that between a context enveloping a signature.

A sign user who is capable of engineering models is also called a modeler, for short. Obviously, a modeler can produce from extremely poor to excellent models.

The metapattern is a technique for consistently differentiating between signature and context. It is nontrivial because contexts and signatures are not absolutes. Neither are their relationships fixed. A model must therefore also support representation⁸ of shifting points of view as explained in § 3.6.

The metapattern, especially as a technique for model visualization, is about *variously* directing attention. First of all during construction and secondly for observation, it orders *unambiguous shifts* in an (overall) sign between what may be taken as signature, and what as context. I emphasize that – regardless of the actual confusion of the sign user the malicious nature of his intentions, etcetera – his interpretants are *always* taken as *his* beliefs about reality. The whole argument of this treatise is pointless when its axioms are not taken seriously. This holds by the way for any argument.

4.2 traditional modeling practice

I outline the metapattern's principles and actual technique by presenting a fictional, simple case study. In this paragraph I first show what assumptions guide a modeler who applies the traditional frames of reference of relationships between entities with attributes and/or object relationships. Entity-attribute-relationship modeling (EAR) and object orientation (OO) share the ontology of absolute, independently existing objects.

In § 4.3 I sketch the metapattern-based approach to information modeling.

8. Figures 3.6.1 and 3.6.2 already provide exactly such models. For they are, as part of this text, signs standing for something beyond them that is assumed to exist as objectified reality.

9. The approaches known as entity-relationship-attribute modeling (EAR) and object orientation (OO) share the ontology/metaphysics of absolute, independently existing 'objects.' The adjective of information is added when the purpose of the conceptual model is to engineer specifications which lead to an operational information system. A 'sign tool' becomes available for supporting one or more human sign users.

Suppose a modeler goes to work one day. He learns his next assignment is to develop a model to be used as conceptual specification for a computerized information system. All that he hears at the initial briefing is that the users of the prospective information system "have to do with people."

Following the traditional approach to modeling, he probably concludes from "people" that some number of persons is involved. His likely next move is to assume, at least for the moment, differences between individual persons are not important. Concentrating on their similarities, he moves up a level of abstraction. It is person-as-type that he is now interested in to learn more about. As a consequence of this abstraction, person-as-instance is seen, not as an element that contributes to the extensional definition of the person set, but as a possibility that can be materialized from the set's intensional definition.

Still within the traditional approach to information modeling, the modeler fits the person at type level with relevant properties. Actually, those are property types, too. His key question at this stage is: What is relevant?

It all depends. What purpose(s) is the information about persons going to serve? As the modeler is not told about any purpose, he has a choice between [a] doing nothing, [b] inventing one or more purposes for himself, or [c] trying to find out about them from (other) stakeholders. With the exception of [a], the modeler will attempt to specify properties to suit.

Is the information system going to support, for example, integrated management of magazine subscriptions? Suppose it will have to. He finds it plausible to assign magazine type as a property of person type. From intension this allows a particular person – John, for example – to be subscribed to a particular magazine – say, *Business Semiotics Weekly*. In other words, first John and next his subscription are instantiated. Figure 4.2.1 outlines what possibilities may be generated from type-oriented modeling.

I don't supply references to literature about EAR and OO. § 4.2 provides no more, and no less, than an informal sketch. My aim is to facilitate a general introduction to the metapattern.

A reader interested in how the metapattern compares with other approaches can find references to literature on EAR and OO in my books *Aspecten en Fasen* (1991),

Informatiekundige ontwerpleer (1999), and Metapattern (2001). Especially Metapattern supplies a comparison with the traditional object orientation to conceptual information modeling. I explain the metapattern's advantages over OO in detail through a discussion of J.J. ODELL's challenging collection of OO-modeling essays Advanced Object-Oriented Analysis & Design Using UML (1998).

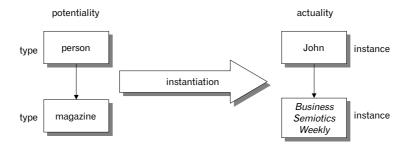


Figure 4.2.1. Modeling with type-level priority.

The relationship between the types of person and types of magazine prescribes what relationship at the instance level is possible, allowed, etcetera. When any person can subscribe to any magazine, the 'opportunity' exists also for John to have a subscription to *Business Semiotics Weekly*. ¹⁰

Information models are traditionally almost without exception at the level of types. It arises to a large extent from the nature of popular languages for computer programming and database management systems. They offer buildin support of particular types. It must be understood that those are, say, computer-oriented types. They match the internal, limited variety of digital machine-information types. Nearly always, those are *not* the types that are directly suited for a human subject's purposeful classification, i.e., to reflect his purposeful order in reality.

It is impossible to escape completely from the worldview incorporated by current tools. However, a responsible modeler is at least aware of inevitable bias. So, modeling right away at type level is actually jumping to a conclusion. Problems with this limiting approach do not manifest themselves as long as the prevailing type-orientation of the tool (especially read: programming languages, etcetera, for computers) does not cause a fundamental reduction¹¹ of the relevant variety of reality. As information technology is applied for increasingly complex tasks, it simply follows that the number of failures will correspondingly grow. Strictly intensional modeling will often be insufficient to support requisite variety. Subjective situationism, with the metapattern as its modeling technique, holds that reality is made up of *particular* situational objects. Instances may of course be grouped into classes, or sets. However,

10. I hate to make sure, but both John and *Business Semiotics Weekly* must be read as figments of my imagination.

11. This must be understood in the sense of reductionism about which I have to say more further on in this treatise.

extension is what fundamentally constitutes a type; intension can be a convenient shorthand, with all the risks of reduction.

For the remainder of my treatment of traditional information modeling here in this paragraph, the orientation at type level is implied. What other stakeholders usually experience from the efforts of the traditional modeler are extremely condensed schemata. The real problem is that most modelers are not aware of reductionism. They establish a gap that is difficult to bridge. What is left of Figure 4.2.1 after reduction to type level is shown in Figure 4.2.2. Its simplicity is misleading.

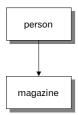


Figure 4.2.2. Model with implicit type orientation.

For the sake of fiction, suppose this is how far the traditional modeler has proceeded. I assume that he now wonders about the quantitative aspect of the relationship between person and magazine. How many – types of – magazines can a person subscribe to? Just one? An unlimited number? Is information about the person registered in advance of his very first subscription? Does personal information continue to be available when no subscription remains?

And what about numbers from the perspective of the magazine type? How many persons can subscribe to it? Etcetera. For a healthy publishing company, the modeler specifies a many-to-many relationship (n:m). See Figure 4.2.3. Those numbers are also called the cardinality.

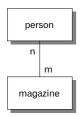


Figure 4.2.3. Specifying cardinality at type level.

A many-to-many relationship lacks sufficient precision. It does not support unambiguous selection of information, for example, on the particular magazines subscribed to by a particular person. The proven solution for disambiguation is the introduction – again, at the type level, here – into the model of a third entity/object. In this case, that object is subscription. Keeping the model general, i.e., without specifying when the presence of an object instance of one type is a precondition for the production of an instance of another type, ¹² Figure 4.2.4 presents the solution to the ambiguity problem.

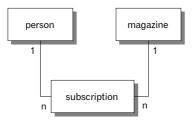


Figure 4.2.4. Disambiguating the model: two one-to-many relationships for one many-to-many relationship.

It usually happens only when programming, or related activities of organizational change, etcetera, is well on its costly way that flaws in the conceptual model are discovered. Suppose the modeler later establishes that not only private persons but organizations, too, subscribe to magazines. This is not a problem when they are not at all different from the *perspective* of subscription management. All it takes is to rename person. Subscriber, for example, comes to mean any party.

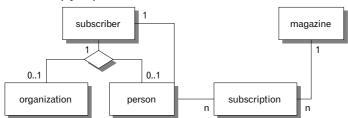


Figure 4.2.5.

Subscriber as the predominant type: organization and person as subtypes.

12. It should normally be impossible, clearly, to record a subscription instance without both the person instance involved and the magazine instance requested being already present.

What I don't elucidate in the main text is that magazine instance is meant as an instance of a magazine type. It is possible, and might be necessary depending on the particular purpose, to consider separate magazine issues, and even separate copies of every issue. I don't want to burden the fictional case study with such elaborations. On the basis of this note I invite the reader to do so for himself.

There often are valid reasons for maintaining – the possibility of – differences between, in this case, person and organization. Where the subscription perspective is dominant, person and organization are established as mutually exclusive subtypes of subsciber. The modeler adjusts his model as shown in Figure 4.2.5. This option requires controlling the choice between person and organization as a property of subscriber. The diamond-shaped symbol indicates such a mechanism.

Where the difference between person and organization is of primary interest, the traditional modeler resorts to so-called subtypes. This will actually always be the preferred solution when person and organization are not only different, but their respective subscriptions as well. At this stage, the traditional modeler of my fictional assignment produces a model as shown in Figure 4.2.6.

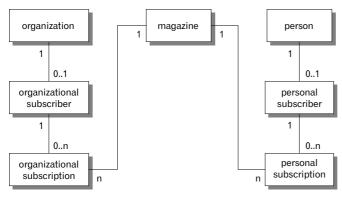


Figure 4.2.6. Different subscription types for organization and person, respectively.

Strictly regarding subscription management, often no real differences exist between persons and organizations. The orientation at subtyping, however, makes it impossible to escape from proliferation of differences inside the model where *no* such differences exist in the objectified reality.

13. The diamond-shaped symbol indicates a choice between mutually exclusive results. The number of instances of for example the 'person' property is at the minimum zero,

and one at the maximum. More precision, necessary for unambiguously 'programming' an information system, is not provided here.

4.3 modeling with a difference

A modeler familiar with the metapattern responds differently to the same assignment. Now the metapattern is *not* a complete departure from entity-relationship-attribute modeling and object orientation. It incorporates their modeling aspects of enduring value. But what has changed are, though small in number, fundamentally important aspects.

The metapattern-equipped modeler will, first of all, try to gain understanding about what *particular situation* is relevant. After all, her ontology is that of situationism. She concentrates for example on: John having a subscription to *Business Semiotics Weekly*. What she looks for are clues for productively starting to objectify the situation-as-instance, rather than object instances residing in it. She calls a particular situation: subscribership.

She relaxes on a fixed object orientation because – the metapattern determines that – situation and object are relative concepts (WISSE, 2001; also see Chapter 3, above). A particular situation is also object in another, higher-level situation. Likewise, an object can act as situation in which another, lower-level object resides. Situation, then, is a recursive function of object and relationship.

Aware of the opportunity for upward recursion, she investigates whether subscribership in its capacity as object leads to recognition of another, encompassing situation instance. Suppose she cannot, at such short notice, think of any. Neither are there any stakeholders around to suggest such situations with broader relevance. She therefore puts a firm limit – but a limit from which she can always includes changes – to upward recursion. This is easily accomplished in a visual model by drawing a thick, continuous line. That line *represents* the outer frame, or horizon, of her objectified reality; it provides her the base in (and of) the model.

The situation of subscribership is now included in the model as if it originates from the totality of objectified reality. From the base line, a thinner line is drawn, and a name for the situation is added. See Figure 4.3.1.



Figure 4.3.1.

The bottom line of objectified reality, drawn at the top; a situation instance specified.

Only *after* a situation has been specified does she give closer attention to persons. Actually, she first includes John – hypothesized or not – as an *individual*. It optimally tunes her to design relevant differences into her model. Her next sketch therefore looks like Figure 4.3.2.

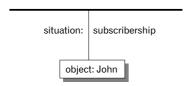


Figure 4.3.2. Placing an object instance inside a situation instance.

Again, this procedure especially supports the modeler focusing her attention on how a particular object exists within a particular situation. What is relevant for the modeler about that existence is *differential behavior*. Because the situation governs – what is different in – behavior, it is John as a subscriber only that the modeler needs to consider at present.

In actual practice, the modeler of course iterates. Behavior is the joint result of object and situation. So, particular behavior is their relationship. Practically she has to start her model somewhere. It is by assuming greater importance for situation. Within this assumption, it is reasonable to speak of situation governing behavior.

Other behaviors by John, or roles that he occupies, may have been relevant in the past. Or they are relevant now, or may be at any time in the future. But they must all be understood within their corresponding, and most likely different, situations. Anything applying to other situations is therefore not relevant within the current focus of the particular situation.

It is this *ontologically essential dimension of situation* that most characteristically sets the metapattern apart from traditional object orientation (and provides it with important advantages over OO). Compared to an object that (only) exists absolutely, an object believed to exist in a multitude a different situations can unambiguously be modeled – to be equipped – with corresponding behavioral multiplicity.

For information modeling, it is useful to stretch the concept of behavior. And I consider behavior and role synonyms. I habitually use behavior, or role, as a generic term for any set of properties, both static and dynamic. For static properties are really not fundamentally different from dynamic properties. I see the static ones as dynamic, too. It is just that change is valued as absent.

The modeler proceeds to investigate John's behavior as a subscriber. Soon enough, though, she will also turn to abstraction (with, again, abstraction in the sense of moving from an inspection of instances to the assumption of types). For the prospective information system, is it really necessary to differentiate behaviors of separate individuals? The metapattern consistently urges that fundamentally individual existence must always be honored. But assuming for now that John's behavior does not differ *in kind* from the behavior of all other subscribers, she may substitute 'person in general' for John.

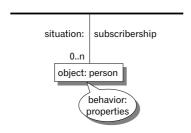


Figure 4.3.3. Abstraction from instances to type; specifying cardinality; suggesting behavior annex properties.

The number of persons who can be subscribers is now added to the model. This is their cardinality. When she does not want to occupy herself at this early stage with detailing any properties of subscribers, a text balloon suggests that one or more of such properties do exist. Figure 4.3.3 presents what she has modeled so far.

The metapattern's recurrent focus on situation leads the modeler to question whether only subscribership is relevant for persons. Suppose that John needs to be registered as a member, too. She learns that his membership is with the Global Semiotic Society. However, for the time being she chooses to concentrate on John as far as instances are concerned. For the sake of compactness of her model, rather than from type as a principle, she assumes that all members will be registered by the same types of properties as their behavior. This abstraction from member instances to the behavioral type of membership is shown in Figure 4.3.4.

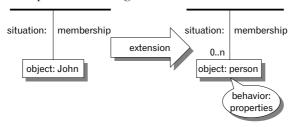


Figure 4.3.4. Hypothesizing similar behavior for all members leads to recognition of a generally applicable situation of membership.

Back again at the level of the individual John, she merges her previous models. See Figure 4.3.5.

In all its simplicity, Figure 4.3.5 shows exactly what the task of the information modeler is. She designs an appropriate balance between sameness and difference. In this case, sameness is expressed by identifying a single object. That is the role of John in her model. But John is everywhere circumscribed

by difference. First of all, he appears in different situations, i.e., in subscribership and membership, respectively. Secondly, he is attributed with different behaviors. In general – and with my apologies for inevitable obscurity of expression – the difference of situation establishes for the sameness of object the difference of behavior.

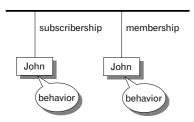


Figure 4.3.5. John with different behaviors in corresponding situations.

4.4 structuralism as method

The metapattern is a formal language¹⁴ with a strong emphasis on visualization. It is designed to support precisely what is essential to the information modeler's task. Subjective situationism with its concept of hexadic dynamics of sign provides guidelines for engineering business information models. It is equally possible to describe what is believed to exist (Ist) as what is believed that should be brought into existence (Soll).

The *quality* of a model improves to the extent that signature and context stand to each other in a way that *believably* stands for how object and situation are related. The belief part, of course, covers the modeler's interpretants. Correspondence is not just between sign and objectified reality. That is too crude. Neither should correspondence be understood as merely resting on two separate representational relationships, i.e., one relationship between situation and context, and the other relationship between object and signature.

Rather, a model accommodates irreducibility in the Peircean sense. What

14. The – mathematical – formalization of the metapattern is simple and compact. It is presented in Part I of my book *Metapattern* (2001). See also *Informatiekundige ontwerpleer* (1999).

Some similarities exist between metapattern and mind mapping. However, a mind map (T. and B. BUZAN, 1993) seems to be a visualization, only. There is no attempt at formal expression. Also, explicit support for multisituational behavior is missing. My idea is that mind mapping is a monosituational subset of the metapattern. It therefore – and still quite apart from consistent treatment of behavioral changes over time – misses the degree of freedom that is especially impor-

the hexad suggests are not only immediate correspondences such as between the elements of the original semiotic triad. In addition, the progression to dimensions supports correspondences at the *structural* level. Resulting from semiosis to which his "cognitive mass" contributes in a major way, through the structure of his interpretants the sign user infers the structure of reality from the structure of the sign/model. Figure 4.1.4 already diagrams such dual relationships, i.e., of correspondence and containment. I hypothesize sign use as a process with simultaneous dynamics at two tightly connected levels. In fact, the hexad from Chapter 2 is the static model of exactly this process.

So, there is also the structural level. The assumption that reality is structured makes the sign user look for corresponding structure in the model. This takes him to the level of elements, and their specific relationships. What is recognizable as being contained by what else? One is the signature, and the other is the context. Whatever structure the sign user interprets *in* the model-as-sign he then believes to stand for reality's structure. As the model suggests elements standing to each other, they are taken to represent real objects similarly related.

The above description of sign use owes much to the work of CLAUDE LÉVI-STRAUSS (1908-). In his book *Totemism* (1962, p 84) he presents a summary of structuralism:

The method we adopt, in this case as in others, consists in the following operations:

1. define the phenomenon under study as a relation between two or more terms, real or supposed;

tant to model variety. On mind maps see also *Mapwise, accelerated learning through visible thinking* (2000) by O. CAVIGLIOLI and I. HARRIS.

The concept of mindmap is derived from what in cognitive science are called semantic network models for representing how information is supposedly structured in human memory (referring to a few textbooks among many, see L.E. BOURNE, R.L. DOMINOWSKI and E.F. LOFTUS, 1979; S.K. REED, 1982). There have been important attempts to escape from strictly hierarchical models (R.M. QUILLIAN, 1968; J.R. ANDERSON and G.H. BOWER, 1973). Though structurally similar to the metapattern, the latter distinguishes different intexts for corresponding contexts. In fact, that is the metapattern's primary purpose. As semantics suggests that word is the

unitary concept, in a semantic network different paths may lead to one and the same node *and leave it at that*. Pragmatics reflects on behavior. Therefore, in order to accommodate separate behaviors it takes separate nodes as foci for one at the same object. But the metapattern does *not* show an object-asa-whole *as a single node*.

J.D. ANDERSON points out that (1985, pp 298-299) "[l]ong before cognitive scientists began modeling the semantic memory, indexers were constructing artificial 'semantic memories' or thesauri to facilitate consistent and effective indexing and retrieval by organizing concepts and controlling their number and the terms used to express them."

- 2. construct a table of possible permutations between these terms;
- 3. take this table as the general object of analysis which, at this level only, can yield necessary connections, the empirical phenomenon considered at the beginning being only one possible combination among others, the complete system of which must be reconstructed beforehand.

Though the applications of LÉVI-STRAUSS look on the surface different from what I propose, the metapattern is deeply structuralist. What he, as an anthropologist, elucidates is how one culture 'behaves' as opposed to another culture. Structuralism is all about comparisons. It recognizes the dual nature of analysis. Wholes cannot be compared to each other without recourse to their respective parts. But then, parts don't make sense outside a particular whole (also read: situation).

Logical positivism does not consider structuralism a scientific procedure. Positivism recognizes just a single level in analysis. What naturally follows from its limitation is a view of signs that presupposes a one-to-one correspondence between object and sign. My development of PEIRCE's ground, and the closely related ontology of subjective situationism, undermine the idea of one-to-one correspondence. Contrary to what positivists fear, the result is *not* chaos. The metapattern provides both the sign engineer and sign observer with the tool to recognize, without getting lost, a structure as a whole and sort out its parts. ¹⁵

The acceptance of structuralism suffers from exactly this dual, simultaneous emphasis on both the set level and the level of elements. Rather than unscientific, though, it deserves recognition as a serious method that can serve scientific activity well. Including 'structure,' it acknowledges more variety in reality than 'elementary' methods do.

Actually, situationism introduces yet another simultaneous emphasis. It concerns the sign user. Precisely this inclusion of the subject in an ontology helps to demarcate so-called poststructuralism. Thus, it is structuralism

15. What is also known as emerging behavior first of all requires recognition of a system that actually 'does' the behaving. Explanation ideally follows from the so-called causal loops connecting the system's elements to each other, and to the environment (which is implied by what has been considered as system). A pioneering publication on modeling of system dynamics is *Industrial Dynamics* (1961) by JAY W. FORRESTER. The approach has more recently been popularized by P.M.

SENGE with The Fifth Discipline (1990). Also relevant are Systems Thinking, Systems Practice (1981) by P. CHECKLAND and Soft Systems Methodology in Action (1990) by P. CHECKLAND and J. SCHOLES. In fact, there is a host of interesting publications on the systems approach. One of my favorites is R.L. ACK-OFF's Towards a system of systems concepts (1971). See also General Systems: Its Scope and Applicability (1981) by T.D. BOWLER.

enriched by the dimension of the individual knower.

It is not the purpose of this treatise to elaborate on possible differences between subjective situationism, postmodernism, and poststructuralism. Here, they may be considered equivalent concepts. I just remark that especially the explicit dimension of situation allows to critically examine whatever discourses occur by the names of postmodernism and/or poststructuralism. It helps to sort out what are rational theories, and what are not. The latter may only entertain their label to pass for science, without any credible claim to it. Responsibly accounting for its system of axioms, subjective situationism aims to support rational explanation.¹⁶

16. A conversation with my friend JAN KOSTER brought out that the terminology of modernism and postmodernism is habitually applied to designate two fixed and consecutive historical periods in the development of Western society. From a wider perspective, however, modernism and postmodernism are relative concepts. There exist many publications hinting at this. See for example *De Onvoltooide Rede: Modern en Postmodern* (especially pp 118-157, 1987) by W. VAN REIJEN.

The separate linear extrapolations that I believe are characteristic of modernism (see also § 1.8) ultimately fan out in territories which are experienced as uncertain. Such overextended modernisn may then be called postmodernism. When efforts of subsequent mapping of those (phenomenological) territories, i.e., the new rational frontier, are declared successful, the ground is cleared for the next round of linear extrapolations. Thus, a new modernism sets in, etcetera. Their cyclic nature explains that one modernism's postmodernism is simultaneously the next modernism's premodernism. I stress that, as with NIETZSCHE's ewige Wiederkehr, there is no overall, unidirectional progress implied by the dialectics of modernism and postmodernism.

Pessimism and intellectual paralysis may

result from an overwhelming experience of uncertainties at a cultural scale. A both elitist and romantic example displays T. MCFAR-LAND in Shapes of Culture (1987, p 178): "The chaos of the modern cultural situation is unlikely to witness another resurgence of formal determinants, and its anarchy will in all probability prevail against attempted reorganizations either of educational systems or of the cultural canon. In time, the limited capacity of human attention will doubtless make it necessary to dismiss many of the cultural objects, and much of the cultural data, currently available to our consciousness. These rejected structures will be relegated to the memories of computers, from which specialists or other computers will only occasionally summon them. But those that remain as subjects of living thought will almost certainly continue to present themselves as monadic shapes of culture, not as chronologically cumulative and culturally interrelated forms."

A similarly conservative cultural program presents A. BORGMANN in *Holding On to* Reality: The Nature of Information at the Turn of the Millennium (1999). His confusion lies in applying for example the label reality to different concepts, with a reality that is a part of the whole of another reality (p 5): "The far-

4.5 sign in the ennead: context, signature and intext

Meanwhile, the modeler has continued with her assignment. She reaches the point where she has modeled – actually, she has made preparations to model – two behaviors of John. One behavior is as a subscriber, the other behavior as a member. Suppose those behaviors are completely disjunct. It means that no overlap of properties exists, at all. This raises the question about what counts as minimal information required to connect John's behavior to the situation.

At the point where John enters the situation even the barest *identification* is sufficient. The metapattern *separately* establishes this minimal point. That, and

ther reaches of reality and the cultural landmarks that used to lend it coherence are being swept off their foundations by information technology."

When I announced, in Chapter 1, that this treatise presents an ontology, or a metaphysics as it may also be called, for conduct in postmodern life I was referring to an attempt aimed at the current uncertainties generated by an older modernism. Should such metaphysics, or "formal determinants," indeed prove useful, by definition a newer modernism is established. Therefore, this metaphysics is offered here as essentially modernist, too, but for a different modernism. As MYERS argues (1961, pp 30-31): "Every age, as it comes to maturity, presents a spectacle of contradiction and inconsistency in its thought. Before it had clearly realized itself, it applies to its new and growing experiences the variable elements of thought which were adequate to the experiences of former generations but which are now impediments rather than aids to growth. The preservation of what held good only for the experiences of a given time constitutes the untimely nature of much metaphysical thought; the mark and evidence that it is untimely, as it struggles to integrate experiences for which it is inadequate, are inconsis-

tency and contradiction. The revolt of philosophy against the untimely, brought about when the inconsistency and contradiction become intolerable, finally reveals what is timely. Thus, in order to know what is timely for us, we must first know what is inconsistent and contradictory, what is untimely, in our thought." Elsewhere in Systematic Pluralism, MYERS continues (p 56): "[R]easonable and timely elements become unreasonable and untimely when a timely pattern, mistaken for the logic of metaphysics itself, is carried over from one time to another." The expression of a timely metaphysics is usually problematic. A person will only be (MYERS, 1961, p 140) "wasting his time in attempts to translate his new conception into old terminology." You'll "never quite make the jump," MYERS warns. His "lesson" (p 139): "[W]hat is new in the thought of a philosopher is best brought out by the figures of speech which present themselves to his imaginative insight; if the new conception has any worth in metaphysics, the very terms of the figure are apt to possess a literal truth where the older, supposedly more literal terminology breaks down into contradictions and insufficiency." I now find situation a metaphysically "apt" term. And subject, of course.

only that, is John's signature. But what in the model, then, informs about John's behavior in a particular context? This is named, as a pendant of context: intext. As Figure 4.5.1 indicates, the model-as-sign is a variable configuration, not of two, but of three concepts: context, signature, and intext.

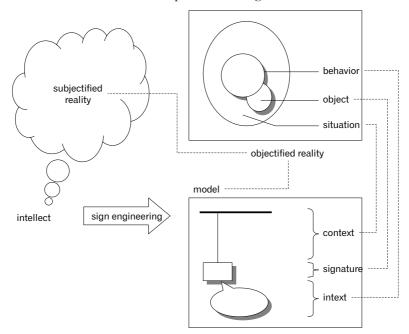


Figure 4.5.1.

Reframing the concept of signature: making room for intext to represent behavior.

The repositioning of signature underlines that an identification only minimally 'stands for' an object. It provides the barest reference possible, no (other) representation. What *really* characterizes an object is its behavior. In fact, given a particular situation, that behavior is the situational object.

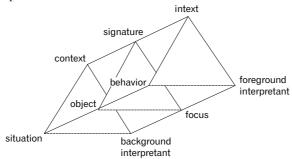


Figure 4.5.2. Enneadic model of a step in processes of sign use.

The articulation of both a sign and objectified reality each into three, rather than two concepts, should be reflected in the model of sign use dynamics. It makes sense to assume that a structural equivalent of situational object and – its – signature is present in the intelligence of the sign user. I choose to call it *focus*. What results is an ennead, replacing the hexad. This development from six to nine constituting elements is shown in Figure 4.5.2.

The ennead is a powerful interdisciplinary device. It retains the original elements of PEIRCE's triad as dimensions. Along each dimension, three concepts are now arranged. Compared with two concepts per dimension for the hexad, the ennead allows correspondence in more detail, again including the structural level.

In VOLOSHINOV's (1929) sense, the only material reality belongs to the sign. Applying the metapattern, from the sign-as-model it is possible to infer more rationally about both the configuration of interpretants and the configuration of reality (with the latter of course inferred from the interpretive structure which the sign mediates through semiosis). Independently from PEIRCE, VOLOSHINOV remarks about the configuration of interpretants (1929, p 26):¹⁷

[T] he inner psyche is not analyzable as a thing but can only be understood and interpreted as a sign.

The radical conclusion from the orientation at situational behavior is that an object's identification, its signature, is *behaviorally meaningless*. The modeler does not have to explicitly include something like an original signature in all her models. Essentially a privileged situation may implied. It serves the only purpose of guaranteeing sameness or, its equivalent, persistent identity across (other) situations. Being a situation in its own right, when included in a model it is represented by a seperate context. Made explicit or not, its role is to authenticate an object's identity in other situations by establishing the signature in other contexts.

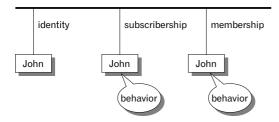


Figure 4.5.3. A separate identity context.

This touches upon the reasons why I introduced, in § 4.1, the term signature. A signature itself does not carry information *except* for leading to an intext as a

particular context directs, vice versa. This way, it stands for an object where it exhibits behavior in a situation. Figure 4.5.3 shows the model accordingly expanded.

Literally through the concept of signature, context and intext become concepts that are (more) independent from each other. For how instances of context relate to instances of intext can always change around signatures. This explains the modeling power of the metapattern (WISSE, 2001).

As a consequence of its behavioral emptiness, an object in its identity situation is considered propertyless. No intext therefore appears in the model. Again, an identity serves to preserve an object's sameness across situations and its corresponding behavioral differences. Conversely, when an object is established in a situation, the modeler must draw its signature from its 'central' identity. When that object has not yet been observed in *any* situation, its identity must be established as a prerequisite for entry in any (other) situation. Obviously, when an object's existence in the past, present and future is no longer considered relevant in any (other) situation, its otherwise empty identity is also no longer required.

Through lateral connections between signatures, an object's existence in one situation may be derived from its existence in another situation. As Figure 4.5.4 shows, such relationships are included in the model as curved, broken lines with their arrow pointing at the 'original' signature. As a matter of principle, directly or indirectly, a signature is always derived from its identity. As an axiomatic value, the identity's signature is considered equal to the identity.

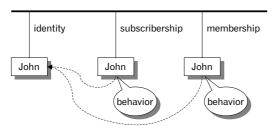


Figure 4.5.4 An object's continuity across situations: making derivative relationships explicit.

It is too cumbersome to include these fundamental relationships to an object's central identity in all information models. When they are absent from a particular model, they should be presupposed.

The modeler continues to concentrate on situational behavior. She models situations onto contexts with the purpose of eliminating behavioral duplication. Disjunct behavior defines situations as disjunct.

Initially, for example John as a subscriber and John as a member both

require his address specified in the respective intexts. It probably sounds contrived at first but the additional situation of, say, personship, eliminates the duplication. It is evident John exists as a natural person before he can ever be considered a subscriber and/or a member. Derivations of signature are therefore as shown in Figure 4.5.5. The privileged identity situation is left out for the sake of the model's compactness; it resides in the background.

There is more to be said about an object's identification being behaviorally meaningless. And about why the object in its identity situation is essentially propertyless. Especially the *name* John should not be taken as the individual's signature, not even where his personship is involved. Rather, any name is better considered a property. The relationships leading from the objects in other situations to personhood, guarantee that John-as-name can be made available there, too.

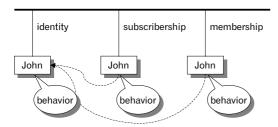


Figure 4.5.5. Elimination of duplication in behavior results in situations that are by definition disjunct.

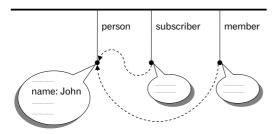


Figure 4.5.6. An object's common name as a property in an appropriate situation.

The radical nature of signatures, only serving to connect context to intext, allows the models to be presented more simply. In Figure 4.5.6, John-as-aname is now a property of an individual, no longer his signature. The same figure also does away with some unusual naming of situations. I have renamed them according to the *role* the object plays in that particular situation.

In computerized information systems, the 'machine' can easily provide a single identification value across the different signature instances for a partic-

ular object. A user may never notice how an object's sameness is organized through actual information. All he experiences are meaningful situations from his perspective(s) and, within every situation, meaningful properties of any object.

For her next step, the modeler can again choose for abstraction. She then has to include, as in Figure 4.5.7, her idea about the number of objects that may exist within every situation. Text balloons remain because they alert to unfinished modeling. Relationships shown for derivation provide additional information about the number of objects in a situation. As the dotted arrows for example make clear it is impossible for a member to exist without a natural person for its 'origin.'

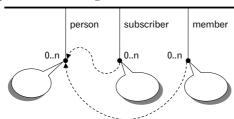


Figure 4.5.7. Again, moving from object instances to situation-determined types of behavior.

4.6 relative configurations

The metapattern's principles for handling multiple contexts have now been explained. Continuing to apply them, the fictional modeler produces a model introducing magazine and subscription. See Figure 4.6.1.

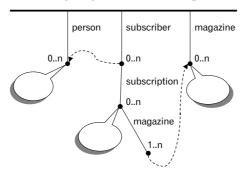


Figure 4.6.1.

After mastering the metapattern's basic technique, models can be elaborated.

A provision is still missing for organizations to subscribe to one or more magazines the same way that persons do while elsewhere maintaining the difference between persons and organizations. The radically minimal notion of identity in reality, and correspondingly of signature in the model, makes for a simple solution. Assuming that a person-as-subscriber is indeed not different from an organization-as-subscriber, the separate situation of subscribership is useful. It 'contains' by definition only one kind of behaving object. They are subscribers. How those objects behave in other situations, and whether or not their behaviors elsewhere are different between objects, is of no concern from the perspective of subscribership. Whatever behaviorial differences are 'supported' by other situations does not matter. What for example is considered a car elsewhere may also entertain a magazine subscription. Why not? to transpose FEYERABEND's "anything goes" (1975).

To indicate that a choice exists at the level of individual signatures, and how they fundamentally connect to sameness in different situations, in Figure 4.6.2 a pertinent symbol is added to the arrows of derivation.

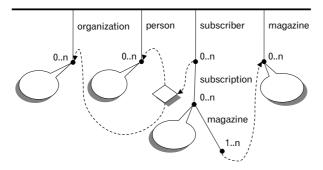


Figure 4.6.2. Objects with heterogeneous behavior elsewhere are all placed in the same situation when their behavior is homogeneous within that particular situation.

The unorthodox idea of making cars eligible to magazine subscriptions is not shown above. But modeling it is simple enough. Situations eliminate the need for this kind of subtyping. With these particular situations *juxtaposed*, so are their types. For by definition, situation is the type for all objects behaving in it.¹⁸

The modeling case has progressed far enough to emphasize that context, signature, and intext are not fixed categories. Above, it already says that situation is a recursive function of object and relationship. This is actually inferred from the metapattern's concept of context, i.e., as a recursive function of sig-

nature and relationship. Take, for example, the signature highlighted in Figure 4.6.3 as the point of view.

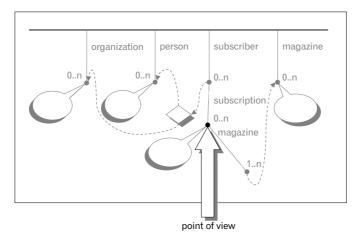


Figure 4.6.3. A metapattern-based model invites the sign user to choose focus.

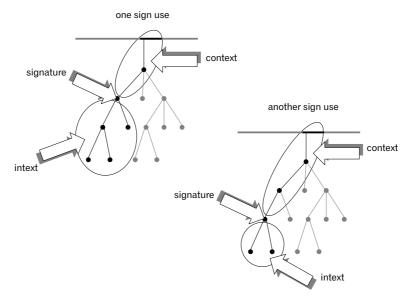


Figure 4.6.4. Support of different interpretations (also read: sign uses).

It is precisely a signature that supports a focus. The *experience* of a signature or a point of view *is* a focus, even. Starting from a particular signature, its context

is the specification of the situation. Its intext is all what specifies behavior of the situational object. Every change of point of view/signature changes the context and the intext, too. The metapattern thus supports a large variety of sign use with compact models. Figure 4.6.4 suggests two different 'readings' from the same model. Every interpretation is driven by a focus. It establishes the signature, and subsequently the related context and intext. A different focus results in the experience of a different signature, etcetera. Already a model small in size can yield a rich harvest in semiosis.

Especially from the perspective of structuralism it may be argued that context is not just the narrow definition of a situation. For a situation does not exist in isolation. It exists *with* other situations. One situation is determined by other situations; similarly, that situation participates in the establishment of other situations. The *narrow* context, then, is just the linear path leading from the model's horizon as the overall perspective to the signature in question. And the *wide* context is everything the model presents except for that particular signature and its intext. This structuralist view of information, emphasizing context, is shown in Figure 4.6.5.

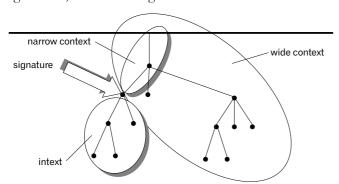


Figure 4.6.5.

Narrow context is linear, wide context is structuralist.

It takes practice to successfully apply the metapattern, including the theory (also read: ontology) it incorporates. For another taste of possibilities, Figure 4.6.6 shows how the modeler may have proceeded with her fictional assignment. She takes up the suggestion that persons need to be registered as members, too. Next, she hears a person can only subscribe to particular magazines in his capacity as a member. Her model is easily adjusted to simultaneously accommodate different situations of subscribership. It should be clear that the model of Figure 4.6.6 also covers organizations receiving a magazine as part of some membership. A subscriber can be either a person, an organization or a member. And a member is either a person or an organization.

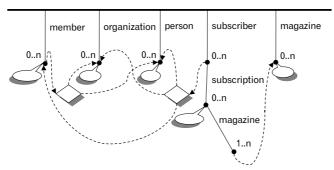


Figure 4.6.6.

Modeling a network of unambiguous behaviors.

My description of the metapattern is limited to what is required for the ontological design of this treatise. However, it has more characteristics. For example, from applying the metapattern time receives pervasive treatment. Every node accommodates time. For one thing, it serves to integrate aspects known from data warehousing into operational information systems. Audit trails are also intrinsic. Such features are documented elsewhere (WISSE, 2001).

This chapter outlines the metapattern as a technique for modeling both actual and planned reality in general. Its models abstract from (also read: idealize)¹⁹ any tool construction applying digital information and communication technologies.

The metapattern treats context as a variable *within* the scope of information models. A key assumption is that an object may exhibit multiple behaviors. Every behavior is unambiguously tied in with a particular situation. With a context representing a situation and signature as an object's barest situational identity, through a number of signature instances a *single* information model represents an object in *multiple* contexts.

Another vital assumption is that context is a recursive function. Highly compact models result, yet with large structural and behavioral variety. For *underlying* the metapattern is the design of combining both situation and context *even as recursive functions* in an encompassing, interdisciplinary semiotic framework of enneadic dynamics. Constituting the ennead in an irreducible way, its concepts acquire new meanings.

prelude 5

Please skip to Chapter 6 when you immediately want to pursue the constructive argument. Chapter 5 is largely occupied with criticism.

With the irreducible relationship between sign, object and interpretant, PEIRCE establishes a ground for semiotics. Do later developments in semiotics add or modify essential concepts? If so, can they be usefully employed for an ontology for information modeling?

Is A Theory of Semiotics (1976) by U. ECO representative for theoretical developments? If so, my conclusion is even negative. The Peircean concept of irreducibility has not survived. Rather, it has been detracted from. Especially the division (also read: reduction) of semiotics into pragmatics, semantics and syntactics has proven influential. C.W. MORRIS offers the classification that prevails (1946, p 219):

[P] ragnatics is that portion of semiotic which deals with the origin, uses, and effects of signs within the behavior in which they occur; semantics deals with the signification of signs in all modes of signifying; syntactics deals with combinations of signs without regard for their specific significations or their relation to the behavior in which they occur.

It should first of all be noted that MORRIS departs from pragmatics as viewed by PEIRCE. For PEIRCE, if anything, pragmatics and semiotics are *perspectives at an equal level*. He needs semiotics to explain pragmatism, vice versa. MORRIS places pragmatics alongside several other disciplines *at a level below* that of semiotics. It suggests that semiotics can be studied exhaustively through its branches. What really happens is that PEIRCE's original emphasis on irreducibility is lost.

Such reduction of semiotics fits a particular scientific climate. Combined with a strong realism, PEIRCE's claim for irreducibility undeniably implies subjectivity, idealism, etcetera. For a positivist science, that is all unacceptable. So, secondly, what MORRIS basically does, is suggest disciplines that can be prac-

ticed according to the positivist requirements of his time. The particular problem for later developments of semiotics has been that the *uniqueness* of every sign user is *not* taken as a ground. It is a problem because semiotic phenomena that are uniquely attributable to an individual sign user cannot simply be denied. But without the proper grounds, explanations of phenomena come out twisted. Chapter 5 confirms this about ECO's semiotic theory. Subjective situationism, with its perspective of a restored irreducibility, cannot gain from such theories but, instead, affords criticism.

A remark on positivism is still in order. It is understood as an absolute doctrine on the proper practice of science. However, I prefer to consider it relative to certain grounds. It is therefore always a particular ontology which subsequently permits positivist science. Subjective situationism does not at all contradict positivism, but establishes more varied grounds for it to be practiced. And that is precisely how it promotes relevance in conceptual information modeling.

Chapter 6 resumes constructive design of an ontology that is well-equipped with variety for information modeling.

chapter 5

CRITICAL SYNOPSIS OF ECO'S SEMIOTICS

Especially in Part i of this treatise, the individual sign user holds the privileged position for explanation. His unique existence is taken as axiomatic. Then why do I include at this stage a synopsis of UMBERTO ECO's *A Theory of Semiotics* (1976)? Doesn't ECO assume that meaning is a social convention, rather than grounded in personal "conduct" or – a concept I consider equivalent to conduct – behavior?

It is precisely *because* ECO attempts to maintain a social, or cultural, explanation of semiotics¹ that a discussion promotes an understanding of subjective situationism. For at least regarding its assumptions, his semiotic theory provides the benefit of a clear contrast.

ECO starts from the idea that language – any signification system, for that matter – strictly is a social system. This leaves many aspects of meaning unexplained, though. I particularly mean the sequences of interpretants occurring in the intelligence of the individual sign user during his unique process instances of sign use. Also fundamentally missing from accounts such as ECO's is the individual creativity in sign engineering. Exactly for these reasons the intentionally demeaning title of § 2.4 already refers to semantics as the poor cousin of pragmatics. For some research purposes it is of course fruitful to assume a separate "symbolic order." But then, next, concepts need to be related as for example K. SILVERMAN suggests (1983, p 282):

[S]ignification cannot be studied apart from discourse, discourse from subjectivity, or subjectivity from the symbolic order.

My shift from society annex culture to individual sign user permits clarification of where ECO's overall theory shows contradictions. Especially as far as

1. I use "semiotic" and "semiotics" intermittingly in this treatise. As semiotic is PEIRCE's

preferred term, I use it when dealing directly with his ideas.

the concept of sharing identical meaning between different sign users, or even its possibility, is concerned, his explanation simply equals his original classification.

In other words, the variables of ECO's theory lack requisite variety. For a theory needs to recognize necessary and sufficient explanatory variables that are *different* from what they explain. This is what R.A. WICKLUND calls the inquiry into the background perspective. Instead, ECO already turns the possible result of theorizing into his perspective. Thus he fails to observe the problematic nature of shared meaning. As WICKLUND remarks in *Zero-Variable Theories and the Psychology of the Explainer* on creating a zero-variable theory (1990, p 22):

The beginning point of the analysis – the grouping of behavioral instances into a seemingly meaningful whole – is also the stopping point of the theoretical analysis. But what else? No one would try to argue that the mere identification of a cluster of behaviors is a theory!

Short-circuiting "stopping point" with "beginning point" of course secures theoretical 'proof' but only as an immediate tautology. In particular shared meaning is left unexplained (also read: is not build up as a system of variables) in *A Theory of Semiotics* because ECO effectively starts from the concept of shared meaning, or mutual knowledge. It acts as his axiom, as I show below in more detail. Criticizing what they call code models of communication, D. SPERBER and D. WILSON pinpoint the faulty reasoning (1986, p 19):

There is a paradox here. Since the assumption of mutual knowledge may always be mistaken, the mutual-knowledge hypothesis cannot deliver the guarantees it was set up to provide. They continue (p 21):

We see the mutual-knowledge hypothesis as untenable. We conclude, therefore, that the code theory must be wrong, and that we had better worry about possible alternatives.

In defense of ECO, I repeat his own stated objective. It is not directly oriented at shared meaning, but he wants (1976, p 3)

to explain every case of sign-function in terms of underlying systems of elements correlated by one or more codes.

Aiming at "every case" includes, I suppose, the Peircean dynamics within the intelligence of the individual sign user. Does it for ECO? The background perspective of the individual sign user, which Part i of this treatise introduces in force, suggests that ECO overstates his goal. The following critique shows that approaches of such closed semantics don't contribute to the background perspective required for explaining processes of sharing meaning or, actually, the lack thereof.

5.1 society as independent actor

Contrary to ECO's proclamations about "every case of sign-function," A Theory of Semiotics fits within a strictly linguistic tradition. A pioneer of linguistics as a scientific discipline is FERDINAND DE SAUSSURE (1857-1913). Some of his students have actually contributed greatly to his subsequent fame. After DE SAUSSURE dies, they compile their lecture notes into a coherent book titled Course in General Linguistics (1916). One of the ideas² thus attributed to DE SAUSSURE is that signs, and all they entail, do not stand on their own. One sign's particular meaning is always dependent on other signs and their meanings. Thus, DE SAUSSURE provides an early articulation of what later becomes known as structuralism, applied in a wide range of disciplines. In § 4.4 I have already cited the prominent structuralist LÉVI-STRAUSS.

Another idea that DE SAUSSURE presents in *Course in General Linguistics*, and one implicitly present throughout ECO's work, concerns the concepts of *langue* and *parole*. Their specialized meanings are usually underlined when these French terms are used in English texts, too. Langue stands for the whole of the language system, whatever that may be. Parole, then, corresponds to what this treatise considers as instances of – processes of – sign use.

ECO assumes that langue controls parole. Basically he says that persons communicate and thereby share meaning. And for him, langue is the repository of meanings which are shared by definition through a priori society, or culture. So, ECO does not explain how persons do their sharing. Instead, he merely assumes they do.³ His own terminology for langue is code or, rather, a system of codes. He writes, for example (1976, p 56):

[c]odes provide the conditions for a complex interplay of sign-functions. The conditional nature of codes explains why ECO gives a "theory of codes" precedence over a "theory of sign production." Although ECO himself writes that his (p 4)

- 2. My presentation of these ideas of DE SAUSSURE's is extremely succinct. I recommend his book *Course in General Linguistics* (1916). The reader will recognize many themes that have inspired a wide variety of intellectual/scientific developments.
- 3. Sharing meaning is guaranteed by sharing the same language. Of course, that could be taken as the explaining factor. But, then,
- the question is how it could be ascertained that, indeed, different persons 'use' exactly the same language.
- 4. ECO shows the habit of labeling something as a "theory" when he does not go into specifying the "background perspective" (WICK-LUND, 1990). For example, only mentions appear of "a theory of referents" (p viii), "a theory of mentions" (p 58), "a theory of

distinction between a theory of codes and a theory of sign production does not correspond to the ones between langue and parole, competence and performance, syntactics (and semantics) and pragmatics[,]

my critique shows that he does not succeed

to overcome these distinctions [... by] proposing a semantics which solves within its own framework many problems of the so-called pragmatics.

There it is clearly ECO who is demeaning about pragmatics. Regretfully he fails to acknowledge that *nothing* can be explained *within* its own framework. A coherent interpretation *A Theory of Semiotics* is possible only when it is taken as a collection of attempts to keep his fundamentally limited semantic framework intact. As I already indicated, ECO assumes at the start of his theorizing (p 8) "an underlying *system of significations*." Such a system is what I have called a repository, above. ECO accords to it an independent existence (p 9):

A signification system is an autonomous semiotic construct that has an abstract mode of existence independent of any possible communicative act it makes possible.

He associates it firmly with society, as when he explains that (p 49)

a sign is always an element of an expression plane conventionally correlated to one (or several) elements of a content plane.

The key term to notice in the sentence above refers to convention. For ECO continues that

[e] very time there is a correlation of this kind, recognized by a human society, there is a sign. Earlier, he says (p17):

There is a sign every time a human group decides to use and to recognize something as the vehicle for something else.

Now my bicycle is a vehicle. When I carry a bag on my bicycle, does that make the bicycle the sign for the bag? Or, even, does the bike stand for me. Don't I use it to carry me, especially so?

It is of course not what ECO means by vehicle. The emphasis to be read from his sentence is that a sign 'originates' from "a human group," i.e., that it is socially determined.

Nowhere, however, does he explain how society performs such acts of determination and recognition. He must assume that society does, that is all. ECO presumes (p 61) "a cultural order, which is the way in which a society thinks."

Throughout he awards to society such anthropomorphic nature. Making

contextual and circumstantial selection" (p 110), "a theory of settings" (p 110), "a theory of code-changing" (p 152), "a theory of the extensional verification of correspondences between propositions and states of the

world" (p 156), "a theory of the relationship sender-addressee (p 314), and "a theory of text-creativity" (p 315). He confuses raising the question with providing the answer. sense of *A Theory of Semiotics* requires a recognition of ECO's concept of society as an independent, human-like actor.

For a synopsis of ECO's semiotics, it must first of all be realized that he actually does *not* theorize about semiotics. His theme is semantics, treating it in a grammar-like fashion, at that. Secondly, it facilitates appreciation of his assumptions to make a minute caricature out of his axiom of society being the repository of meaning. In my sketch, Society is a person, too. She acts as the essential broker of meaning. Mrs Langue is the name of this privileged actor. She is called Connie – from convention, of course – by all her friends. In fact, everybody is supposed to be her friend. For, at one time or another, everyone will communicate, if only by interior monologue. The funny thing about that exemplary society is that all friends, which means everybody except Connie Langue herself, share the same last name. It is Parole. So there is John Parole, Mary Parole, and little Suzan Parole, etcetera, etcetera.

5.2 centralized communication

Embodying Society, Connie Langue controls all communication between 'her' members, that is, between all the Parole citizens. There is, however, something special about all the instances of communication. An individual Parole who originates a message (also read: sign) does not realize that Connie scans it. For example John simply experiences that he is talking directly to Mary. But in the background Connie always intervenes. Only when *she* understands the message or sign, i.e., when she experiences an already known content, does she pass it on. The Parole on the receiving end is equally unaware of her coordinating efforts.

My parody highlights what ECO's main objective is with his theory of codes. Given an occurrence on the expression plane, he seeks to describe what Connie Langue recognizes on the content plane. An expression is a sign vehicle. It 'carries' a sememe. Such content is described by semantic markers (pp 84-85):

[A] network of mutually opposed features [...] rule[s] the difference between two sememes. Thus, to say that a sign-vehicle conveys a given position within a semantic field constitutes a shorthand definition. [...] As a matter of fact one must assume that a sign-vehicle may refer (i) to a network of positions within the same semantic system, (ii) to a network of positions within different semantic systems. These positions constitute the semantic markers of a given sememe.

ECO continues to distinguish between denotative and connotative markers (p 85):

[D]enotative [are] markers [...] whose sum (or hierarchy) constitutes and isolates the cultural

unit which first corresponds to the sign-vehicle and upon which rely all the other connotations.

This implies that

a connotation must rely on a preceding denotation.

So first of all, the 'knowledge' of Connie Langue may be described as a collection of trees. A single sign vehicle constitutes the root of every tree. Its branches are each composed of one or more denotations. Zero, one, or more leaves appear at the end of every branch as connotations. Trees may be interconnected between branches, between branch and leave, vice versa, and between leaves. It amounts to the concept that Connie Langue's knowledge (also read: repository of content starting with form) ultimately is a network, rather than a collection of hierarchies.

In the one but last quotation, above, the (conceptual) content is referred to as a "cultural unit." It is an important concept for ECO's theory, and understanding what he means by it especially explains why his theory falls short of the pragmatics of PEIRCE. This is treated in the next paragraph. For now I continue with the way ECO models sememes.

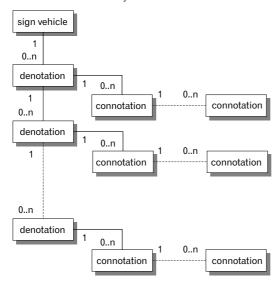


Figure 5.2.1. An abstraction of ECO's model of meaning(s) of a sign vehicle.

Figure 5.2.1 presents ECO's basic idea about the knowledge of Society (here: Connie Langue). The abstraction of only a single tree is shown.

An even more condensed schema exploits the recurrent nature of elements. So, Figure 5.2.2 is presented as the equivalent of Figure 5.2.1.

Figure 5.2.2 indicates that a major problem of semantics is homonymy. A

single sign vehicle may have a large number of meanings, independent of their categorizations into denotations and connotations. According to ECO's theory of codes, the task of Connie Langue is *not* to choose any particular meaning out of all possible meanings for a sign vehicle. Rather, it is to only 'significantly' check the sign vehicle. It passes her inspection when she considers it at all meaningful, i.e., when it triggers *any* meaning (also read: content) in her knowledge.⁵

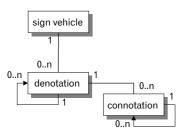


Figure 5.2.2. A more compact model of meanings that might originate from a sign vehicle.

5. DE SAUSSURE starts his book Course in General Linguistics with (1916, p 1) "a brief survey of the history of linguistics." ECO's approach seems very similar to what DE SAUSSURE mentions as the first phase: "Grammar aims solely at providing rules which distinguish between correct and incorrect forms. It is a prescriptive discipline, far removed from any concern with impartial observation, and its outlook is invariably a narrow one." ECO does not maintain such a narrow prescription. But he sees codes-asgrammar as the rule, and anything that does not conform to them as exceptions. A similar orientation - and, like ECO, not really in the usually relevant conclusions he draws, but in his assumptions – demonstrates W. NÖTH in Dynamik semiotischer Systeme (1977). NÖTH argues that (p 3) the accepted concept of semiotics is that of a general science of sign systems, or (p 1) codes.

At many places, DE SAUSSURE already shows his appreciation of the vital role of the lan-

guage user. He writes, for example (p 7): "In the final analysis, where languages are concerned everything has its psychological aspect." And (p 9): "Language has an individual aspect and a social aspect. One is not conceivable without the other. [...] The structure of a language is a social product of our language faculty. At the same time, it is also a body of necessary conventions adopted by a society to enable members of society to use their language faculty." He asks (p 13): "What is the origin of this social crystallization?" The answer is that "[t]he individual's receptive and co-ordinating faculties build up a stock of imprints which turn out to be for all practical purposes the same as the next person's." Like ECO after him, DE SAUSSURE does not yet concern himself with the psychological nature of such same imprints (also read: interpretants), and with questions how they become possible or what keeps them from occurring, and what is an optimal level of sameness, anyway? On p 89 he writes that

For the sake of my own conceptual development I assume that Connie does like to understand what content her friends want to communicate to each other. Therefore, suppose she is not satisfied with merely passing on a sign vehicle when she recognizes it as a tree root. How does she tell the difference from one denotation/connotation to another? ECO suggests a mechanism of contextual and circumstantial selections to (p 105)

distinguish the different readings of the sememe as encyclopedia item and determine the assignment of many denotations and connotations [... with such selections also being] pieces of coded information, in other words semantic units just like the others except that they perform a switching function.

In his view a single tree, growing from a particular sign vehicle, has a structure in which permutations of denotation, contextual selection, and circumstantial selection occur. Please note that, like the previous figures, Figure 5.2.3 exemplifies an abstraction on my part. ECO does not systematize his own theory of codes to this extent.

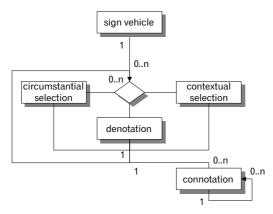


Figure 5.2.3. All of ECO's semantic markers accounted for.

As with the difference between denotation and connotation, ECO does not offer much guidance for distinguishing between – his concepts of – context and circumstances.⁶ For an explanation he argues that (p 106)

static linguistics, or "[s]ynchrony has only one perspective, that of the language users; and its whole method consists of collecting evidence from them." And (p 110): "The characteristic role of a language [...] is to act as intermediary between thought and sound." That is of course the thought of the sign user.

6. On p 105 ECO writes down instructions. Certainly, this is how Connie Langue would use her own knowledge network. But how does one selection come to be classified as contextual, and another one as circumstantial?

[c]ontextual selections record other sememes (or groups of sememes) *usually* associated with the sememe in question; circumstantial selections record other sign-vehicles (or groups of sign-vehicles) [...] *usually* occurring along with the sign-vehicle corresponding to the sememe in question.

The italics ECO places make it once again clear that his statement is about codes, that is, about Socially accepted (also read: shared) meanings. Now what about Connie Langue's desire to unambiguously understand what one Parole might be telling another Parole in Society? It remains unfulfilled as far as contextual selections are concerned. Whatever ECO means by them, what they do is to draw attention to the fundamental interconnectedness of the semantic forest. No tree stands isolated, and I agree. But a contextual selection as ECO proposes cannot serve as a switch. For Connie Langue already needs directions upon entering the forest. After she is lost inside, it is too late. Indeed being dropped in the middle, so to say, Connie still does not know which occurrence of all possible meanings is relevant for the particular occurrence of the sign vehicle. What does help her selection is to broaden her perception to the configuration of sign vehicles in which the one under inspection appears. This is what the circumstantial selections are supposed to do. Following ECO's theory, it is only after Connie Langue has thus chosen a particular tree that she is in a position for contextual selections to point out other trees of possible interest. It is a link, rather than a switch.

5.3 culturalized reality

In Chapter 2 I have shown that PEIRCE explains sign use on the basis of an irreducible triad consisting of sign, object and interpretant. He does not claim that an interpretant provides the 'truth' about an object. Instead, interpretants are beliefs and doubts in all degrees imaginable. They guide – the conduct of – the individual sign user.

The dynamics of sign use are driven by a belief, too. It resides in the referential nature of signs. VAIHINGER (1911) writes about fictions, arguing that an individual person experiences his world *as if* it exists in such and such a way. His concept of fiction is similar to what PEIRCE calls belief.

The only way to make sense of signs is to believe they stand for objects. Because he does not want any obstacles for dynamics of sign use, PEIRCE proposes that "anything goes" as far as objects are concerned.⁷ ECO agrees with the referential nature of the sign for (p 7)

7. The quotation is from FEYERABEND, of course. See § 3.4. And see note 7 in Chapter 2

for a quotation from PEIRCE on the amplitude of his concept of object.

[a] sign is everything which can be taken as significantly substituting for something else. His phrasing is somewhat unfortunate. Why does he add "significantly"? Does he mean "clearly," perhaps? Or does he want to say that it is a sign that acts as the substitute? But doesn't he want to describe what a sign is, in the first place? Further on, ECO is less confusing about his concept of sign (p 16):

I propose to define as a sign *everything* that, on the grounds of a previously established convention, can be taken as *something standing for something else*.

His emphasis on convention is precisely why his theory cannot *explain*, in support or in criticism, something like shared meaning. Again, his theory effectively *starts* with it. ⁹ In terms of PEIRCE's triad, ECO only calls something a sign when it stands for a conventional object. He needs this limitation to avoid extending his theory beyond semantics into pragmatics (p 58):

The problem in question is that of the *referent*, in other words the problem of the possible states of the world corresponding to the content of the sign-function.

Why it is a problem, he doesn't make clear. ECO applies a reversal by stating that (p 58) "[a] theory of codes must study everything that can be used in order to lie." Does he mean to say that the concept of referent has a "malignent influence" on a theory of codes because a sign function cannot guarantee the truth about the state of the world? Is that the reason why the "referential fallacy" must be avoided? His cure, however, is worse than the disease. It is even lethal, at least when I take ECO seriously with his insistence on convention. How can something outside convention ever be expressed? Anything

8. On p 7 ECO adds that "[t]his something else does not necessarily have to exist or to actually be somewhere at the moment in which a sign stands in for it." Then follows, as a conclusion, the sentence which contains the characteristic that ECO himself often presents to summarize his theory: "Thus semiotics is in principle the discipline studying everything which can be used in order to lie." The problem, once more, is that ECO is confusing categories. A lie is only possible within a framework that - also - recognizes truth. But nowhere, and I agree with that, does ECO make provisions for truth statements. It simply means that he also cannot use the concept of lying to promote his theory.

9. H.PUTNAM commits the same reduction in Representation and Reality where he assumes that (1988, p 25) "reference is socially fixed and not determined by conditions or objects in individual brains/minds. Looking inside the brain for the reference of our words is [...] just looking in the wrong place."

So-called rationalists don't recognize anything about an individual person that lies beyond the mind. For the faculty of human reason occupies the most elevated position in their concept of personal order.

Chapter 6 of this treatise establishes the view of SCHOPENHAUER. He argues that the intellect (also read: mind) is subservient to the will. Reference is therefore not "socially fixed" but hinges on the individual person who, as SCHOPENHAUER suggests, is a unique objectification of the will.

new? If not by a sign, then by what?¹⁰

I happily grant that ECO probably does not mean any referent. For he, too, describes a sign as something that stands for something else. Apparently, he has a special *kind* of referent in mind. Perhaps it is an indication that – a theory of – codes governs the conditions for communication. Therefore, codes do not refer to objects. They only provide rules for eligible signs (p 59):

A theory of codes is concerned with intensional semantics.

But then, when indeed codes abstract from extensions – where extensions must probably be seen as generated instances of signs –, why does ECO include descriptions of meaning in his theory of codes? Why doesn't he limit himself to purely grammatical specifications. I agree when the answer is that some sort of referential information is needed for communication rules to function properly. The linguistic compartments from phonetics through to pragmatics block comprehensive explanations. But ECO writes (p 60),

[i]t must be absolutely clear that [a theory of codes] has nothing to do with [...] an extensional semantics. [...A]n expression does not, in principle, designate any object, but on the contrary *conveys a cultural content*.

From a wider perspective it is hard to follow ECO's argument. He sets up constraints that I find counterproductive. For example, he doesn't want the sign to stand for an (p 61) "actual object" as that reflects "a distinctively naive attitude:"

[T]he codes, insofar as they are accepted by a society, set up a 'cultural' world which is neither actual nor possible in the ontological sense.

It is amazing to what lengths ECO goes in his attempts to maintain "a semantics [...] within its own framework." He creates an opposition, without actually mentioning it, between world (also read: reality) and culture. His logic is that as it is possible to lie about the world, only culture can be trusted. It is trivial that it can when, as ECO assumes, culture is equivalent to convention, i.e., culture consists of meanings about which exist a priori consent. With 'cultural truth' secure by definition, I admit that ECO really does not need an explicit referent anymore. Of course it remains open how "cultural content" relates to, say, world content. Juggling words fail as a credible explanation (p 62):

The semiotic object of a semantics is the *content*, not the referent, and the content has to be defined as a *cultural unit*.

10. A dilemma for ECO is that either his book *A Theory of Semiotics* is not new because he could at all write it, or that his theory is flawed precisely because he has written an original book.

11. In contrast, DE SAUSSURE offers a refreshingly accessible account of fundamental arguments for delimiting distinct areas of scientific activity. See also my recommendation in note 2, above.

But when

the theory of codes is only interested in sign-functions and the rules of their possible combination[,]

why is meaning as cultural unit implied in codes at the semantic level? Why, at all, are codes at the semantic level relevant for ECO? I recognize a consistent desire to treat successful communication from a strictly semantic perspective. Different persons, so he reasons with his theory of codes, *always* agree when they communicate. For the communicative instrument they employ *preconditions* their agreement. A priori shared meaning rules.

5.4 comparing interpretations

ECO's semiotic theory is unproductive for explaining shared meaning, let alone for criticizing it. I hypothesize the main reason is that he fails to understand the essential nature of PEIRCE's triad. ECO misses how PEIRCE establishes the *fiction* of the object. Instead, ECO mistakes the concept of object for a claim to absolute truth.

Closely reading both PEIRCE and ECO, it strikes me that my interpretations of PEIRCE's work differ so widely from how ECO understands exactly the same texts. ¹² It looks as if ECO believes his own theory is already final and beyond improvements before he embarks on a study of PEIRCE. He therefore projects Peircean concepts *onto* his closed semantic framework. ECO enlists them, overwhelms the new signs with the weight of his previous cognitive mass which remains relatively unchanged through semioses. But reinforcing semantics with recourse to PEIRCE involves an injustice. For PEIRCE doesn't describe how a priori successful sign exchange proceeds. He concentrates on semiosis, sign action in particular as it relates to conduct. PEIRCE's framework is definitely pragmatic. It is reduced to a strictly semantic framework at the cost of severe loss of 'meaning.' Reduction is precisely ECO's procedure. An extreme example is his suggestion that (p 144)

one must radicalize Peirce's approach and insert the notion of the interpretant into the framework of a non-referential and structural theory of codes and of semantic systems.

What remains is pure grammar, of course. This I find unacceptable to imagine as a concept that PEIRCE allows to be derived from his related theories of pragmatics and signs.

ECO actually depersonalizes society by insisting that individual persons can only successfully exchange meanings as cultural units. His semantics abstract completely from overall behavior by an individual. My idea is that any such theory is sterile. PEIRCE is also right, I believe, to view sign use at the service of personal conduct.

With fundamental differences in outlook between PEIRCE and ECO, is it surprising that ECO consistently refers to PEIRCE? I give some examples of my inventory of misinterpretations on the part of ECO.¹³

13. I also believe that ECO doesn't do justice to DE SAUSSURE where he treats his work. Again, our readings seem to differ greatly.

With respect to PEIRCE, I have encountered another influential interpretation that does not seem to do him justice, not from my perspective, anyway. In Signs: An Introduction to Semiotics (1994), THOMAS A. SEBEOK (1920-) has collected several essays. Please note that SEBEOK is considered "the major force in international semiotics" during the second half of the twentieth century (COBLEY and JANSZ, 1997, p 119-120): "It is largely by dint of [an] administrative profile set up by Sebeok that the term 'semiotics' has superseded 'semiology' on both sides of the Atlantic." That he should have worked at that terminology shift I find quite surprising, for all I can make out is that his own theory is essentially grounded in the dualistic Saussurean concept of the static sign as constituted by signifier and signified (1994, p 17). SEBEOK does not apply his earlier introduction (p 5) of PEIRCE's concept of dynamic semiosis. Or when he does, it is in a manner that I do not consider faithful to PEIRCE. For SEBEOK immediately reduces the Peircean object inside the triadic dynamics of semiosis (p 12), "so that the initial twofold distinction [between object and sign] is resolved to one between two sorts of signs." I really don't believe that such a reduction is what PEIRCE has in mind, at all. But SEBEOK's turn allows him to stress the importance of his field of semiology/semiotics (p 14): "If objects are

signs, in indefinite regression to a supposititious logos [logos is a concept that SEBEOK credits to HERACLITUS as meaning 'a reality behind signs' (p 12); supposititious would mean that the concept of logos is even fraudulently inserted], and if interpretants are signs marching in progression toward the ultimate disintegration of mind, what is there left that is not a sign?" At least SEBEOK openly admits that such a conclusion labels him a pure idealist in philosophical terms (p 14). Now PEIRCE certainly believes that signs are pervasive but they are nevertheless only a means to represent beyond them. It is in the nature of human knowledge faculties, including perception, that by definition the 'beyond,' cannot be known directly. As object, reality however deserves a separate conceptual position, i.e., apart from sign (and interpretant). I agree with PEIRCE's transcendental idealism.

What, as a secondary area of interest, comes out clearly from SEBEOK's work is the confusion arising from taking different sign types too seriously. For this emphasis in modern semiotics PEIRCE is no doubt largely to blame. SEBEOK tries to control the worst misunderstandings by arguing (p 21) "that it is not signs that are actually being classified, but more precisely, aspects of signs." The classification is of course without added value when every sign is subsequently discovered to show more or less all aspects. My approach is to forget about such a general classification and concentrate, instead, on

On p 15, ECO introduces PEIRCE by repeating what the latter considers a sign. ECO adds that

a sign can *stand for* something else to somebody only because this 'standing-for' relation is mediated by an interpretant.

I don't agree. My interpretation of PEIRCE is that the interpretant is *not* the mediating element. It is the sign. This explains figure 2.4.2 where the sign is at the top of the triangle, and a broken line is drawn between interpretant and object indicating that only an indirect connection exists. ECO doesn't notice the essential difference between what I called, in § 2.4, the classical semantic triangle (see Figure 2.4.1) on the one hand, and PEIRCE's pragmatic triad on the other hand (see Figure 2.4.2). His own two figures on page 59 of *A Theory of Semiotics* confirm this. I consider it a significant departure from the focus on instances of sign use. Instead, ECO starts from what he takes is the necessary precondition of signs, that is, from codes as a property of a society.

My (own) major (pre)occupation in Chapter 2 has been the development starting from PEIRCE's concept of ground. There I took my cue from what at first looks almost like an ornamental addition in a sentence in which PEIRCE summarizes his concept of sign. It turns out ECO reads those words very differently (p 16):

I suppose it is in this sense that one must take Peirce's definition of the 'standing-for' power of the sign "in some respect or capacity."

I find ECO's reference to a particular "sense" difficult to fathom. Does he mean that "in some respect or capacity" equals a property of an object which qualifies it as a sign. If that is indeed what he means, why does he mention it? For what does it add to PEIRCE's description?

An additional problem with understanding ECO on this point is that he is following C.W. MORRIS (1901-1979). The latter also doesn't express himself

actual sign use. The anatomy of meaning developed later in Chapters 7 and 8 of this treatise may fruitfully be deployed to combat the confusion caused by Peircean sign types. The fundamental contribution by PEIRCE is his exposition of the irreducibly triadic, and dynamic, nature of semiosis.

However, attempts at reduction have been persistent. In *Peirce's Concept of Sign* (1973) D. GREENLEE produces the objectivist turn that seems to originate with MORRIS (see note 13, below). He summarizes (p 9): "As I understand the sign, the sign-interpretant relation

becomes more important than the relation Peirce makes the most of, the sign-object relation." GREENLEE effectively contradicts the realist emphasis that PEIRCE includes in his triad. Much like ECO, it reads: "The concept of the sign which I have arrived at [...] is the concept of something that is interpreted according to a rule or a convention of interpretation, rather than the concept of something which stands for something else." I find it peculiar, embarrassing even, to discover how such authors still claim PEIRCE's heritage.

too clearly, at least not in the quotation that ECO offers (p 16). There, MORRIS can be read as making a statement about, not an object as sign, but an object which is stood for by a sign. This interpretation is more in line with the original PEIRCE. But ECO chooses to differ from MORRIS:

The only modification that I would introduce into Morris's definition is that the interpretation by an interpreter, which would seem to characterize a sign, must be understood as a *possible* interpretation by a *possible* interpreter.

I don't engage in a discussion on how closely MORRIS follows PEIRCE, or not. 14 ECO's "modification" underlines that he ignores PEIRCE's attention to *actual* process instances of sign use. ECO's theme is that of *rules* for processes of sign use. It is exactly why he is interested in possibilities, rather than instances. What ECO calls "[t]he only modification" is, in fact, a major shift of focus, i.e.,

14. MORRIS exerts a strong influence on — establishing — semiotics as an academic discipline (W. NÖTH, 1990). PEIRCE is an academic outsider during his own lifetime. MORRIS (who also edits *Self, Mind, & Society* by G.H. MEAD; see Chapter 11) helps to popularize PEIRCE's writings but in his own work essentially *reduces* the triadic unity into separate branches: syntax, semantics, and pragmatics. This reduction simplifies study but it comes at the expense of contradictions. It is now increasingly recognized that syntax, semantics, and pragmatics cannot be independently understood. That simply follows from the irreducibility of the Peircean triad.

Authors referring to PEIRCE are often actually more directly influenced by MORRIS. Examples are SEBEOK (see note 12, above), ECO (see this chapter), and NAUTA (see note 3 in Chapter 13). An analysis of publications by MORRIS himself has been kept outside the scope of this treatise. He outlines his ideas on "a comprehensive and fruitful science of signs" in Signs, Language and Behavior (1946, p v) which carries the subtitle An Original, Important Contribution to Semantics. He expands his treatment in Signification & Significance, a study of the relations of signs and values (1964).

There, MORRIS remarks that (p 15) "[t]he distinguishing feature of work in semiotic in recent years has been the extension of interest into the diversity of dimensions of signification and into the variety of uses which sign performs. Earlier in the century, philosophers were concerned mainly with the designative and formative dimensions of signification as they occurred in science and mathematics. This concern remains, but it has been supplemented by a growing interest in the place that signs have in the manipulatory and consummatory phases of action." In Elements of Semiology, R. BARTHES (1915-1980) indicates the development of the concept of value in DE SAUSSURE (1964, p54): "[H]e increasingly concentrated on it, and value became an essential concept for him, and eventually more important than that of signification." As BARTHES remarks: "We must [...] tackle the sign, no longer by way of its 'composition', but of its 'setting': this is the problem of value." My anatomy of meaning radically subsumes (see MORRIS) "the diversity of dimensions of signification" under a single purpose, i.e., to request compliance with interests (see Chapters 7 and 8).

from a philosophy of cognitive and social psychology to, say, a naive sociology.

Another example of ECO's preoccupation with conventions for sign use is how he abstracts interpretants from the sign user. He suggests (p 68) that PEIRCE occasionally confuses the interpreter for the interpretant. But according to ECO

[t]he interpretant is that which guarantees the validity of the sign, even in the absence of the interpreter.

This can only be understood as a statement about a repository of sign possibilities. What ECO seeks to establish is

the foundation of a semiotic system capable of checking itself entirely by its own means.

Language would then be an auto-clarificatory system, or rather one which is clarified by successive systems of conventions that explain each other.

I am puzzled why ECO insists on recruiting PEIRCE into his service, even blaming him that he (p 199) "does not abandon the reference to objects." What PEIRCE in fact proposes is that sign use is a process of a dynamic sequence of *irreducible* triads at the service of facilitating conduct. His fundamental insight remains unchanged even though in this treatise I have extended triad to hexad (see Chapter 2) and subsequently to ennead (see Chapter 4). That insight implies the conducting subject, of course. That subject may also be called sign user, interpreter, or whatever. But it may certainly *not* be removed from the equation.

When a subject's conduct, or behavior, is guided to a large extent by his "scientific intelligence," it may indeed be *characterized* to an equally large extent as the collection of his interpretants. In this way, it surely makes metaphorical sense to state that an interpreter *is* his interpretants. But then, subjects don't count in ECO's theory of codes. Suppose Connie Langue couldn't care less about what Mary Parole might want to tell her daughter Suzan Parole. With Connie's knowledge switched off, Mary and Suzan would be unable to communicate.

I have established a clear pattern of preoccupation in ECO. In § 5.6 I add my comments with an emphasis on ECO's concept of sign production. He continues to define semiotics in terms of a priori agreement on meaning. Or, rather, that is how he defines his semiotic assumptions. See also ECO (1968). In fairness to ECO, I acknowledge that his actual "explorations in the semiotics of texts" with their emphasis on interpretative "openness" (1959-1977) often contradict "the theory of codes." My criticism is therefore especially valid at the axiomatic level where premature contradictions (see also § 9.1) are sown.

I conclude this paragraph of comparing interpretations with a sentence by ECO that is typical of how he usurps concepts for his own "theory" (p 70):

The idea of the interpretant makes a theory of signification a rigorous science of cultural

phenomena, while detaching it from the metaphysics of the referent. Isn't PEIRCE already very clear on metaphysical truth and falsity? See also § 2.3, above.

5.5 application of the ennead

My critique of *A Theory of Semiotics*, in particular of ECO's underlying assumptions for his theory of codes, draws suspicion to the quality of his proposal for modeling a sign vehicle's meanings. As shown in Figure 5.2.3, he employs the categories of [1] denotation, [2] contextual selection, [3] circumstantial selection, and [4] connotation. Can the metapattern (see Chapter 4) be applied for the same purpose?

The essential difference might be that the metapattern takes objects seriously. But then, so does ECO although he doesn't want to admit it for his theory of codes. He favors the terminology of "cultural unit." Like object it is a fiction in VAIHINGER's sense, all the same. In *fact*, taking objects seriously amounts to recognizing their fictional nature. It makes cultural unit and object equivalent for all practical and theoretical purposes. So, upon closer inspection, the metapattern is not disqualified because it cannot handle cultural units. It can.

Another difference, this one more superficial, concerns the roots of the semantic trees. As ECO conceptualizes them, every tree has a sign vehicle for its root. Metapattern-based models all have a root, too. That root reflects recognition of the – very practical – boundary of objectified reality. The chosen sign for that boundary is a thick, unbroken line.

Especially relevant for the purposes of modeling meaning of signs is the situation in which objects function as signs. That specific situation may be called signship, or something similar. Then by definition, objects in the situation of signship all behave as signs. In Figure 5.5.1, the transition to shorthand indicators is shown, too.

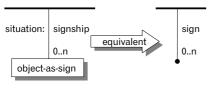


Figure 5.5.1. A separate situation of signship.

One way to proceed is to consider a sign's meaning(s) as its direct properties. That would be the sign's intext. Why not model it using ECO's categories? This makes Figure 5.5.2 to a large extent the equivalent of Figure 5.2.3.

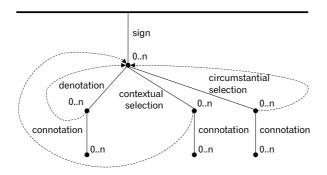


Figure 5.5.2. ECO's semantic markers in a metapattern-based model.

Figure 5.5.2 no doubt makes perfect sense from a limited semantic perspective. However, a shift to pragmatic recognition of objects, i.e., working from a belief in a subject's objectified reality, immediately goes beyond ECO's categories of meaning. The idea is to reverse the dynamics, from observation to sign engineering. The modeler's task is then no longer to describe the meanings of a particular sign. Rather, he describes an object's situational behavior. And he actively *makes* signs to do so. An example is Figure 4.6.2 which is repeated here as Figure 5.5.3.

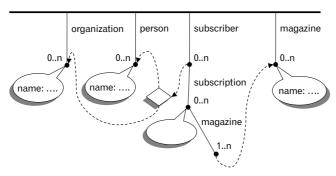


Figure 5.5.3. Revisiting the fictional case study of the previous chapter.

In Figure 5.5.3 (some) – positions for – names are added. As suggested in Figure 4.5.6, names are not used as signatures. That is, a name is *not* a whole object – that is, not the particular object that the attention is currently focused on – but only stands for it *at some distance*. It is 'only' considered a property of that object.

ECO pursues a closed semantics and tries to keep objects out of his framework. My view is that semantics should strongly relate to pragmatics.

Apologizing for my banal terminology, surmounting unproductive linguistic compartments is only possible with an *open* semantics. It is open because it integrates the perspectives on both objects and signs. As explained before, my procedure is to model a sign that stands for an object as that same object's property (or attribute, or characteristic). The integration of Figures 5.5.2 and 5.5.3 in Figure 5.5.4 shows how a predominantly sign-oriented situation coexists with situations in which (other) behavior of the 'stood-for' objects is considered relevant.

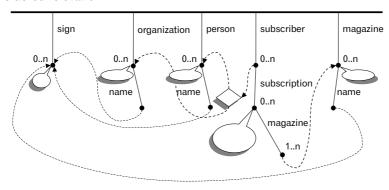


Figure 5.5.4. Integrated model of sign behavior and name behavior(s).

Figure 5.5.4 combines the situation of signship and all other situations of non-signship into an integrated model. It must be clear that ultimately *every* detail shown in a model draws upon an object that, at the minimum, exists in the situation of signship as its precondition for naming elsewhere. First of all, the establishment of the separate situation of signship effectively puts a halt to infinite regression of signs ... describing signs, etcetera.

Secondly, names – please note, in their broadest sense – are usually either commonplace or particular. Both ways, modeling signs in their own right for them is often not deemed necessary. My goal here is different. It is to show how the metapattern supports modeling of semantic networks such as ECO proposes. It requires that signship explicitly appears as a separate situation.

Given such an example of a – model of a – semantic network, the obvious question is: What happens to ECO's categories? To make it easier to follow the argument, Figure 5.5.5 presents a model with instances, not types. As an example of a sign I take "Semiotics." Further, I assume that "Semiotics" has several known meanings, for example in science, in publishing, in identifying persons, dito organizations. In all those fields (also read: situations) other than that of signs themselves, I regard this sign as what *names* an object. Why indeed not a mrs or mr Semiotics?

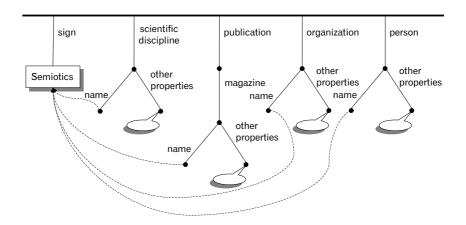


Figure 5.5.5.

Different, i.e., situational, name uses of the sign of "Semiotics."

From the model of Figure 5.5.5 it is straightforward to 'read' the meanings of the sign "Semiotics." Just follow any dotted line from the sign itself. These relationships solve, what ECO puts forward as (p 121)

the real problem [...] that every semantic unit used in order to analyze a sememe is in its turn a sememe to be analyzed.

Earlier in *A Theory of Semiotics* his question is (p 112):

Is it possible to establish componential trees that take into account all coded contexts and circumstances?

ECO persists in hierarchies, only later (p 121) referring to the work of R.M. QUILLIAN (1968). My answer is that the metapattern is suited to model an approximation. Metapattern-based models in fact don't show independent trees. Trees may be interconnected at many nodes. As in a forest, the life of any one tree is influenced by its neighbors in a myriad of ways. And because every tree has neighbors, the *whole* forest is a system of interdependencies. This model structure is quite isomorphous to QUILLIAN's approach about which ECO recounts that (p 122)

[t]he configuration of the meaning of the lexeme is given by the multiplicity of its links with various tokens, each of which, however, becomes [...] the patriach of a new configuration. What is different about the metapattern is that connections are possible from any node of one tree to any node of any other tree. It allows for increased variety and confirms DE SAUSSURE's fundamental remark that (1916, p 107)

[t]he mechanism of a language turns entirely on identities and differences.

Then, to continue with DE SAUSSURE (p 115),

what we find, instead of *ideas* given in advance, are *values* emanating from a linguistic system. DE SAUSSURE introduces the concept of value to emphasize the essence of

both the arbitrary relationship between sign and meaning and the relational nature of meaning, i.e., that meaning is not so much independent but, rather, interdependent. Ultimately, meanings are systemic properties. A systematic model is therefore required for approximating the anatomy of meaning. For, as DE SAUSSURE remarks (p 118),

[i]n a linguistic state[,...] everything depends on relations. [...] (p 80) [A] language is a system of pure values, determined by nothing else apart from the temporary state of its constituent elements. [...] (p 81) Nowhere else [but in language] do we find comparable precision of values, or such a large number and diversity of terms involved, or such a strict mutual dependence between them.

For example take in Figure 5.5.5 the immediate neighbor in the model of the 'original' sign of "Semiotics." Then as Figure 5.5.6 shows, step 1 leads to "Semiotics" as a name. Step 2 leads to the situational object to which "Semiotics" lends itself as name. Of course, step 2 does not lead to that object itself, only to what stands for it in the model. That representative of the object's identity is the signature as a specific node in the network model. A particular signature (re) focuses the sign user, who then may reach an inference about a corresponding situational object. In this case, the object is the scientific discipline of semiotics.

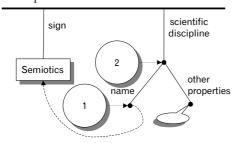


Figure 5.5.6. Stepwise focusing for establishing meaning(s).

In general, an *open* semantics such as the metapattern supports with its underlying ontology and characteristic visualization technique makes it possible to state meaning directly in terms of objects. Please note that "in terms of" should be read as "in sign standing for."

There is really no problem with any truth, or with any falsity for that matter. All objects are essentially fictional, anyway. It simply follows from letting signs stand for them. An interpretant – which by definition arises from a sign – can therefore *never directly* correspond to an object. Because the conditional nature of objects is pervasive, it is no longer necessary to specify conditions. With sufficient awareness of their fictional character secured, objects may once again be told about in the manner of naive realism. ECO, for one, fails to grasp

the axiomatic quality of PEIRCE's fiction of the object. He doesn't recognize the daily practice of naive realism against the philosophical background of pragmatism.

When PEIRCE is properly appreciated and the metapattern properly applied, any difference between denotation and connotation disappears. The intext of a signature describes properties as they are modeled as relevant for an object in a particular situation; the signature's context stands for that situation. The unambiguous distinction between the concepts of situation and context implies that any difference between contextual selections and circumstantial selections is also overcome. In metapattern terms it is the context which represents the circumstances. When circumstances are taken as synonymous with situation, that is.

An example of a sign function to which ECO often returns is a measurement system informing a remote operator on the water level in a reservoir (p 32 and on). The operator reads off measurements. An action on his part may result to control the water level. ECO calls the measurement of the water level the denotation of the sign; its connotation is the required action. In general, he remarks that (p 86)

[d]enotation is the content of an expression, connotation the content of a sign-function. The difference between these confusing categories of meaning disappears when *behavior* is differentiated. The model is then conceived as showing, through corresponding contexts, the situations in which the signal emitted by the measurement system performs. It constitutes a series of derivations as summarized in Figure 5.5.7.

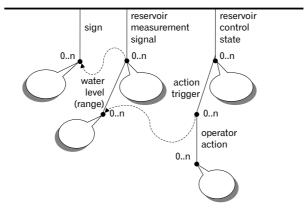


Figure 5.5.7.
Situational differentiation preempts any need for (sub)categories of meaning.

Do I ridicule ECO's theory of codes? I see no other way to present a serious synopsis without getting overwhelmed by his contradictions. On the basis of *The Name of the Rose* I even consider it a possibility that ECO means it all as a joke. Is he applying for example his own maxim on lying? Does my criticism finally find him out? Suppose he tries, indeed, to parody semiotics. Then I gladly acknowledge his success equals that of his great novel.

After the bias of closed semantics is sufficiently digested there is in fact much to enjoy in *A Theory of Semiotics*. For example, ECO is not at all blind to changes in the conventions he assumes to rule sign production. Throughout, he also writes about creative activities of individual sign users. Consistently, however, he places such phenomena outside semiotics.

I find ECO an excellent columnist. He taxes logical argument, though, every time he fits one of his small theories into his narrow preoccupation with overall conventions about the proper production of signs. Running into inconsistencies he irons those out by suggesting more theory, etcetera. What he needs is less, not more. He seeks to repair his theory of codes, not by rethinking its axioms, but by a baroque collection of additional hypotheses. In this paragraph I offer examples from his argument where he introduces – what I call – the individual sign user.

Where ECO places the boundary of semiotics is addressed in the following statement (p159):

Let us call *semiotic* a judgment which predicates of a given content (one or more cultural units) the semantic markers already attributed to it by a previous code.

The general problem with statements like these is that the label for the whole field reappears as the label for one of its categories. Are not all judgments within semiotics by definition ... semiotic? Where is the background perspective necessary for rational explanation?

15 Again, I express my conviction that DE SAUSSURE provides an excellent example of a balanced, explicitly stated axiomatic system. But the problem of his current celebrity status in linguistic circles probably is that nobody actually studies his original work.

16. ECO continues to exhibit his remarkable theorizing flexibility in *Semiotics and the Philosophy of Language* (1984). At first it seems he reaches an opposite perspective for he

writes (p 1): "The concept of sign must be disentangled from its trivial identification of coded equivalence and identity; the semiotic process of interpretation is present at the very core of the concept of sign." It does not turn out, however, as the radical departure from A Theory of Semiotics that it suggests. A sentence earlier in Semiotics and the Philosophy of Language, ECO already maintains that "there is no opposition between the 'nomadism' of semiosis (and of interpretive activity) and the

On p 163 ECO develops the view that

the use of an expression means that the semantic analysis of a given sememe establishes a list of semantic properties that should correspond to the supposedly extra-semiotic properties of an object.

He cannot untie this knot. The simple reason is, as I explained in Chapter 3 on ontology, that nothing can be untied "within its own framework." Detachment (p 70) "from the metaphysics of the referent" only makes the knot all that tighter. The knot must be cut through from the outside, by altogether forgetting about the metaphysics (also read: axioms) of ECO's closed semantics.

As PEIRCE postulates, *nothing* about signs is extrasemiotic. When dealing with signs, by definition they are *irreducibly* connected to objects and interpretants. It is impossible to remove any one of these fundamental concepts, and still practice semiotics.

PEIRCE does not have a problem determining what sign-related phenomena belong to semiotics. They simply all belong ECO faces the inevitable problem of explaining phenomena that have a mixed character as a consequence of his categories. He acknowledges (p 129) "the mobility of semantic space." But how does an individual sign user get informed about the changed conditions for communicative success? ECO's answer is that such uncertainty

imposes on the activity of sign production and text interpretation [...] the necessity of a continuous extra-coding.

alleged stiffness and immobility of the sign." As usual, he only pretends to honor a different perspective. He borrows its reputation, and especially its author's, for his own, indeed opposite, cause which he pursues without noticeable deflection. Just mentioning that no opposition exists, of course does not make it disappear. His obscure formulations to that extent should not be mistaken for tight arguments.

I myself am all in favor of poetic license in scientific texts. However, its goal should always be to support arguments, not hide or even avoid them. A both convincing and humorous critique of obscurity in reputedly scientific works is given by A. SOKAL and J. BRICMONT in *Intellectuel Impostures* (1997).

Though concentrating my criticism on A

Theory of Semiotics, I wish to acknowledge that ECO subsequently changes his ideas somewhat. Rather than commenting on his complete, extensive œuvre, I quote from Kant and the Platypus (1997) where he explains why he never has revised his earlier book (p 4): "[E]very time I thought of putting my hand to A Theory of Semiotics again, I wondered if I shouldn't have restructured it starting from the second part." I agree, especially when that would mean omitting the first part altogether. But then he would probably still put too much emphasis on his favorite subject of interpretation, i.e., on sign observation. What I propose instead is a process view of sign exchange, with both engineer and observer as participants. This anatomy of meaning is presented here in Chapters 7 and 8.

It is inefficient to consider something an exception when there exists a continuous requirement for it. So, if necessity is enduring, why is it extra rather than standard? But, first, what does ECO mean by it? He writes that

[t]he interpreter of a text is at the same time obliged to both challenge the existing codes and to advance interpretive hypotheses that work as a more comprehensive, tentative and prospective form of codification.

Then, it can happen

that the interpreter is obliged to recognize that the message does not rely on previous codes and yet that it must be understandable.

For ECO it constitutes a "border-line situation." His label is apt when only what is conventional is accepted as intrasemiotic. Next, ECO proclaims as his profound discovery that

the very activity of sign production and interpretation nourishes and enriches the universe of codes.

I agree completely that individual sign users change conventions. As a *continuous* possibility, however, I consider change the rule, not the exception. A convention is merely the result of absence of change, and only for as long as it lasts. ECO keeps change from his assumptions. For him, therefore (p 249),

[t]he main problem arises when trying to determine how it is possible to map onto an expression continuum the properties of something which [...] is *not yet culturally known*.

When assumptions deny the ordinary it *then* becomes a problem. But change ordinarily happens, with ECO himself providing the example of a painting. But that, he argues (p 250),

is not a semiotic phenomenon, because there is neither pre-established expression nor pre-established content. [...] (p 252) [... T]he process is not an easy one; sometimes addressees refuse to collaborate, and consequently the convention fails to establish itself.

As usual ECO applies a label for both showing his recognition, and keeping such a phenomenon outside his limited semantic framework. Invention is how he calls the extrasemiotic forces that change the semantic field. Or aesthetic activities. For PEIRCE nothing is more essentially semiotic than precisely what ECO excludes. The latter is actually confusing semiosis in general and successful communication in particular, when concerning – his concept of – invention he writes (p 254):

The sender gambles on the possibility of semiosis, and loses.

What the sender, by definition of sending, i.e., by engineering a sign, *cannot* lose is semiosis. Fundamentally, sign engineering *is* semiosis. However, there may not be any receipt. Or the semiosis of the receiver may not yield the result as desired by the sign's engineer.

And then, any sign observation is semiosis, too. ¹⁷ Communication across sign users involves their – please note the plural – semioses. In *successful* communication, what happens might be modeled as some sort of correspondence

between otherwise separate semioses, i.e., various processes of sign use. That is the theme of the anatomy of meaning (see Part ii). Again, change must be considered the rule, resulting inevitably in a time series of states.¹⁸

DE SAUSSURE is already very clear about the necessity of theorizing along two axes (1916, p 80). They are simultaneity and succession, respectively. He refers to them as synchrony and diachrony. DE SAUSSURE is adamant they must not be confused. Even (p 83),

[t]he opposition between these two orders[, i.e., of synchrony and diachrony, respectively] must be grasped in order to draw out the consequences it implies.

ECO does not master the application of these axes. He tries to explain diachronic events from a synchronic perspective. As synchrony is convention, to him anything diachronic is unconventional. And because he limits semiotics to convention, whatever changes convention is extrasemiotic. DE SAUSSURE explicitly includes both axes. ¹⁹ PEIRCE points to the sign user's experience of uncertainty. It all amounts to acceptance of change as the rule, rather than the awkward exception it is with ECO. Change is fundamental for semiotics for every time a sign user establishes a belief — or a doubt — in response to a sign, his intelligence *changes* by definition. The more uncertainty a sign user experiences, the more changes occur (and the more change occurs).

17. The distinction between engineer and observer, in this treatise developed from PEIRCE's mention of experimentalist (see § 3.1, above), is already made by DE SAUSSURE (1916, p 13): "[I]n the psychological part localized in the brain, one may call everything which is active 'executive' [...], and everything which is passive 'receptive' [...]." What he means is that executive behavior transforms a concept into a sign, and that receptive behavior works in the reverse direction, that is, it transforms a sign into a concept.

18. The subtitle of my book Metapattern (2001) reads: context and time in information models. I choose to highlight time, too. For time-factoring information at the most finely grained level of meaning to relevant sign users (also read: stakeholders) makes it possible to consistently record each and every event. With – information on – all events

throughout time available, it is then possible to derive – information on – the state at any point in time. As such, the metapattern is a pure application of DE SAUSSURE's distinction between synchrony and diachrony. It provides for the explicitly manageable opportunity to shift attention from one perspective to the other.

19. DE SAUSSURE does not use the word semiotics. He coins semiology for (1916, p 15) "a science which studies the role of signs as part of social life." He adds that "[i]t would form part of social psychology, and hence of general psychology." PEIRCE does not arrive at his semiotic from – a new paradigm for – linguistics but from philosophy. And because his central concept is that of conduct, he was in fact already practicing psychology, both social and cognitive.

Returning to ECO's treatment of change, he actually places it outside his concern because (p 130)

in some other cases there are (besides the possible contexts which can be foreseen but cannot be coded) possible circumstances which are either unforeseeable or excessively complex and which make up a cluster of different extra-semiotic factors. In all these cases one is entitled to speak of extra-semiotic and *uncoded determinants of the interpretation*.

Once again I agree with a part of what ECO argues. Yes, often a sign lacks a priori possibilities of interpretation. Recognizing this need for creativity on the part of the sign user, however, is definitely not the important achievement of his theory of codes which ECO claims for it (p 129):

The theory of codes explains how one possesses rules of competence that permits one to disambiguate or to overambiguate, to form and to interpret given messages or texts.

My first question is how one can form something that is given. When it is a slip of the pen, the overall claim is clearly overstated. ECO's theory explains nothing of the sort. All he does for it are repairs by somewhat loosening the rein on his postulate of intrasemiotics. Extracoding – of which he distinguishes the forms of overcoding and undercoding – is ECO's attempt to restore sufficient freedom to the individual sign user for change to conventions to happen. A theory of codes cannot be repaired in this half-hearted way so that a theory of semiotics may result. Semiotics needs a *radical* orientation at the freedom of the individual sign user.

Surely, freedom is often severely obstructed in the sign user's daily life (see also Chapters 7 and 8). Understanding obstructions is nevertheless vital for the background perspective required for any encompassing anatomy of meaning. Here, I am particularly concerned about the claim that – preferences for – conditions or even prescriptions for successful communication are adequate assumptions for scientific explanation (see also Chapter 9 through 12). What ECO's assumptions lead him to is to remark that (p 188)

we have a paradoxical situation, in which expression must be established according to a content model which does not yet exist as such.

It is a paradox of his own making because he apparently fears what he believes is the paradox of (p 178)

the presence of the referent as a discriminant parameter, a situation which is not permitted by the theory of codes proposed in [my] book.

What somebody proposes to permit, and what not, might very well be the outcome of a serious, elegantly argued theory. However, it can never be *both* a serious start to theorizing, *and* its result. ECO is therefore not in the position to be taken seriously with his advice on any permission. Actually, he has a glim-

20. ECO does not use the term intra-semiotics. It is my invention, intended to highlight all he places outside of his narrowly semantic concept of semiotics.

mer of awareness of his zero-variable enterprise because (p 139)

the message (or the text) appear[s] as an *empty form to which can be attributed various possible senses*. This places the individual sign user at the start of theory about meaning. Regarding meaning shared between individuals, my critique of *A Theory of Semiotics* shows that it cannot be explained properly on the basis of semantic conventions alone.

5.7 an anticipatory critique

If there is, neutrally speaking, one thing this chapter makes clear it is that assumptions vary widely. The assumptions from which ECO theorizes guide mainstream²¹ semiotics and linguistics as it has been 'academized' by MORRIS.²²

In Marxism and the Philosophy of Language (1929) VOLOSHINOV devotes much space to criticizing what he considers the current (p 47) "two basic trends [... i]n the philosophy of language and in the related methodological sectors of general linguistics:"

[T]he problem of language [...] is to bring this whole multifarious system of features and relations, of processes and artifacts [of the organized social milieu into which we have included our complex and the immediate social communicative situation], to one common denominator: all its various lines must be channeled to one center—to the focal point of the language process.

According to VOLOSHINOV (p 48), the main trends in futile pursuit of a solution are [1] individualistic subjectivism and [2] abstract objectivism. He summarizes (p 52):

If, for the first trend, language is an ever-flowing stream of speech acts in which nothing remains fixed and identical to itself, then, for the second trend, language is the stationary rainbow arched over that stream.

Especially relevant here is VOLOSHINOV's criticism of abstract objectivism which he considers the linguistic equivalent of logical positivism. It is relevant because ECO's semiotic theory, especially his theory of codes, perfectly fits abstract objectivism's mold. The criticism by VOLOSHINOV, even though he makes it decades earlier, is therefore also valid for *A Theory of Semiotics*. Some quotations from VOLOSHINOV (1929), selected here especially for the purpose of my critical synopsis of ECO's semiotics, illuminate axiomatic differences.

21. It has been, and still is, mainstream academic science to such an extent that WOLD feels compelled to include the term alternative in the title of the book *The Dialogical Alternative* (1993, editor).

22. See note 13, above, for some remarks on the influence of MORRIS.

VOLOSHINOV first describes and subsequently criticizes abstract objectivism:

[p 53] Language stands before the individual as an inviolable, incontestable norm which the individual, for his part, can only accept.

[p 54 T]here is only one linguistic criterion: correct versus incorrect, wherein *linguistically correct* is understood to mean only the *correspondence of a given form to the normative system of language*. [p 56] The present state of a language and the history of a language do not enter into and are incapable of entering into mutual comprehensibility.

[p 57] What interests the mathematically [p 58] minded rationalists is not the relationship of the sign to the actual reality it reflects nor to the individual who is its originator, but the *relationship of sign to sign within a closed system* already accepted and authorized. In other words, they are interested only in the inner logic of the system of signs itself, taken, as in algebra, completely independently of the ideological meanings that give the signs their content.

Rationalists are not averse to taking the understander's viewpoint into account, but are least of all inclined to to consider that of the speaker, as the subject expressing his own inner life. [p 58] It should be noted [...] that the precedence of the understander's viewpoint over the speaker's has remained a constant feature of [abstract objectivism]. This means that on the basis of this trend, there is no access to the problem of expression nor, consequently, to the problem of the verbal generation of thought and the subjective psyche (one of the fundamental problems of [individualistic subjectivism]).

[p 67] Most representatives of abstract objectivism are inclined to assert the unmediated reality, the unmediated objectivity of language as a system of normatively identical forms.

[p 82 Abstract objectivism] leads us away from the living, dynamic reality of language and its social functions, notwithstanding the fact that adherents of abstract objectivism claim sociological significance for their point of view.

Having outlined abstract objectivism, VOLOSHINOV contrasts it with his own preferences. Again, I select some quotations that strongly support my argument (and that show VOLOSHINOV precedes my theoretical development on several aspects). How my fundamental position is different from VOLOSHINOV's is, as I indicated earlier, taken up in the next chapter.

[p 67 I]s the mode of being of language in the subjective speech consciousness really what abstract objectivism says it is? We must answer this question in the negative. [...] For [the speaker], the center of gravity lies not in [p 68] the identity of the form but in that new and concrete meaning it acquires in the particular context. What the speaker values is not that aspect of the form which is invariably identical in all instances of its usage, despite the nature of those instances, but that aspect of the linguistic form because of which it can figure in the given, concrete context, because of which it becomes a sign adequate to the conditions of the given, concrete situation.

[p 68] The basic task of understanding does not at all [...] amount to recognizing the form used, but rather to understanding it in a particular, concrete context, to understanding its meaning in a particular utterance, i.e., it amounts to understanding its novelty and not to recognizing its identity.

[p 69 T]hus the constituent factor for the linguistic form, as for the sign, is not at all its self-identity as signal but its specific variability[.]

[p 70] The linguistic consciousness of the speaker and of the listener-understander, in the practical business of living speech, is not at all concerned with the abstract system of normatively identical forms of language, but with language-speech in the sense of the aggregate of possible contexts of usage for a particular linguistic form. [... A] member of a language community does not normally feel himself under the pressure of incontestable linguistic norms. [...] Words are always filled with content and meaning drawn from behavior or ideology. That is the way we understand words, and we can respond only to words that engage us behaviorally or ideologically. [... p 71] The divorce of language from its ideological impletion is one of abstract objectivism's most serious errors.

VOLOSHINOV is so surprised by abstract objectivism's popularity that he seeks to explain why it has risen to such prominence. In fact, his explanation resembles DE SAUSSURE's criticism of earlier generations of linguists.²³ VOLOSHINOV writes:

[p 71] At the basis of the modes of linguistic thought that lead to the postulation of language as a system of normatively identical forms lies a practical and theoretical focus of attention on the study of defunct, alien languages preserved in written monuments. This philological orientation [of ...] European linguistic thought formed and matured over concern with the cadavers of written languages; almost all its basic categories, its basic approaches and techniques were worked out in the process of reviving these cadavers. Philologism [...] lacked the range necessary for mastering living speech as actually and continuously generated.

[p 78] Linguistics [...] is oriented toward the isolated, monologic utterance. [...] Research is wholly taken up in study of immanent connections on the inside territory of the utterance. ECO's semiotic theory provides a clear example of how trying to remain "on the inside territory" leads to irreparable contradictions. He certainly recognizes that multiplicity of meanings occurs. However, he does not switch to an essentially behavioral theory (PEIRCE: pragmatism, VOLOSHINOV: ideology) for — more — inclusive explanations. For VOLOSHINOV multiplicity is *not* an awkward exception, but the phenomenon he needs to address first and foremost:

[p 80] For abstract objectivism, the unity factor of a word solidifies, as it were, and breaks away from the fundamental multiplicity of its meanings. This multiplicity is perceived as the occasional overtones of a single hard-and-fast meaning.

This process of isolating a word and fixing its meaning outside any context [... is] further complicated by the fact that [the linguist] creates the fiction of a single and actual object cor-

23. One point where I therefore don't agree with VOLOSHINOV is precisely that he classifies DE SAUSSURE as an abstract objectivist. As I try to demonstrate in this chapter, DE

SAUSSURE's view on the psychological nature of language is more balanced than he is often credited with.

responding to the given word. This object, being single and self-identical, is just what ensures the unity of meaning.

ECO does not exclude a concept such as context. He views homonymy as a linguistic puzzle, though, rather than as a phenomenon that requires behavioral criteria to eliminate ambiguity. VOLOSHINOV (p 80) comments as if anticipating A Theory of Semiotics:

Another grave error on the part of abstract objectivism is [that t]he various contexts of usage for any particular word are conceived of as all lying on the same plane. These contexts are thought of as forming a series of circumscribed, self-contained utterances all pointed in the same direction. In actual fact, this is far from true: contexts of usage for one and the same word often contrast with one another. The classical instance of such contrasting contexts of usage for one and the same word is found in dialogue.

My contribution to increased clarity is that the multiplicity of meanings of context is somewhat ordered. Extending first the triad and next the hexad, the ennead differentiates between situation and context. I read VOLOSHINOV as writing about *both* situations *and* contexts in their integrated enneadic sense. A context as a circumscription clearly is meant along the sign dimension. But a context for usage is a situation, i.e., a concept along the reality dimension. I propose that context can often more productively be read as situation in VOLOSHINOV. Take, for example (p 80):

Of course, dialogue is only the most graphic and obvious instance of varidirectional contexts. Actually, any real utterance, in one way or another or to one degree or another, makes a statement of agreement with or a negation of something. Contexts do not stand side by side in a row, as if unaware of one another, but are in a state of constant tension, or incessant interaction and conflict.

[p 81 I]t is precisely a word's multiaccentuality that makes it a living thing. The problem of multiaccentuality ought to be closely associated with the problem of multiplicity of meanings.

At the core of an understanding of multiplicity is therefore recognition of situational variety. As VOLOSHINOV already underlines, the attribution of variety should not be limited to the observer of the sign. The sign engineer equally experiences "varidirectional [situations]."

How, from a rational perspective, any sign only imperfectly stands for situational behavior of objects is discussed in the next chapter. There I introduce SCHOPENHAUER's concept of the will. His insight is that the intellect, including the faculty of reason, is 'only' an instrument of the will. Applied as a boundary concept, just like SCHOPENHAUER does for his own purposes, the concept of the will completes the picture that Part i sketches of the individual sign user.

Part ii proceeds with the anatomy of meaning. With engineer and observer united in an instance of sign exchange, it is radically dialogical. It calls for several more quotations from the work of VOLOSHINOV (1929).

In A Theory of Semiotics ECO emphatically renounces the label idealist for his work and, by implication, for himself. "Semiotics fully avoids any risk of idealism" (1976, p 317), he writes. Why? Because it is limited to "the social existence of the universe of signification." All that lies "beyond the semiotic threshold" ECO leaves for its (p 316) "verification [...] to other types of approach."

ECO fails to admit that he is merely passing on – what he considers – the problem of an idealist position. He does not solve it, at all. It is obvious that, next, such necessarily complementary approaches must come to terms with the "threshold" he has preset for his private brand of semiotics. So, he does not own up to the conclusion that such boundaries are not at all absolute but, at the minimum, correlate with idealist conjectures of (p 315) "individual material subjects" made from a broader perspective. Indeed, by implication, his theory of codes – which is what his semiotics-as-theory actually amounts to – is associated with strong idealist assumptions (also read for assumptions: conceptual grounds).

Taking as another example a thinker who has already been introduced in this treatise, such dependency is not different with PEIRCE. The label that he is most often fitted with is that of pragmatist. What happens is that usually only a part of his work is highlighted, in this case his philosophy on the ground of conduct. What the label of pragmatism misses, then, are *related* parts of PEIRCE's work. I especially mean his semiotic. When considering only that other part of his work, i.e., his semiotic theory, it would actually be quite logical to call PEIRCE an transcendental idealist.

As I have shown in Chapter 2, PEIRCE's pragmatism, and his semiotic, respectively, can only be properly understood when one is seen against the background of the other. It is appropriate to state that at least²⁴ for pragmatism and semiotic PEIRCE designs an encompassing system of concepts. Merging labels, his system may be called idealist pragmatism, or pragmatic idealism. On his conceptual development, R. COLLINS remarks (1998, p 676):

Peirce absorbed metaphysics into logic, producing his own semiotic Idealism.

However, I am not concerned here with improving the label for PEIRCE and his work. For my theoretical development I emphasize, as I already did in Chapter 3, that idealism is a respectable approach for philosophical explanation, and for explanation in general. But any idealism should always be balanced by a corresponding realism, and the other way around. That is precisely

24. Commentators such as T.A. GOUDGE (1950) also point out discrepancies in

PEIRCE's thought.

what PEIRCE's triadic conceptual scheme prescribes: both idealism and realism are transcended. As it were, they hinge on signs and are thereby irreducibly integrated.

prelude 6

Any semiotic theory built from PEIRCE's triad, while leaving its irreducibility essentially intact, is representational. The ennead explains semiosis with additional dynamics *oriented at* a sign (engineering) and *issuing from* a sign (observation).

The metapattern corresponds to the ennead's sign dimension (see Chapter 4). Through its formal concept of signature, it allows discrete shifts of focus within a model. A particular focus suggests an object, but only to the extent of exhibiting particular behavior (as represented by a foreground interpretant on the ideal dimension) in a particular situation (as represented by a background interpretant on the ideal dimension). Every change of focus yields a different configuration from the model.

Thus, as an enneadic tool the metapattern confers on conceptual models a potential for greatly increased variety. But it certainly is *not* the last word on representation. Chapter 6 prepares the ground for a departure from a naive (also read: objective) theory of representation.

Though the so-called mind-body problem is usually not openly addressed, a preferred solution is often implied. Traditionally, it holds that the mind, or intellect, one-sidedly controls the body. That is, the body is seen to merely wait on the intellect to execute its designs. Even when the body is obviously indispensable for sign engineering and observation, it is only conceived as an auxiliary element. Another assumption – mostly implied, too – is that the intellect is ultimately rational. The inference is then made that a sign is rational, too.

When the intellect is considered a straightforward repository of objective knowledge about an external reality, signs are supposed to be equally straightforward pictures, statements, etcetera of reality. It only marginally changes with the view that the intellect also forms intentions. With intentions once again as rational constructs, the implied solution for both the mind-body

problem and the rationality of the mind/intellect is not challenged. Still, signs are seen as one-to-one representations. An internal reality is allowed to enter the picture, with the concept of intention as a stop-gap for upholding the mind-over-body position reflecting a rational will.

The mind-body problem does not permit an empirically decisive outcome. Of course, the mind-over-body axiom seems attractive. Is not it natural to award priority to the element, i.e., the intellect, which *appears* to produce such an axiom in the first place?

As any designer has learned from experience, it is often an assumption that is at first counterintuitive which proves especially productive. For example, why is the number *zero* such a powerful invention? Because it is *not* a number, too. SCHOPENHAUER performs a similarly contradictory design step where it counts most. Cutting through the paradox of what he calls the *Weltknoten*, he radically turns priorities around. His concept of the will is not intermediary, i.e., it is not what results from an intellect. With SCHOPENHAUER, will is the *ultimate* ground. Then, a particular body is a unique objectification of the will. And a unique intellect is an irreducible part of a unique body. As such, the intellect is an instrument of the will.

It follows that the Schopenhauerean intellect is not in exhaustive, leave aside rational, control of the body. By definition, the *will* is in control. And the will is preintellectual. Anyway, it is from the relative and necessarily limited perspective of the intellect (which, at the same time, is *all* it can develop *as perspective*).

For the representational nature of a sign, this has three major consequences. First, and again by definition, a sign is always instrumental to the Schopenhauerean will, too. Second, the intellect is not in complete rational control of signs; the will-as-ground implies preintellectuality for signs. Third, how a sign is engineered is immediately tied up with the uniqueness of the sign engineer, and how it is observed is likewise connected with the uniqueness of the sign observer.

Subjective situationism changes through Chapter 6 yet again. It openly does not start from rationalist assumptions. It concedes fundamental irrationality, thus achieving improved rationality for concepts that are subsequently erected on the will-as-ground. And with models as signs, the body-over-mind axiom also influences how a conceptual information models is valued.

Chapter 6, the last of Part i, essentially completes the design of subjective situationism. Part ii, starting with Chapter 7, applies the ontology to human communication. It sheds penetrating light on signs, resulting in much-extended models of their representational structure.

chapter 6

SCHOPENHAUER, AND THE LIMITS OF RATIONAL SIGNS

Since IMMANUEL KANT (1724-1804) theories about world, subject, and their relationship *as knowledge*, are known as transcendental idealism.¹ They have in common that the existence of the world holds axiomatic value. Another axiom is that a 'knowledge entity' exists, i.e., some 'thing' that is considered a separate *part* of the *whole* world. It is assumed to entertain information *about* the world. That part is usually called the subject. For semiotic emphasis I also call it the sign user.

A theory of knowledge is idealist when its axiomatic subject actively con-

1. KANT's major work in this respect is Kritik der reinen Vernunft (1781). The English translation is titled Critique of Pure Reason. An earlier attempt to formulate a systematic view, based on empirical science, on the nature of knowledge makes JOHN LOCKE (1632-1704) with his Essay concerning Human Understanding (1690). He is followed by GEORGE BERKE-LEY (1685-1753) who writes A Treatise concerning the Principles of Human Knowledge (1710), and DAVID HUME (1711-1776) with A Treatise on Human Nature (1739) and An Enquiry concerning Human Understanding (1748). A contemporary of LOCKE is GOTTFRIED WIL-HELM LEIBNIZ (1646-1716) who responds with New Essays on Human Understanding (written in French and completed in 1704, published in 1765). The works of especially

HUME are taken up by THOMAS REID (1710-1796) who writes *An Inquiry into the Human Mind* (1764). Of special interest for my ontological design is ALEXANDER B. JOHNSON'S (1786-1867) *A Treatise on Language* (1828).

Transcendental idealism is a way to experience reality. Using its grounds, it is still impossible to get there, i.e., to experience reality both directly and conceptually. But I also think it is impossible to get any closer, conceptually. So, I believe that the best way to be a realist is by practicing transcendental idealism.

Anyway, it may just as well be called transcendental realism. Such a change of label no doubt increases chances for broad acceptance.

structs knowledge objects (PEIRCE: interpretants) which it assumes to correspond to world objects (PEIRCE: objects) but are *different* from it. Starting from such axioms it can be theorized about how the knowledge faculty (PEIRCE: intelligence or, even, scientific intelligence) of the subject operates. This line of inquiry abstracts from individual interpretants. In other words, it transcends them, as it transcends the mutual exclusion of knowledge objects and world objects. Such inquiries into the general nature of knowledge are classified as transcendental idealism.

A philosopher who considers himself a practitioner of transcendental idealism is ARTHUR SCHOPENHAUER (1788-1860). In this Chapter I demonstrate that even this label is insufficient. I promote a proper understanding of his work, as I see it being highly relevant for a wide range of present-day inquiries. For, like PEIRCE after him, SCHOPENHAUER designs his system of concepts to include *behavior*. However, those thinkers differ widely in several of their important assumptions, or conceptual grounds.

The relevance of SCHOPENHAUER lies in both his emphasis on grounds and his particular conceptual design of grounds. The concept of the will is fundamental to his argument. It is his single, ultimate ground. As such, it is a very different concept from what nowadays is commonly referred to as will. With a single stroke, SCHOPENHAUER integrates everything that is impossible to treat conceptually. His productive paradox is to nonetheless admit this, say, a-conceptual collection to the realm of concepts. There, it must of course be yet another concept. SCHOPENHAUER recognizes that the opportunities for rationalization are optimized by minimizing the number of such a-conceptual concepts. One, only one, special concept is necessary and sufficient: the will. It is an extraordinary design, the Schopenhauerean will. To appreciate its nature, for example compare it with the number zero. That, too, is a far-reaching design resulting from a productive paradox.

I take SCHOPENHAUER's concept of the will as an invaluable inspiration to arrive at a compact yet flexible model for explaining meaning. His conceptual scheme supports my idea of *absence* of identical meaning for different sign users (or even of absence of identical meaning for the same sign user at different times, i.e., occurring through different semioses).

What is *present*, then? It is a radical subjective situationism, or situational subjectivity. This model itself, or anatomy of meaning as I call it, is developed in Part ii, particularly in Chapters 7 and 8. But first SCHOPENHAUER's conceptual scheme needs detailed exposition. Without it, the anatomy of meaning that follows cannot be fully appreciated.

6.1 a structural theory beyond the mind

I review two publications by SCHOPENHAUER. They are Über die vierfache Wurzel des Satzes vom zureichenden Grunde (1813, 1847)² and Die Welt als Wille und Vorstellung (1818, 1848, 1859).³ Of the latter I limit myself to Books 1 and 2 of its Part I. I comment upon those in §§ 6.2 and 6.3, respectively.

For a necessary introduction to SCHOPENHAUER's major work, in this first paragraph I concentrate on *Über die vierfache Wurzel des Satzes vom zureichenden Grunde*. It is his first book. He submits it, successfully, as his doctoral thesis.

My summary of SCHOPENHAUER's dissertation follows an account of the development of my interpretation of his text. I start by approaching *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* from the perspective of a strict transcendental idealism. Indeed, SCHOPENHAUER presents a theory of knowledge faculties. He sketches how the mind is structured.⁴ His inquiry starts from the assumption that (p 12)⁵

[n]ichts ist ohne Grund warum es sei.

_____[n]othing is without a ground or reason why it is.

For publication in English the title of SHOPENHAUER's dissertation is translated as *On the Fourfold Root of the Principle of Sufficient Reason*. Please note that the original term "Grund" appears as "Reason" in the English version. I don't agree with the translator. By once translating "Grund" as "ground or reason,"

- 2. This text is originally published in 1813 as SCHOPENHAUER's dissertation, earning him a doctorate in philosophy. Much later, he augments it; the second edition is published in 1847. I consult, in German, the second edition. It is been translated into English by E.F.J. PAYNE: On the Fourfold Root of the Principle of Sufficient Reason (1974).
- 3. E.F.J. PAYNE (see note 2, above) also translates both parts of *Die Welt als Wille und Vorstellung* into English: *The World as Will and Representation* (1958).
- 4. Especially famous are ideas of SIGMUND FREUD (1856-1939). His classifications of, initially, the conscious and the unconscious, and, later, ego, id and super id, are structural theories of the mind, too. That "[c]onscious-

- ness plays a far smaller role in human life than Western culture has tended to believe" is the theme that T. NØRRETRANDERS exposits in his popular account *The User Illusion* (1991, p ix). His book's subtitle is: *cutting consciousness down to size*.
- 5. I have chosen to present both the original German texts, and the English translations. I don't change the English to include my preferred terms except for changing representation to interpretant. In other cases I add comments where I favor a different terminology.

I don't include the page numbers of the quotations' translations; where they can be found in the English version is easily traced through the German version.

as shown above, he licenses himself to continue using the term "reason," only. In English, I prefer ground. It avoids the confusion from which the 'official' translation suffers. For one of the four roots also manifests itself as – the faculty of – reason (Vernunft). Though context may well guide the reader for every instance to its appropriate meaning (German: Grund oder Vernunft), confusion must especially be avoided for the term reason. In any translation of SCHOPENHAUER's thesis it also needs to retain as singular a context, and thus meaning, as possible. I point out that PEIRCE later introduces a concept called ground, too.⁶

As I already stressed, SCHOPENHAUER starts his inquiry by acknowledging the universal virtue of asking: Why? It is important to appreciate that, initially, such questioning is about existence. So, *why* does something in the world *exist*?

I have deliberately chosen this grounding of my interpretation in his concept of virtue. For it seems to me the most direct way of showing where SCHOPENHAUER's conceptual system reflects a choice of value. Placing an emphasis on value is not his particular shortcoming, at all. For any theory implies moral judgment. Or ideology (VOLOSHINOV, 1929). Or is, to apply SCHOPENHAUER's theory to itself, an expression of the will. An important task of the scientific interpreter – who is himself of course also value-based – is to discover those transitions between value and reason.⁷ They often occur

6. A comparison between the ground of SCHOPENHAUER and PEIRCE, respectively, has to wait for my summary of SCHOPENHAUER's concept, later in this chapter. See also note 15 in this chapter. Of course, PEIRCE's concept of the ground has already been treated and elaborated upon – and departed from – in Chapter 2.

7. This is my idea of deconstruction. I of course derive it from the work of JACQUES DERRIDA (1930-). See for example his book *Writing and Difference* (1967).

My privately developed metaphor is that every attempt at exposition is like an inflated bicycle tire (with my own presentation here definitely *not* excluded!). No matter how full the theorist pumps and fills it with air, the tire invariably has some holes. Deconstruction is about discovering where the leaks are. The harder a theorist has pumped, the easier it is

to detect holes for they also widen under the additional pressure. With a well-designed tire, a moderate amount of air, and therefore minute holes, only, it helps to submerge the tire in water where bubbles make it much easier to pinpoint (pun intended) them. For holes there always are.

What I learn from DERRIDA is that close reading of a text often soon enough shows an author's forced attempts to maintain the impression of intact air pressure in his tire. Those are precisely the locations where what I call premature contradictions arise. See § 9.1 for more details about my concept of premature contradictions. And throughout I have, at least when critically discussing an author's work, a preference for quoting her or him where the source of contradiction(s) is most obvious. For nobody likes to ride a bicycle with (too) leaky tires; it will then fail to serve to cover sufficient distance.

right at the start of a theory's exposition. The logic of an argument's continuation could be flawless. What keeps bothering an interpreter may be the, often implicit, assumptions (also read: the axiomatic system, or paradigm).

What makes a study of SCHOPENHAUER extra worthwhile is that he occupies himself especially with (basic) assumptions. That is, with ground. He shows acute awareness of its axiomatic character. In fact, one of the outcomes of *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* is the moral dimension of assumptions. I miss in that particular work that SCHOPENHAUER already makes his assumptions sufficiently explicit for his own exposition. The lack of reflexivity is precisely the greatest obstacle I encounter interpreting his thesis-'sign.'

How SCHOPENHAUER proceeds is nevertheless straightforward enough. He shifts his attention to knowledge. He refocuses his inquiry from 'Why does something exist in the world?' to 'What can somebody know about the world?' Several additional assumptions help to constitute his new focus. The steps from realism to idealism are sketched in Figure 6.1.1. Particular knowledge is *possible*, SCHOPENHAUER claims, because a *ground* of knowledge is available. He also calls it a priori knowledge. As he directs his attention primarily toward this ground annex a priori knowledge, or knowledge *faculties*, his inquiry deserves the label transcendental idealist in the Kantian sense. Its assumptions are presented as related concepts in Figure 6.1.2.

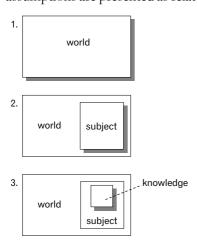


Figure 6.1.1. Shifting the orientation of inquiry from realism to idealism.

The breadth of his statements indicates that SCHOPENHAUER aims his theory at a priori knowledge in general, i.e., not restricted to a particular subject. Figure 6.1.3 is therefore more appropriate for transcendental idealism.

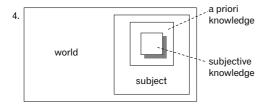


Figure 6.1.2. Axioms of transcendental idealism.

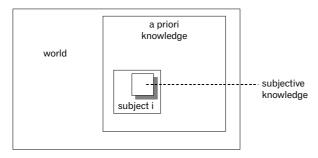


Figure 6.1.3. Metasubjective nature of a priori knowledge in transcendental idealism.

This ground, or a priori knowledge, is not singular and homogeneous, though. SCHOPENHAUER classifies four "roots." Every root determines a specific category of knowledge. Figure 6.1.4 diagrams his "fourfold root of the principle of sufficient ground."

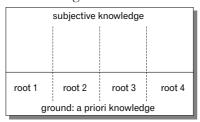


Figure 6.1.4. A single ground consisting of four roots of a priori knowledge.

The articulation of the single ground into different roots clearly makes the concept of knowledge too wide for an analysis at the level of the specialized roots. SCHOPENHAUER introduces "Vorstellungen" as the building blocks of knowledge. In the singular, his term is normally translated into English as representation. Again I am not happy with it. It lacks the connotation of initiative by the subject. Presentation, rather than representation, is already much better. The concept of reality *construct* (HOLZNER, 1968) also captures the sub-

ject's active involvement well. With the aim of aligning – some important – concepts from SCHOPENHAUER and PEIRCE I prefer interpretant. This particular terminology has already gained acceptance through semiotics.

As a structural theory of the mind, SCHOPENHAUER's system of concepts in *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* is not completely consistent. The first two types of root he describes are easily recognizable as cognitive faculties as they are still conceived of today.

First of all, a subject has a faculty of perception (Verstand). The corresponding category of interpretants are, in English, similarly called perceptions (Anschauungen). It helps, though, to clearly distinguish the faculty from its products. I therefore prefer to call the latter perceptive interpretants. Perception is rooted in causality. Every perceptive interpretant is taken as the effect of a cause.

Secondly, a subject has a reasoning faculty (Vernunft). Reason abstracts from perceptive interpretants to form concepts (Begriffe). Concepts, SCHOPENHAUER argues, are not connected through outer-wordly cause and effect, but by logic.

It is SCHOPENHAUER's third category of interpretants that is difficult to place in his proposed structure. He presents it as a category beyond (underlying?) the faculty of perception and subsequently the perceptive interpretants resulting from that faculty. As such, its interpretants are susceptible to reason. According to SCHOPENHAUER's argument, they are especially *evident* as manifestations of time and space. However, he does not specify a cognitive faculty that 'produces' or 'handles' these interpretants.

Aiming at more formal balance – and elegance – in the model as a preparation for further inquiry I posit *pairs* of faculty/interpretant throughout. From the causally normative interpretants (Normalanschauungen) SCHOPENHAUER mentions as members of his third category, I propose to call the corresponding faculty that of pure mathematics or, better still, of formalization. As already indicated above, its two branches refer to time (arithmetic) and space (geometry), respectively. Following KANT, for SCHOPENHAUER this class of interpretants constitutes the a priori knowledge for perception (and perceptive interpretants constitute the a priori knowledge for reason).

The immutable condition vested in – his assumption of – causally normative interpretants already bothers SCHOPENHAUER himself. He subsequently

8. See § 6.2, especially Figure 6.2.1, for a comparison between concepts of interpretant. In general, the correspondence between the conceptual systems of SCHOPENHAUER and PEIRCE is remarkable, even though SCHOPENHAUER doesn't argue from explicit

assumptions about signs. However, introducing them helps to better understand some of his statements. Later, I show that SCHOPEN-HAUER can nevertheless be labeled a semiotician, too.

revises his fourfold system somewhat in *Die Welt als Wille und Vorstellung*. I point this out later (see the beginning of the next paragraph). At the same time, I do not want to elaborate upon his conceptual development too much. This treatise is not about the history of ideas on the structure of the mind. Rather, I engage in an ontological design for which Shopenhauer's concept of the will forms an essential ingredient. I must make my immediate derivation from Schopenhauer clear. It doesn't require extensive treatment of developmental issues nor a review of secondary sources.

SCHOPENHAUER's work in cognitive science avant la lettre at the stage of his original fourfold root is shown in Figure 6.1.5. My condensation of course leaves much of his thesis unaccounted for. But as I have already indicated, what is left out I consider not relevant for my own ontological design.

subjective knowledge						
perceptions	concepts	arithmetic sequences, geometric forms	motives			
perception	reason	formalization	introspection			
ground: a priori knowledge						

Figure 6.1.5.

Overview of SCHOPENHAUER's structural theory of the mind.

It is the fourth cognitive *faculty* that is of most interest here. Equally unspecified by SCHOPENHAUER as the third faculty is, he limits himself to classify interpretants. His fourth class of interpretants are motives.

A motive results from a subject – and see below for more on SCHOPEN-HAUER's concept of subject – trying to interpret himself. I therefore suggest to name this faculty introspection. The whole of SCHOPENHAUER's philosophical system actually rests on his answer to what a subject 'knows' reflexively (p 176):

[D]as erkannte in uns [ist] nicht das Erkennende, sondern das Wollende, das Subjekt des Wollens, der Wille. [...]Wenn wir in unser Inneres blicken, finden wir uns immer als wollend.

—[W]ithin us the known as such is not the knower but the willer, the subject of willing, the will. [...] When we are introspective, we always find ourselves as the willer.

The critical point SCHOPENHAUER presumes is that the subject is more than his knowledge faculties and subsequent particular knowledge. C. JANAWAY summarizes (1989, p7):

It is central to Schopenhauer, that we are not [...] passive, disembodied spectators of the world of objects, but are essentially embodied and active. The will in us is primary, not the intellect. This one thought is extremely fruitful for Schopenhauer, and he uses it to mount a sustained attack on the notion of the purely rational and self-transparent subject of perspectiveless knowledge.

Indeed, the highly productive insight underlying SCHOPENHAUER's whole conceptual system is that he distinctively places the will *outside* and *a priori* the intellect. A subject does *not* do what he earlier thinks out deliberately, he argues. It is the other way around. At most, and limited by his ground of knowledge, a subject may be aware, through particular motives, of what he wants (and, often, of how he has already acted).

SCHOPENHAUER's emphasis on motives explains why his theory goes further than the structure of the mind. With his dissertation he attempts, however tentatively, to integrate intellectual with non-intellectual determinants of behavior. Rather than a structural theory of the mind, only, it could be viewed as a structural, comprehensive theory of behavior. This is shown in Figure 6.1.6.

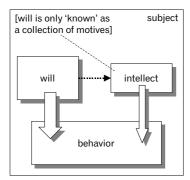


Figure 6.1.6.

The will as primary determinant of behavior; intellectual determinants come second.

With his concept of the will SCHOPENHAUER goes beyond rationalism. The poor scientific reception of his work during the twentieth century is therefore no surprise. Especially logical positivists tend to completely ignore it. Someone who assumes that human behavior, especially his own, is purely rationally grounded must find it impossible to accept – a theory suggesting – any irrational determinants. For analytical theorists, a theory of the rational mind is a theory of behavior.

The development of behavioral sciences, especially during the last few decennia, has created an academic climate for proper assessment of SCHO-PENHAUER's theory. In some places, slowly his ideas are being recognized again for their groundbreaking originality. Elsewhere, though, they remain

9. Examples of renewed interest are Schopenhauer im Denken der Gegenwart: 23 Beiträge zu seiner Aktualität (1987) edited by v. SPIERLING, Schopenhauers Aktualität: Ein Philosoph wird neu gelesen (1988) edited by W. SCHIRMACHER, the excellent biography Schopenhauer und die wilden Jahre der Philosophie (1987) by R. SAFRANSKI, and Der junge

completely forgotten. Often without awareness of their origin, they are rediscovered as for example by GENDLIN.

Many of SCHOPENHAUER's detailed analyses have of course been superseded. His overall direction of thought keeps its relevance (p 177):

Die Identität [...] des Subjekt des Wollens mit dem erkennenden Subjekt, vermöge welcher (und zwar nothwendig) das Wort "Ich" beide einschließt und bezeichnet, ist der Weltknoten und daher unerklärlich.

_____[T]he identity of the subject of willing with that of knowing by virtue whereof (and indeed necessarily) the word "I" includes and indicates both, is the knot of the world [...], and hence inexplicable.

On the surface, Über die vierfache Wurzel des Satzes vom zureichenden Grunde is SCHOPENHAUER's contribution to ideas on what and how a subject knows. As an exercise in transcendental idealism, alone, it already offers a powerful argument from explicitly stated axioms. But far more importantly, he prepares the ground for the question: Why does a subject know? After this hidden question is unearthed and rightfully emphasized, it is much easier to appreciate his axioms and follow his arguments. Indeed, he doesn't yet openly formulate this vital question in his thesis, but already provides part – actually, start – of the answer by introducing the concept of the preintellectual will.

6.2 a semiotic reconstruction

Die Welt als Wille und Vorstellung is SCHOPENHAUER's major philosophical work. Its key ingredients, however, are already all present in Über die vierfache Wurzel des Satzes vom zureichenden Grunde. As the title indicates, SCHOPENHAUER reorganizes his systematic exposition. He also elaborates widely.

His new book also starts with the world, a concept that encompasses the concepts of will and interpretant (again, the latter being my translation of Vorstellung, rather than the traditional representation). The overall composition of *Die Welt als Wille und Vorstellung* reflects an attempt to eliminate (some) of the conceptual confusion from which his earlier thesis suffers. SCHOPENHAUER now right away makes the distinction between the world as will, and the world as interpretant, respectively.

Schopenhauer: Genese des Grundgedankens der Welt als Wille und Vorstellung (1988) by Y.

KAMATA. In English, examples are
Schopenhauer (1980) by D.W. HAMLYN and Self and World in Schopenhauer's Philosophy (1989) by
C. JANAWAY. For readers of Dutch, in Arthur

Schopenhauer, Een oorlogsverklaring aan de geschiedenis (1996) E. BINDERVOET and R.J. HENKES apply a Schopenhauerean perspective for a convincing critique of how history is usually practiced unproductively.

SCHOPENHAUER deals first of all with the world as interpretant. Indeed, this first Book of Part I of *Die Welt als Wille und Vorstellung* revisits in many ways his theory of knowledge that *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* contains. He certainly makes his conceptual scheme clearer by excluding the will from the level of the separate knowledge faculties. In fact, only two, rather than four "roots" of interpretants remain. He merges the third root into the first. Again, he eliminates the fourth altogether, that is, as a separate root. As I discuss below, the will returns as the overall, ultimate ground of a priori knowledge. As C. JANAWAY remarks (1989, p 7):

Given this, the heart of a great vision, the rest of Schopenhauer's thought falls quite naturally into place.

The subtitle SCHOPENHAUER gives to Book 1 of Part I confirms his reduction of the number of roots and their reorganization. It mentions the object as resulting from experience, and science, respectively. Those are two, not four, classes of interpretants. But still SCHOPENHAUER often refers to his doctoral thesis. He does *not* repeat, though, the fourfold nature of the ground of interpretation. In general, he just mentions his "Satz vom Grunde," or principle of the ground.

The original fourth root is not removed from SCHOPENHAUER's conceptual system. On the contrary, it reappears to occupy a more important position. In *Die Welt als Wille und Vorstellung*, the whole ground of knowledge is 'grounded' on it (1813, 1844, 1859; p 55):

Wir sind [...] weder vom Objekt noch vom Subjekt ausgegangen; sondern von der *Vorstellung*, welche jene beide schon enthält und voraussetzt; da das Zerfallen in Objekt und Subjekt ihre erste, allgemeinste und wesentlichste Form ist.

— We started neither from the object nor from the subject, but from the [interpretation], which contains and presupposes them both; for the division into object and subject is the first, universal, and essential form of the [interpretation].

This is the basic tenet of transcendental idealism. The world as interpretant constitutes both subject and object. The subject's knowledge is *by definition* knowledge about objects. And objects only exist as knowledge of the subject.

PEIRCE's later definition of the sign closely resembles SCHOPENHAUER's definition of the interpretant as 'consisting' of subject, object, and their relationship. The triadic diagrams, derived from their respective theories, are sketched in Figure 6.2.1.

As Figure 6.2.1 stands, it points at a contradiction. How can one and the same concept serve different purposes? The problem immediately dissolves when it is simply acknowledged that the purposes of SCHOPENHAUER and PEIRCE differ when they suggest their definitions. The former's meaning of *interpretant* accordingly differs from the latter's. Or in terms of subjective situationism, their respective terminologies must be attributed to different situa-

tions. In a metapattern-based model (see Chapter 4 for an introduction to the metapattern technique), the interpretant 'object' appears as signature instances with characteristic intexts in – at least – two contexts reflecting those different theorizing 'situations.'

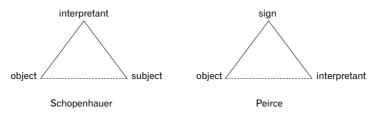


Figure 6.2.1. Different triadic definitions of interpretant (left) and sign (right).

SCHOPENHAUER uses the term interpretant (Vorstellung) in the singular mainly for indicating the overall *possibility* of knowledge. Speaking of interpretation, rather than interpretant, is already an improvement. However, I don't want to *start* my discussion by disturbing the terminological unity from the original. As interpretation, though, it constitutes the class of subjects. A particular subject has actual knowledge.

For the *actual content* of the subject's knowledge SCHOPENHAUER applies the *same* term, be it often in the plural (interpretants, Vorstellungen), as the one he starts with. SCHOPENHAUER's triangle on the left of Figure 6.2.1 does not cover this second meaning. But this is precisely PEIRCE's productive meaning of interpretant. His triangle presents an interpretant as a particular *instance*, originating from a particular sign and (then) installing a particular measure of belief, or doubt, in the subject about a particular object. For PEIRCE then, the possibility of knowledge is not only a priori, as it is with SCHOPENHAUER, but remains outside his explicit theoretical scope.

In other respects, SCHOPENHAUER is not less but more detailed than PEIRCE. The latter does not elaborate on the *structure* of the intellect beyond assuming a "cognitive mass" involved in constructing interpretants. CHOPENHAUER is already more of a cognitive psychologist. Then again, PEIRCE has more to say about the *mechanism* of semiosis (see Chapter 2). His model of sign use dynamics rests on the assumption that the interpretant resulting from one step may act as the sign triggering another step. The whole

10. Especially seen from the perspective of the part "cognitive mass" plays in the dynamics of Peircean semiosis (see Chapter 2, above), Remembering the Personal Past:

Descriptions of Autobiographical Memory (1991) by B.M. ROSS acquires relevant additional (also read: interdisciplinary) relief.

process starts with what I have called the original sign.

I use the term *interpretant* in the second sense of SCHOPENHAUER. It refers to specific content elements of knowledge, thus equaling the Peircean concept of interpretant.

In *Die Welt als Wille und Vorstellung* SCHOPENHAUER reduces the fourfold knowledge ground outlined in *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* to the two faculties of perception (Verstand) and reason (Vernunft). At the same time he brings *more* differentiation, avant la lettre of course, to semiosis. There is, first of all (p 48),

die bloß sinnliche Empfindung, das unmittelbare Bewußtseyn der Veränderungen des Leibes.

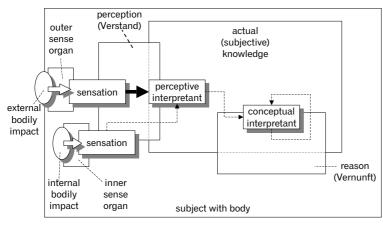


Figure 6.2.2. SCHOPENHAUER's knowledge dynamics with semiotic hindsight.

Figure 6.2.2 captures SCHOPENHAUER's main points about the creation of perceptive and conceptual interpretants. It suggests a fruitful comparison between the epistemological theories of SCHOPENHAUER and PEIRCE after some terminology is straightened out. They overlap considerably. Their theories are complementary to some degree, too. ¹¹ I remark again briefly on their opposition in the next paragraph.

11. It is interesting that PEIRCE acknowledges the positive influence of KANT while venting

negative commentary on SCHOPENHAUER. For some remarks to this extent, see *Charles*

schopenhauer's view on how – the faculties of – perception and reason are related comes out beautifully in his work (p 100):

Jeder Mensch hat durch Erfahrung, durch Betrachtung des sich darbietenden Einzelnen, ein Wissen um mancherlei Dinge erlangt: aber nur wer sich die Aufgabe macht, über irgend eine Art von Gegenständen volständige Erkenntniß *in abstracto* zu erlangen, strebt nach

Wissenschaft. [... p 102 D]er Zweck der Wissenschaft [ist] nicht größere Gewißheit [...,] sondern Erleichterung des Wissens.

Every person has obtained a rational knowledge about many different things through experience, through a consideration of the individual things presented to him; but only the person who sets himself the task of obtaining a complete knowledge in the abstract about some species of objects aspires to science. [...] [T]he aim of science is not greater certainty [...]; it [is] rather facility of rational knowledge.

Nowhere does SCHOPENHAUER reason with, and from, sign as a general category. I nevertheless apply the label semiotic to his conceptual system, too. His acute awareness of the importance of 'signs' may be derived from statements to the extent that (p 69)

der Mensch theilt dem andern Gedanken mit, durch Sprache, oder verbirgt Gedanken, durch Sprache. Sprache ist das erste Erzeugniß und das nothwendige Werkzeug seiner Vernunft.

— man communicates thought to another, or conceals it from him, by language. Speech is the first product and the necessary instrument of his faculty of reason.

He mentions that (p 92)

Zeichen die komplicirtesten Abstraktionen vertreten.

———symbols represent the most complicated abstractions.

And because signs make important aspects of life-as-practice possible SCHOPENHAUER argues that

[d]as Wissen, die abstrakte Erkenntniß, hat ihren größten Werth in der Mittheilbarkeit und in der Möglichkeit, fixirt aufbehalten zu werden: erst hiedurch wird sie für das Praktische so unschätzbar wichtig.

_____[r]ational or abstract knowledge has its greatest value in its communicability, and in its possibility of being fixed and retained; only through this does it become so invaluable for practice.

Following KANT, with practice SCHOPENHAUER means what I call behavior. He distinguishes two knowledge-directed types of behavior. Of course they types correspond to the faculties of perception and reason (p 92):

Selbst für das Praktische ist eine Erkenntniß der ersten Art[, d.h. unmittelbare, anschauliche Erkenntniß im bloßen Verstande,] hinreichend, sobald [der Mensch] auch die Ausführung ganz allein übernimmt, und zwar in einer, während noch die anschauliche Erkenntniß

S. Peirce: Selected Writings (1958) edited by P.P. WIENER. My impression is that PEIRCE the

pragmatist, not the semiotician, has studied the work of SCHOPENHAUER, his predecessor.

lebendig ist, ausführbaren Handlung; nicht aber, wenn er fremder Hülfe, oder auch nur eines zu verschiedenen Zeiten eintretenden eigenen Handelns und daher eines überlegten Planes bedarf.

——Even knowledge of the first kind[, i.e., an immediate, perceptive knowledge in the mere understanding,] is sufficient for practice, as soon as a man puts it into execution entirely by himself, in fact when he carries it out in a practical action, while the knowledge from perception is still vivid. But such knowledge is not sufficient if a man requires the help of another, or if he needs to carry out on his own part some action manifested at different times and therefore needing a deliberate plan.

So, the coordination of behavior or conduct requires communication of concepts. As I remarked before, SCHOPENHAUER does not extend his philosophy to a general treatment of signs. His conceptual system is easier to comprehend, though, when an overall semiotic approach is applied, too. Because he places interpretant (Vorstellung) high in his conceptual order his invitation is actually impossible to miss in a so-called age of information.

6.3 a proposal for empathy

A review of SCHOPENHAUER's philosophy in later semiotic terms helps to appreciate its contribution to the design of subjective situationism. I outline especially his theory of knowledge. Some acquaintance with it is necessary to understand his *a priori* concept of the will. Next, I present the overall line of reasoning from the second Book of Part I of *Die Welt als Wille und Vorstellung*. It also serves to emphasize which of his ideas I apply.

SCHOPENHAUER continues by questioning the strictly idealist position of the world as interpretant, only. He argues that the subject as pictured in the first Book of Part I knows his own *body*, too, as an object. As knowledge, however, this interpretant constitutes an indirect relationship between the subject and his body. ¹² In the second Book of Part I he adds that, in a direct sense, the subject also *is* his body. But the *whole* body as *being* lies by definition outside knowledge, i.e., *its wholeness is never a perceptive interpretant, let alone a concept.* It is only known through specific manifestations.

Applying the metapattern for modeling, Figure 6.3.1 captures how the most important concepts taken so far from SCHOPENHAUER's scheme are formally

12. Elsewhere SCHOPENHAUER shows an interest in etymology. It is therefore surprising that he does not point out that Leib, that is, the German word for body, is intimately connected to the verb leben (to live). His

whole philosophy does not suffer, at least, that is my opinion, when life is substituted for will. In my account of SCHOPENHAUER's reasoning I use the term being.

related. The key to this particular model lies in the assumption of – in this case – two different *situations* for – further – conceptualization of bodily behavior. On the one side there is behavior of knowledge of the body which, as is the nature of knowledge, is an intermediate phenomenon (see the left-hand branch of Figure 6.3.1). On the other side there is an approach, as a conceptualization itself of necessity intermediate, to behavior as being of the body with being assumed as immediate (see right-hand branch).

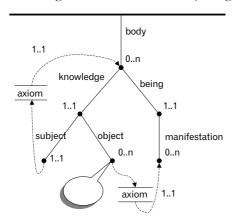


Figure 6.3.1. Being and knowledge 'situated' in the body.

See also GENDLIN on his concept of experiencing (1962, 1997). And J.G. MEYER attempts the impossible, that is to develop SCHOPENHAUER's concept of Weltknoten (see last quotation in § 6.1, above) including the necessary duality involved in conscious knowledge as follows. Writing in German, there is "Ich" and "Nicht Ich." He argues for the latter to be designated "Es." Then, labeling unity by conjugation yields "Iches," "Ichs," or "Ix" (1913, p 25, my translation from the German):

For the symbol of the unity of Ix wills and Ix knows [...] may be taken the endlessly revolving circle: "Ix wills that Ix knows that Ix wills."

I urge no attempt is made to discover the internal logic of Figure 6.3.1 as a system. For it reflects a set of axioms that are themselves by definition illogical or, in other words, without ground. The most the interpreter of any axiomatic 'system' can achieve is to show where, as exactly as possible, the *necessary* conceptual transitions occur. A clear indication of where a theorist tries to make divergent ends meet is the use of a single term for different meanings, with those differences often kept implicit. This practice can also be observed in SCHOPENHAUER. But at least he readily admits the unexplainable nature of first principles. H.M. WOLFF (1960, p 6, my translation from the German)

insightfully comments on the accusations of contradictions made against SCHOPENHAUER:

Schopenhauer often applies [...] contradictory formulations, punctuated as paradoxes, [...] to inspire in his readers an awareness of the problems he treated, of the complexity of the world in general. He aimed to show that a particular thesis can be interpreted comprehensively only when its antithesis is also taken into account. As he himself was completely aware of the paradoxical nature of such figures of speech, they should definitely not be mistaken for contradictions, i.e., for theses that Schopenhauer believed could be integrated.

In *Die Welt als Wille und Vorstellung* SCHOPENHAUER orients himself at the *actions* of the body. For that is how the body manifests itself. Introspection reveals, he argues, that actions essentially happen to accomplish what a subject-as-body *wills* in a particular configuration of time and space. What a subject therefore knows from introspection are his motives. But what counts outside knowledge is (direct) action.

From perceptions of such bodily actions SCHOPENHAUER abstracts the body-as-being as a concept in order to (further) reason about it. The term he chooses for this concept is *will*. So, in the realm of knowledge, the world is interpretant. The subject lives in a dual world, though. In direct action, his world is will. Because the will is unknowable it might be confusing to associate the subject with it. He therefore introduces the additional term individual. The duality of an individual consists of a subject and a body. Rather, 'his' subject is a subdivision of a body-individual. The subject knows (world as interpretant) and the encompassing body acts (world as will). See 6.3.2 for this stage of SCHOPENHAUER's theorizing. It is clear he experiments with interpretants, and their signs, to arrive at an optimally consistent axiomatic system.

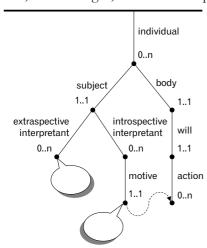


Figure 6.3.2. A further stage of SCHOPENHAUER's conceptual development.

At least from SCHOPENHAUER's point of view, Figure 6.3.2 introduces a contradiction. For actions are modeled as intext of the will. SCHOPENHAUER maintains that the will is only *knowable* as a collection of interests or motives. But then he mentions actions. What is their place in his system?

Philosophers generally don't present visualizations for conceptual schemes. Exceptional among philosophers, SCHOPENHAUER reports a method for precisely such visualization.¹³ He regretfully omits applying it to the axiomatic system of his own ground.

The additional orientation at action is of course another decisive point in SCHOPENHAUER's argument. Every attempt to balance idealism with realism needs to make assumptions about reality. The ontology SCHOPENHAUER proposes is still largely transcendental idealist. What he places in reality outside knowledge is the will. It is the one and only *Ding an sich* in his conceptual system. Every'thing' else is *interpreted as* object by subjective knowledge.

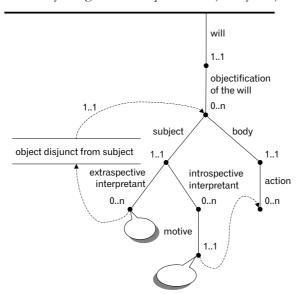


Figure 6.3.3.

The world as will, with individuals as the will's objectifications.

SCHOPENHAUER holds that objects are 'subject' to the world as will as the ultimate ground of knowledge. It involves, he argues in an extremely dense step, that a subject experiences what an object is as closely to the will as its knowledge faculties allow. While irreducibly represented by an interpretant, an object is necessarily perceived/conceived as an objectification of the will.

The implications become recognizable where SCHOPENHAUER declares that man – every single man or woman, that is – is the will's objectification at its most individualized stage. One individual human being is always different from another (H. REMPLEIN, 1954). He is by definition unique. ¹⁴ Much more so, for example, than one grain of sand differs from another grain of sand. Whatever species of individuals is concerned, the concept of the will moves to an even more important position in the overall conceptual system. Figure 6.3.3 shows this next stage of development.

A person experiences the duality of will and interpretant first of all about himself. The degree varies between persons. SCHOPENHAUER admonishes that every person also projects – and he does it to an equally unique degree – this duality upon other persons and how they exist. In fact, this kind of projection occurs for all objects.

Precisely this capacity – or is it a ground, too? – for *empathy* is another vital ingredient for my own ontological design. A sign user is an actor. He behaves in a world where other people act, too. His behavioral acts are determined by conscious knowledge and by other determinants. Once the actor is aware, and accepts, that his own behavior is not completely controlled by his "scientific intellect," he may then acknowledge that his co-actors enjoy, of suffer, the same fact of life. Figure 6.3.3 already shows that the knowledge of one subject pertains to objectifications of the will, other than that subject itself. In their turn, such (other) objectifications are also of a dual nature, i.e., they are both knowing subject and acting body.

With his concept of the will, is SCHOPENHAUER perhaps an early social psychologist? For himself he has a different ambition. After theorizing on the ground of knowledge in Über die vierfache Wurzel des Satzes vom zureichenden

14. Any organism's genetic uniqueness is practically secured through so-called recombination of parental genetic 'material' (POL-LACK, 1994). This makes uniqueness a highly *empirically* credible ontological assumption.

15. A more detailed structure of behavioral determinants is beyond the scope of this treatise. There are for example many different positions taken in the debate on influences from nature versus nurture. However, nobody nowadays maintains that behavior is completely controlled by either nature or nurture. See also Rethinking Innateness: A

Connectionist Perspective on Development (1996) by J.L. ELMAN et al. They argue that (p xi) "the distal effects of gene products are highly indirect, complicated, and most often dependent on interactions not only with other gene products but also with external events."

The first point I demonstrate in this chapter is the coexistence of behavioral determinants. And the second, strongly related, point is that nature and nurture do not govern disjunct areas of behavior. Influences jointly determine behavior. Again, for my ontological design of subjective situationism I don't

Grunde he aims for the ground of that knowledge ground. ¹⁶ He is keenly aware of the paradoxical nature of his enterprise. He cannot make it work by proving anything. It is impossible with axioms. So, he sets out to develop a credible axiomatic system.

The next step in SCHOPENHAUER's search for what actually may be called 'a single ground of existence' is to enlarge the sphere of empathy. Above, I interrupted my account of his reasoning about the will at the point where an individual person is attributed with the capacity for empathizing with other persons. He then assume that everybody else, too, is constituted by the duality of will and interpretant. SCHOPENHAUER continues by extending this empathy to *all* objects of perception, both organic and inorganic. To recognize an object as an objectification of the will, he states, is to come as close as possible to the essence (German: das Wesen) of the object. It is not the introspective slogan "I doubt, therefore I am" of DESCARTES but an equally introspective variation: I have a dual nature, therefore the world is of a dual nature.

Now SCHOPENHAUER does not write this. I do. But don't I suggest that he might have? At this stage an intermezzo is therefore in order. I address accountability in the next few passages.

In Part ii of this treatise I propose for *every* sign that first and foremost its engineer reflects his *interests* in it. Semiosis of the sign observer is equally *driven* by interests, but there they are the observer's (see Chapters 7 and 8). Especially regarding SCHOPENHAUER's conceptual scheme, a responsible account of it must address this issue of interests. I therefore report on some additional interpretations on my part.

As an interpreter I take liberties with SCHOPENHAUER's texts. For in spite of some reorganization he essentially composes *Die Welt als Wille und Vorstellung*

need to go into details. Even a much less radical position than SCHOPENHAUER's suffices to acknowledge that some behavior occurs beyond rational control, regardless of details provided for the actor.

16. As announced in note 6, above, the uses SCHOPENHAUER and PEIRCE make of the concept of ground may be compared. With SCHOPENHAUER ground occupies an axiomatic place in his overall conceptual system. The extreme position is reserved for the will. The will itself being unknowable, he even calls it groundless. But it supplies the

foundation for his theory of knowledge. This is clearer in *Die Welt als Wille und Vorstellung* than it is in his earlier *Über die vierfache Wurzel des Satzes vom zureichenden Grunde.*

PEIRCE, on the contrary, keeps his meaning of ground quite open. It seems a procedure within, not a priori, knowledge. It types an object as an element of a class, or what PEIRCE calls an idea. It then 'inherits' properties. My own development of the concept of ground, inspired by PEIRCE, is to emphasize plurality of behavior, leading me to assume *situational* objects.

as an extension of Über die vierfache Wurzel des Satzes vom zureichenden Grunde. Yet at the same time he engages in repairing his earlier work. His repairs are not clearly marked, though. Aiming at overview I experience an extra burden of interpretation. Do I ignore discrepancies too easily? And consciously and unconsciously I am 'filling in' what I find lacking according to my interest in designing conceptual grounds of business information modeling. It is in fact precisely SCHOPENHAUER's theory which explains why this is inevitable. It becomes equally obvious that my discussion must to a certain degree depart from interests underlying his – designing of his – conceptual scheme. This is the argument why I don't position this chapter as an impartial contribution Schopenhauerean science. Rather, I am accountable for the use of some of his original concepts in a different situation, i.e., for an ontological design to suit information modeling of differential behaviors. It is with that interest I continue to summarize his conceptual scheme.

From my intermezzo I return to following SCHOPENHAUER. Knowledge still comes first in his system. Then body, and next will. But he subsequently moves the concept of will to even groundless status. There it secures the ground for the a priori knowledge. And, for example, where should the interpreter of his conceptual system locate the essence of an object? Is it outside himself as subject? But when it is, reality is more than only the will as Ding an sich. So, in SCHOPENHAUER's scheme, an object's essence is probably a 'matter' of knowledge, too.

Does the assumption of the will help to gain a different knowledge about an object? It certainly does when the perspective on human behavior has so far been purely rational, or even mechanistic. ¹⁷ What it does for SCHOPENHAUER is to provide him with a single concept to integrate all explanations. A stone, for example, also objectifies the will. This doesn't mean that the concept of the will can ever explain anything empirically. It cannot, SCHOPENHAUER emphasizes. But it serves to unify explanations by their proper, often complementary means. ¹⁸ I think that such is the ultimate philosophical program of

17. It has become common knowledge that behavior is not just rational. But SCHOPEN-HAUER thought and wrote long before the origin of psychoanalytic theory, for example. It is even documented that SCHOPENHAUER anticipated FREUD. As F.J. SULLOWAY writes in Frend, Biologist of the Mind (1979, p 468): "It is simply inconceivable that Freud [...] was as totally uninfluenced by Schopenhauer and Nietzsche as he liked to think." He adds that

their (p 467) "philosophies [...] closely resemble the leading tenets of psychoanalysis. [... They] described the unconscious and irrational sources of human behavior and stressed the self-deluding character of the intellect."

18. Scientifically speaking, an axiom serves explanation. It does *not* prove in the sense that it provides a ground. It cannot provide

ground because it is a ground. What makes SCHOPENHAUER a pleasure to read is that he consistently adstructs his general statements with examples. He is faithful to his adagium that every concept ultimately depends on a perceptive interpretation.

The problem with the concept of the will is that, by itself, it is too general. As I report next in the main text, SCHOPENHAUER not only links it to individuals as objectifications of the will. He also includes levels in his conceptual system, thus creating the opportunity to elaborate on dynamics at a particular level and between different levels of objectification of the will. How an individual behaves, he states, is largely determined by his own level and that of the individuals he comes into contact with. What SCHOPENHAUER emphasizes is conflict between individuals, rather than their cooperation. See also note 19, below.

SCHOPENHAUER's axiomatic system in which he moves the will to center stage does indeed suggest explanations to a wide range of phenomena. With his own explanations he predates many empirical results of science.

His work must not be confused with that of, for example, R. SHELDRAKE whose theory of formative causation (*A new science of life: the hypothesis of formative causation*, 1981) is self-fulfilling to a significantly larger degree than SCHOPENHAUER's world as will and interpretant. They have in common that neither theory is susceptible to proof through empirical science. And for this reason only, it is that I draw attention to SHELDRAKE's theory, too. I find his axiomatic system, and as such it stands far removed from SCHOPENHAUER's speculative ideas, misses an explanatory potential that yields interesting results.

On the other hand, in *The Selfish Gene* (1976) R. DAWKINS proposes a compact set of first principles admirably comparable, both in the abstract and in its applications, to what SCHOPENHAUER creates. DAWKINS takes the single gene, whatever it is, as the concept from which to construct an intriguing background perspective for explaining the behaviors of what are normally considered individual organisms. The latter, he says with human beings notably included, are mere "survival machines" for the genes.

All such explanations assume that the object (also read: system) being studied behaves from a particular purpose. In general, teleology is described by A. ROSENBERG (1991, p 885) as "the property of objects whose behaviour is or appears to be directed at attaining or maintaining some goal, purpose, end, or aim. Teleological systems also include ones to which 'functions' are accorded. Such behavior is manifested in human action, and by organisms, and their components, organs, tissues, cells, and subcellular organelles. Advances in technology have also given currency to teleological descriptions of complex mechanical and electronic devices, such as steam engine governors, guided missiles, and computers." On teleology see also, for example, On Purposeful Systems (1972) by R.L. ACK-OFF and F.E. EMERY. They apply the cybernetic concept of teleology, first developed by A. ROSENBLUETH, N. WIENER and J. BIGELOW in Behavior, Purpose, and Teleology (1943). Elsewhere, in his "capacity as an experimenter and neurophysiologist" R. GRANIT remarks that (1972, p 401) "[i]t is not a question of whether Nature is designed on teleological principles or not, but only of whether, and to what an extent, we can obtain scientific knowledge by teleological reasoning." In

SCHOPENHAUER. His conceptual scheme allows innovative ways to hypothesize "pragmatic unit[s] of analysis" (BOWKER and STAR, 1999).

Once again continuing with my account of his exposition on the will, SCHOPENHAUER proposes different levels of its objectification. His hypothesis is that an appearance at a higher level of objectification of the will envelopes objectifications at lower levels. He applies the terminology of *appearance* because he takes a particular level of objectification to correspond to a Platonic idea. Again, his approach raises questions. Why doesn't he call it an interpretant? That is, an object to a subject? Or is there plurality in the world as will, after all? Anyway, what exists at the higher level as configuration,

the aptly titled essay *In Defense of Teleology*, published in the collection *Brain and Human Behavior* edited by A.G. KARCZMAR and J.C. ECCLES, GRANIT continues by observing that "knowledge of a causal connexion may remain a trivial statement unless or until it leads to teleological insight of the kind we accept as a real contribution to the understanding of something." His opening statement reads (p 400): "The bad reputation teleological thinking enjoys in many circles may perhaps be traceable to its metaphysical history."

My goal anyway is to contribute to a better reputation for metaphysics/ontology. For the positivist will sooner or later run into problems with his limitation to observable causes and effects. For example a child of about four years old, in fact one of my own daughters at the time, is usually able to find the critical flaw. "Yes I understand, but why? But what, then, is the cause of that?" Quite rightly, the answer "That is why!" is unacceptable. So, a first cause - or what, according to A. ROSENBERG, ARISTOTLE calls a final cause - must be assumed. Allowing a chain of, say, regular causes and effects, the first cause must of course be set apart conceptually as a cause of a different order. That is why it is given a different name, such as a purpose. SCHOPEN-

HAUER has just taken this teleological necessity for conducting proper science to an extreme; the will is the first cause in representation. Rather than opposing science, his metaphysics is enabling it. As GRANIT writes, a scientist's (p 400) "real problem is to find out in what way it is possible to find a causal connexion between events within his particular domain of research." Only when an object can be understood in a way that (p 401) "a sensible purpose is served," does its behavior become "interesting and respectable. [... A] teleological lead [i]s stimulating and valuable, because it inspire[s] much experimentation. [... I]nsight often appears as a blending of causal experimentation with teleological hypotheses." Such a hypothesis (p 407) "adds to [causal analysis] a special distinction, that of arriving at an understanding of integrative action." In Logical Learning Theory: A Human Teleology and Its Empirical Support, J.F. RYCHLAK argues (1994, p xix): "If we begin with a technical language that is intentional rather than mechanistic, we can end with a perfectly valid, experimentally proven view of human behavior." Cynically and probably out of frustration, GRANIT concludes his essay by stating (p 407): "I realize quite well that there are people who think it quite useless to understand the wider purpose."

or system, is never fully explainable at the constituting lower levels. It is a systems approach avant la lettre: the whole is more than the sum of its parts. SCHOPENHAUER thus provides a compelling argument against reductionism.

He also introduces the idea of conflict between individuals. Objectification of the will results in a battle for matter; objects want to gain a place in space and time. ¹⁹ At the same time, SCHOPENHAUER's view is already ecological. For a sequence of individuals to have conflicts over matter, their overall species need to coexist. Species adapt to their environment, which includes other species, to secure continuity of objectification of the will through individual conflict. At this point in his argument SCHOPENHAUER elegantly weaves in the contribution of knowledge. I select several quotations emphasizing, much better than is possible in a derived account, the place of knowledge faculties in his overall theory (p 201):

Die immer höher stehenden Stufen der Objektität des Willens führen endlich zu dem Punkt, wo das Individuum [... seine] Nahrung [... aufsuchen, auswählen muß]. [...] Dadurch wird hier die Bewegung auf Motive und wegen dieser die Erkenntniß nothwendig, welche also eintritt als ein auf dieser Stufe der Objektivation des Willens erfordertes Hülfsmittel [...] zur Erhaltung des Individuums und Fortpflanzung des Geslechts. [... p 202] Allein mit diesem Hülfsmittel [...] steht nun, mit einem Schlage, die Welt als Vorstellung da, mit allen ihren Formen, Objekt und Subjekt, Zeit, Raum, Vielheit und Kausalitat. Die Welt zeigt jetzt die zweite Seite. Bisher bloß Wille, ist sie nun zugleich Vorstellung, Objekt des erkennendes Subjekt. Der Wille, der bis hieher im Dunkeln, höchst sicher und unfeilbar, seinen Trieb verfolgte, hat sich auf dieser Stufe ein Licht angezündet, als ein Mittel, welche nothwendig wurde, zur Aufhebung des Nachtheils, der aus dem Gedränge und der komplicirten Beschaffenheit seiner Erscheinungen eben der vollendetesten erwachsen würde. [...D]er Welt der Vorstellung [... greift jetzt ein ...] in den Zusammenhang seiner Erscheinungen. Dadurch hört [...] die unfeilbare Sicherheit [...] auf. [... p 203] Der Irrthum wird möglich, welcher in vielen Fällen die adäquate Objektivation des Willens durch Thaten hindert. [... p 204] Die Erkenntniß überhaupt, vernünftige sowohl als bloß anschauliche, geht also ursprünglich aus dem Willen selbst hervor, gehört zum Wesen der höheren Stufen seiner Objektivation, als [...] ein Mittel zur Erhaltung des Individuums und der Art, so gut wie jedes Organ des Leibes.

19. When reading SCHOPENHAUER I cannot help to imagine that it is, indeed, easy to misread him on the will because of a particular objectification of the will (also read here: political perspective). After him, NIETZSCHE comes to be associated with the will to power and, what sounds even more aggressive, the glorification of action. And especially the

misreading of NIETZSCHE enters the ideology of nazi Germany. But, again, it was SCHOPENHAUER to give the term its first prominence. It is sadly ironic that he himself notes in *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* how concepts are often used, even centuries long, for the wrong purposes. His point is certainly proven.

-The higher and higher grades of the will's objectivity lead ultimately to the point where the individual [... must seek and select his] food. [...] Thus movement consequent on motives and, because of this, knowledge, here becomes necessary; and hence knowledge enters as an expedient [...] required at this stage of the will's objectification for the preservation of the individual and the propagation of the species. [...] But with this expedient [...] the world as [interpretation] now stands out at one stroke with all its forms, object and subject, time, space, plurality, and causality. The world now shows its second side; hitherto mere will, it is now at the same time [interpretation], object of the knowing subject. The will, which hitherto followed its tendency in the dark with extreme certainty and infallibility, has at this stage kindled a light for itself. This was a means that became necessary for getting rid of the disadvantage which would result from the throng and the complicated nature of its phenomena, and would accrue precisely to the most perfect of them. [... The world as interpretation] now intervenes in the sequence of phenomena of the will. Thus their infallible certainty now comes to an end. [...] Error becomes possible, and in many cases obstructs the adequate objectification of the will through actions. [...] Thus knowledge in general, rational knowledge as well as mere knowledge from perception, proceeds originally from the will itself, belongs to the inner being of the will's objectification as a [...] means for preserving the individual and the species, just like any organ of the body.

SCHOPENHAUER mentions that KANT causes a revolution in philosophy by making the intellect an active constructor of the world. He himself attempts another revolution. He dethrones the intellect. SCHOPENHAUER no longer sees it as absolute master. In his scheme the intellect as the system of knowledge *faculties* is the servant, the *instrument* of the will.²⁰

20. When SCHOPENHAUER is right on the instrumental nature of the intellect, and more and more it is confirmed that he is, it also simply follows why artificial intelligence is misconceived as long as the intellect is thought to control a 'body,' rather than the other way around (at least at the most fundamental conceptual level). In Affective Computing (1997) R.W. PICARD clings to a rationally atomistic order with particular emotions included as something like irrational reasons (pp 126-127): "A research problem in the development of animated agents is how to associate behaviors with emotions. A neglected part of this problem is the issue of the 'will,' which in agents is rarely directly implemented, but rather

emerges from the mechanisms that consider goals, values, and situations, and decides whether or not the emotion which arises is surpressed, expressed, or acted upon in a particular way." Her orientation shifts the problem to what she calls "goals" and "values." Therefore, the actual contribution PICARD makes lies elsewhere. She emphasizes improvements in the quality of information *tools* by designing them for a wider range of human behaviors, i.e., making them responsive to what are naively called separate human emotions.

An example of a much-needed attempt at departure from absolutist claims for artificial intelligence provides *Expertise in Context:* Human and Machine (1997) by P.J. FELTOVICH,

But SCHOPENHAUER's proposal is not accepted as a revolution. It is an evolution. Slowly but undeniably behavioral sciences are established showing that behavior, indeed, is determined by a wide range of factors, not only by how a person consciously intends to act. The work of psychotherapist E.T. GENDLIN, his pivotal concept being that of experiencing, aims at reintegrating such insight into philosophy. See also *Cultural Materialism: The Struggle for a Science of Culture* (1979) by anthropologist M. HARRIS (1927-2001). In *Culture, People, Nature* (seventh edition, 1997) HARRIS applies the point of view of cultural materialism (p 102):

This research strategy holds that the primary task of cultural anthropology is is to give scientific causal explanations for the differences and similarities in thought and behavior found among human groups. Cultural materialism makes the assumption that this task can best be carried out by studying the material constraints and opportunities to which human existence is exposed.

My interest in the particular view of SCHOPENHAUER is that he radically sets a limit to the rationality underlying signs. See § 6.5 for an overview of structural sign determinants.

Here I already indicate where SCHOPENHAUER and PEIRCE differ in their ideas on the determinants of behavior, or conduct. The latter proposes pragmatism as an essentially rationalist doctrine. Conduct is controlled by the intellect. In this sense, a subject's will is free because he first of all controls his intellect.

According to SCHOPENHAUER it is the other way around. In his *Preisschrift über die Freiheit des Willens* (1839, p 206) he comments on the incommensurability of the concepts of will and freedom. The intellect is an instrument of the will. Inquiring after what controls the will only leads to a concept of the will at yet another level, etcetera. In actually quite a Hegelian fashion his conceptualization ends and starts with the will. Anyway, SCHOPENHAUER extends the meaning of the concept of the will far beyond the more daily meaning PEIRCE applies. It is thus difficult to compare their views on this concept taken is iso-

K.M. FORD and R.R. HOFFMAN (editors). However, it lacks more widely productive conceptual grounds.

Despite their authors' explicit claims there are many publications that are not really about *artificial* intelligence, after all. Instead, many authors apply concepts from machine computation and, more generally, cybernetics for theorizing on *human* psychology, often calling it cognitive science. I refrain from

providing any references, with the exception of The Mind's New Science: A History of the Cognitive Revolution (1985) by H. GARDNER who sketches an illuminating overview. What is currently known as cognitive science does not deal with the Schopenhauerean concept of the will. Of course, as an axiom the will cannot be empirically demonstrated, but neither can the presumably rational assumptions of today's cognitive scientists.

lation. For example, SCHOPENHAUER readily admits that knowledge influences action. What he writes about is what he considers the *essence* of action. And that essence doesn't lie in any separate plan for action (p 143):

[N]ur die Ausführung stämpelt den Entschluß, der bis dahin noch veränderlicher Vorsatz ist und nur in der Vernunft, in abstracto existirt. In der Reflexion ist Wollen und Thun verschieden: in die Wirklichkeit sind sie Eins.

Only the carrying out stamps the resolve; till then it is always a mere intention that can be altered; it exists only in reason, in the abstract.

SCHOPENHAUER and PEIRCE both propose productive theories about the general relationship between knowledge and behavior. The value of SCHOPENHAUER lies in his convincing realism, often mistaken for pessimism. It seems odd to apply the label of realism on someone who is especially known for his transcendental idealism. However, SCHOPENHAUER really is a great teacher for seeing the world as it is because he directs attention at how particular things individually act. Then gain, often a person is not content with the current state of the world. When he wants to change it to the measure that surpasses immediate solitary action, he needs – the conviction of acting according to deliberate – plans. For supporting such a normative attitude PEIRCE offers more. The paradox is that the person who can best be portrayed with SCHOPENHAUER is best served to act with PEIRCE as a guide. For the fiction of his free will is necessary to aim conduct at complex change. SCHOPENHAUER is mainly an observer, not an engineer.

6.4 converging schemes

I reiterate that SCHOPENHAUER starts his conceptual development from an individualistic perspective. He retains this purely psychological perspective to the extent that *knowledge* is grounded in – with me borrowing VOLOSHINOV's phrase here – individualistic subjectivism. Every individual's *behavior* is social, though, which immediately follows from its empathic faculty.

The distinction between personal knowledge and social behavior is important. It helps to understand how for example SCHOPENHAUER and VOLOSHINOV, though starting from opposing positions, end up with conceptual schemes that are quite similar. Another attempt at such synthesis provides A. SCHÜTZ with *The Phenomenology of the Social World* (1932). My point is to illustrate how explicitly stated first principles about psychology (or sociology) may be practically mitigated by sociological (or psychological) orientations. For my illustration this paragraph concentrates on VOLSHINOV and traces how he arrives at a balanced view.

VOLOSHINOV doesn't start reasoning from a separate individual. His first

assumption is sociological in nature. It concerns the existence of an *organized collection* of individuals. Then it remains to be observed how he accounts for the equally inevitable psychological orientation. For the time being, VOLOSHI-NOV argues that social life is grounded in ideologies, as Marxist theory has it. This is exactly why he writes that (1929, p.9)

[p]roblems of the philosophy of language have [...] acquired exceptional pertinence and importance for Marxism.

For, he continues,

[a]ny ideological product is not only itself a part of a reality (natural or social), just as is any physical body, any instrument of production, or any product for consumption, it also, in contradistinction to these other phenomena, reflects and refracts another reality outside itself. Everything ideological possesses *meaning*: it represents, depicts, or stands for something lying outside itself. In other words, it is a *sign*. *Without signs there is no ideology*.

Placing such emphasis on ideology, it is reasonable to expect VOLOSHINOV to explain what he means by it. But he *avoids* the immediate question of ideology by practically substituting semiotics for it (p 10):

The domain of ideology coincides with the domain of signs. They equate with one another.

Wherever a sign is present, ideology is present, too. *Everything ideological possesses semiotic value*. With ideology as meaning at the level of a social group, VOLOSHINOV then seems set on a direct course to declare his support for abstract objectivism. The decisive departure, however, originates from a main tenet of Marxism. It is the insistence on change. Carefully, VOLOSHINOV creates some confusion about the meaning of ideology. In fact, he subsequently establishes different meanings (p 14):

A word [...] is neutral with respect to any specific ideological function. It can carry out ideological functions of *any* kind[. ...] Moreover, there is that immense area of ideological communication that cannot be pinned down to any one ideological sphere: the area of *communication in human life, human behavior*.

But pinning it down as a separate concept is precisely what he continues to do: [T]he material of behavioral communication is preeminently the *word*. The locale of so-called conversational language and its forms is precisely here, in the area of behavioral ideology.

VOLOSHINOV now applies an originally sociological term, ideology, in a *psychological* situation too:

Although the reality of the word, as is true of any sign, resides between individuals, a word, at the same time, is produced by the individual organism's own means without recourse to any equipment or any other kind of extracorporeal material. This has determined the role of word as the semiotic material of inner life - of consciousness (inner speech). [... T]he problem of individual consciousness as the inner word (as an inner sign in general) becomes one of the most vital problems in philosophy of language.

It is a both remarkable and highly productive turn of perspective. At the same

time, it can hardly still be called Marxist. Where it is not necessary to pay lipservice to party doctrine, development of dialogical theory becomes much more focused (WOLD, 1993). But VOLOSHINOV needs to maintain his 'ideological' balancing act. He introduces Marxism's trump card, i.e., the concept of change (p 19):

[T]he word is the most sensitive *index of social changes*[...] The word has the capacity to register all the transitory, delicate, momentary phases of social change.

So, what essentially starts as an individual contribution (behavioral ideology), may end up acquiring social status (p 18):

It is essential above all to determine the *meaning of any given ideological change in the context of ideology appropriate to it*, seeing that every domain of ideology is a unified whole which reacts with its entire constitution to a change in the basis. [... p 20] And it is here, in the inner workings of this verbally materialized social psychology, that the barely noticeable shifts and changes that will later find expression in fully fledged ideological products accumulate.

Marxism requires that change results from human activities with participants organized in classes. If in proven mathematical fashion I take *the separate individual* as the minimum size of a class, the correspondence between the assumptions of SCHOPENHAUER and VOLOSHINOV becomes immediately clear. What the latter (p 23) concludes with respect to the life of signs is equally well concluded from how the former argues about conflicting objectifications of the will:

Existence reflected in sign is not merely reflected but *refracted*. How is this refraction of existence in the ideological sign determined? By an intersecting of differently oriented social interests within one and the same community, i.e., *by the class struggle*. [...] As a result, differently oriented accents intersect in every ideological sign. Sign becomes an arena of the class struggle.

This social *multiaccentuality* of the ideological sign is a very crucial aspect. By and large, it is thanks to this intersecting of accents that a sign maintains its vitality and dynamism and the capacity for further development.

The crucial concept is that of social interaction. For SCHOPENHAUER empathy that mitigates the egoism of the individual as a unique objectification of the will. Reasoning from the opposite direction, VOLOSHINOV nevertheless assumes a similar variety (p 34):

[A] rigorous distinction must always be made between the concept of the individual as natural specimen without reference to the social world [...], and the concept of individuality which has the status of an ideological-semiotic superstructure over the natural individual and which, therefore, is a social concept. These two meanings of the word "individual" (the natural specimen and the person) are commonly confused[.]

Indeed, SCHOPENHAUER is often wrongly accused of a pessimism featuring man as singular egoist. He certainly doesn't harbour false illusions about the extent of man's social interests. But an egoism that *includes* an empathic faculty

is an essentially social concept. That is why their apparently different conceptual schemes are, after all, quite similar. And it is therefore allowed to draw essentially identical conclusions from them. Compare the possible range of empathic egoism (SCHOPENHAUER) with how VOLOSHINOV (p 87) posits the variety of social orientations in behavior:

With regard to the potential [...] addressee, a distinction can be made between two poles, two extremes between which an experience can be apprehended and ideologically structured, tending now toward the one, now toward the other. Let us label these two extremes the "I-experience" the "we-experience."

6.5 toward a group picture of sign users

Which characteristics of the sign user especially come out when his solo picture is drawn taking account of SCHOPENHAUER's concept of will?

- 1. The sign user is a person with *subjective* knowledge. The world is his interpretant (also read: interpretation).
- 2. But it is interpretant for which a 'cause' exterior to the knowledge faculties exist. His intelligence is an instrument of his will. And what he wants, what his motives or interests are, he wants for himself. So, he is portrayed as an *egoist*.
- Of course the sign user can, and often will, support a group. For he is an *empathic* egoist. But, still, when he does act in the interests of one or more other persons it always is because he ultimately hopes to profit himself. That is his interest in group membership.
- 3. He is not to be completely trusted. This is not a blanket value judgment. He really cannot help it that he *misleads* for he is never in complete intellectual control of his own actions, including sign use of course. His intelligence is only an instrument, imperfect at that. It is simply impossible for the part to wholly interpret the whole.

It is a compact portrait. And it is unflattering, at least for people who not only value altruism and perfect honesty but also believe they practice those values without exception. How realistic the portrait is depends on the person and, as subjective situationism suggests, on the situation the person finds himself in.

I have drawn the sign user with these characteristics for indicating the boundaries of what a sign may be taken to represent. Already the doctrine of transcendental idealism implies that any sign reflects the objectified reality of its engineer. This is something quite different from representing the reality. The latter is not objectively known, by definition. Only subjectively as objectified reality. This essential characteristic of the sign is sketched in Figure 6.5.1.

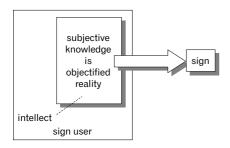


Figure 6.5.1. Subjectivity: sign as representation of interpretants.

With the will in control of the intellect, rather than the other way around, the sign is issued as a message *from ultimately the sign user's will*. It doesn't provide a disinterested representation of the subject's objectified reality. What it represents foremost, as Figure 6.5.2 indicates, are the individual *preintellectual* interests²¹ of the sign user.

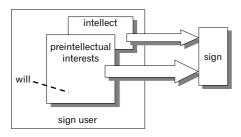


Figure 6.5.2.

The egoistic (but with egoism always including empathy), preintellectual nature of a sign.

Another consideration is that any sign, however perfectly produced from interpretants, deflects – VOLOSHINOV might say: defracts – from the whole of

21. To call interests *preintellectual* already presupposes, of course, the concept of intellect. In spite of this bias I choose this term here for emphasizing that the world as will can only be conceptually 'constructed' by the intellect, by reason in particular.

In many scientific disciplines researchers maintain that their work is value-free, that reason alone drives them. Or that it ought to, anyway. Right along with that, much work that is also called science is oriented at under-

standing the relative nature of the rational intellect. Here I mention a few publications. Approaches are widely scattered, so I don't make any pretense at overview or synthesis. I just want to demonstrate that scientific studies of behavior are not restricted to so-called rational determinants. Quite apart from the vast literature on psychoanalysis, and chosen arbitrarily, see for example *Emotions and Memory* (1942) by D. RAPAPORT, *Assessment of Human Motives* (1958) by G. LINDZEY (editor),

the sign engineer. As objectified reality, it can not express anything beyond what has earlier become exemplified by the set of interpretants of the sign engineer. Knowledge is not only subjective, but always incomplete. Thus, how GENDLIN posits his concept of experiencing is both similar to the Schopenhauerean will and reflects the Peircean irreducibility of the semiotic triad (1962, p 153):

If experiencing is not constituted of unit experiences (but only symbolizing makes it so), then it follows that experiencing is not organized in schematic relationships of units to each other, but only symbolizing makes it so.

The intellect also has incomplete self-knowledge, i.e., knowledge about the sign user whose instrument for behavior it is. What his mind doesn't (yet) interpret as objects cannot make an appearance in a sign to represent the sign user's reality. It follows that his own interests, too, are only partly, and subjectively, represented by motivational interpretants. This distinction is added in Figure 6.5.3.

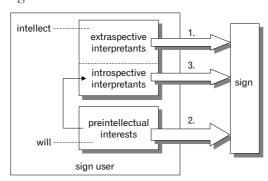


Figure 6.5.3.

The impossibility of wholly representing the self with intellectual means.

Please observe that the relationship between object and (its) sign does not at all imply consciousness. Or, as S. ROSENTHAL indicates in *Speculative Pragmatism* (1986, p 27):

Pragmatic meaning is not to be understood fundamentally in terms of language, but rather as that matrix within which language emerges. This is not to say that we have consciously explicit prelinguistic experience. At the level of everyday lived experience, language and

Modern Theories of Motivation (1974) by K.B.

MADSEN, Biological Psychology (1981) by J.W.

KALAT, The Meaning of Behavior (1983) by J.R.

MAZE, On the Evolution of Human Behavior: The

Argument from Animals to Man (1981) by P.C.

REYNOLDS, The Rationality of Emotion (1987)

by R. DE SOUSA, The Cognitive Structure of

Emotions (1988) by A. ORTONY, G.L. CLORE and A. COLLINS, Handbook of Mental Control (1993) by D.M. WEGNER and J.W. PENNEBAKER (editors) and Handbook of Cognition and Emotion (1999) by T. DALGLEISH and M. POWER (editors).

pragmatic meaning are separable only by abstraction. Language is the expression of pragmatic meaning; pragmatic meaning becomes explicit and communicable within the structures of language. Meaning, however, is not fundamentally propositional; at its basic level meaning is embodied in the activity of a purposive agent engrossed in the world, and language emerges as an expression of such active engagement. The unity of the object is brought about by the purposive activity of the human organism as expressive of a vital intentionality, not by a "thinking subject."

ROSENTHAL displays several mentions of "language," six to be exact. Her exposition gains in clarity when a distinction between language system and language use is applied. Then, her first, third and fifth mention are changed into language system, and the second, fourth and sixth into language use. Organizing concepts this way, a language system results as an "abstraction" from language uses or "pragmatic meanings." Anyway, through some sign an individual may believe he consciously experiences of an object. Then again, it may not enter conscious experiencing. Consciousness as knowledge-of-being, or whatever, is a 'situation' that lies outside the scope of this treatise.

To the extent that the intellect controls production of the sign, the egoistic nature is even misrepresented. I stress once more that the reverse relationship should be always acknowledged as a possibility, too. Figure 6.5.2 has already shown this. The sign user is *not* in complete intellectual control of sign production. So, a sign may include aspects, or elements, that don't correspond to the subject's objectified reality.

The arrows in Figure 6.5.3 are numbered. Those numbers reflect some reorganization of the major aspects required for a Schopenhauerean solo portrait of a sign user. The three aspects of subjectivity, egoism, and motivational (mis)representation, respectively, are identified at the start of this paragraph. Based on SCHOPENHAUER's conceptual system the determinants of a sign can be specified still further. His main division of the intellect is between the faculties of perception and reason. Combined with the division of the sign user's objectified reality between his own body and what is experienced to lie outside it, a matrix results. Figure 6.5.4 shows this elaboration.

The purpose of thus classifying sign determinants is to make a both credible and productive ground for it that *every* sign is produced with the sign user only partly in rational control.²² So, a sign is *reasonable*, or rational, as a result of

22. I don't claim to have developed an accurate model of, for example, interaction between body and cognition. It must 'just' be accurate enough to proceed theorizing on the possibility or impossibility of shared meaning.

On the relationship between body and sign, GENDLIN remarks (1997, p 28): "The body implies what we want to do *and say*. [... O]ur bodies shape the next thing we say, and perform many other implicit functions essential to language. [...] With linguistic and

determinants (1a) and (2a). All other determinants are unreasonable, or irrational. Determinant (3) is even preintellectual. As an exercise with SCHOPENHAUER's concept of will, recognition of irrational determinants is a vital step toward a more rational perspective on communication.

So far in this paragraph, I have concentrated on the sign engineer, that is, on the sign user who produces a sign. But a sign user is also an observer of signs. I simply propose that the process of observation and, possibly, subsequent interpretation occurs on the same ground as Figure 6.5.4 sketches for engineering. Later, Chapters 7 and 8 treat differences in sign structure for engineer and observer, respectively.

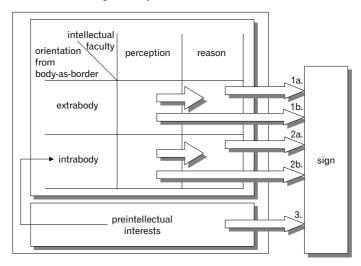


Figure 6.5.4. An overview of determinants for sign engineering.

The concept of the sign of course presupposes that it yields an interpretant objectifying reality for the interpreting subject. I suggest that the sign user's preintellectual interests determine whether or not 'something' is taken up as a sign. So, when – the faculty of – perception is actively involved, there already is a sign. See Figures 6.5.5 and 6.5.6.

Many signs never enter semiosis beyond perception. Some are, and by definition the observer tries to make reasonable sense of the sign. For the pur-

cultural elaborations, our bodies imply what we want to say, which can be typical or something very new. It can surprise us. Our bodies imply the next words and actions to carry our situations forward." One page earlier GENDLIN writes: "We have situational bodies..... The body knows the situation directly." In A Treatise on Language (1828) A.B. JOHNSON already expounds a similar relationship between experience and language.

pose of this treatise I assume that the reasoning faculty of the observer attempts to reach a conclusion whether or not the sign was, say, artificially produced. Does it originate from an object deserving of the observer's empathy? If not, further interpretation is relatively straightforward. A sign is then considered unintentional. That is, the observer will not bother himself trying to find a sign engineer's interests represented in the sign. He can – continue to – modify his objectified reality with complete devotion to his very own interests.

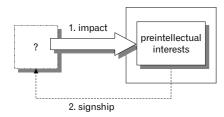


Figure 6.5.5. Signship is individually determined, too.

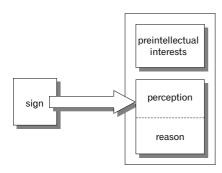


Figure 6.5.6. Perception presupposes a sign.

On the other hand, suppose the observer continues his semiosis with the assumption that the sign, indeed, expresses a(nother) will. He is then faced with far more complexity. As part of his observation effort he infers at what the sign does and does not convey about the sign engineer. What are the interests in it, and what objectified reality? And the observer needs to create an impression about the engineer's egoism versus community orientation. For example, is the observer included in the implied community of the engineer? Thus it is really not that the sign engineer has projected onto his sign less of more of the reality than the sign observer might expect. Their interests and objectified realities could be altogether different.

I don't pursue these issues here. Part ii deals with them systematically. My

preparations in Part i have put emphasis on the individual sign user. In Figure 6.5.7 I have therefore let the determinants, or rather the types of determinants, of sign engineering reappear during observation. The numbered arrows arriving at and leaving from the sign all depict projections by the sign observer. There is also an arrow from the sign to the faculty of perception of the observer. It refers to the primary observation of the sign.

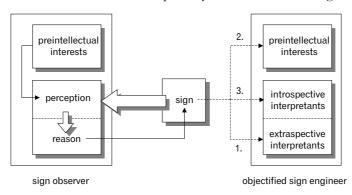


Figure 6.5.7. Interpretation of a sign believed to originate from an equally-willed sign engineer.

Concluding this chapter, and Part i of this treatise, I suggest to imagine an ideal sign. It is a short preview of Chapters 7 and 8 in Part ii.

What does the sign engineer represent in his ideal sign? Suppose no constraints exist on what he both wants to, and can, express. What I then take as ideal(ization) is that he makes behavior of objects completely explicit. This he accomplishes by modeling situations, and then placing objects with their behavior in them. The metapattern, described in Chapter 4, supports the engineering of information models where these qualities are easily recognizable. But so far, all that the sign stands for only concerns the objectified reality external to the sign engineer. He has an internal objectified reality, too. To ideally reflect this, the sign must express its original engineer's behavior. Even more importantly, what interests underlie - his engineering of - the ideal sign? What are his assumptions about his internal and external objectified reality. Making his particular interest(s) 'visible' requires representing that engineer's particular situation when producing the sign, i.e., preempting an answer to the question of how his behavior fits in his objectified reality. In sign engineering, the metapattern can also be used for modeling the relevant introspective interpretants.

This so-called ideal sign is only determined by influences numbered [1a] and [2a] (see Figure 6.5.4). An ideal sign first of all implies complete and perfect self-knowledge on the part of the engineer. Secondly, for an ideal sign the

engineer derives perfect concepts from his perceptive interpretants.

Both requirements are impossible to fulfill. SCHOPENHAUER'S concept of will determines that signs run into limits of rationality. There are *really* no ideal signs in a rational sense. In fact, for any particular sign it will always be impossible to specify how far it is removed from any such ideal. As I have already indicated, sign engineering involves irrational determinants, too. As a corollary, interpretation is an act of much guesswork (also read: construction) on the part of the sign observer. For his task is also highly complex because the observer has his picture drawn with the same characteristics as the engineer of the sign. That is, he cannot completely trust his own (intellectual) judgment. And he fundamentally is also an empathic egoist. I can of course imagine some ideal frame of interpretation for the sign observer. He is then aware of his own assumptions for objectifying his external reality. As for the observer's internal objectified reality, he fully understands the situation he experiences for sign observation, and – the goals of – his behavior in it.

With realistic limits on rationality, sign exchange between a sign engineer and a sign observer yields a complex group picture. It therefore makes urgent scientific sense to explain *sign use across sign users* with more variables than communication theories resting on naive realism and/or analytic rationality offer. SCHOPENHAUER's philosophy leads to the recognition that behavior also has irrational determinants, even *essentially* so.

Determinants, whether they lie within or outside the (rational) intelligence of the sign user, are not further specified here. Sign use always partly being irrational is already a sufficient assumption for developing a much richer theory of communication. It is the goal for Part ii where the focus shifts from semiosis in the individual sign user to the exchange of signs between individual participants.²³ For a conceptual information model, too, is always made to conduct relationships.

23. The transition seems bigger than it really is, though. Communication that occurs strictly within an individual sign user is structurally largely identical to communication

between different sign users. See Chapters 7 and 8 for a development of sign structures from the perspectives of sign engineer and sign observer, respectively.

part ii

ANATOMY OF MEANING

prelude 7

After the extensive groundwork of Part i, a now relatively simple task remains. What follows from those grounds when individual sign users exchange signs? That is, emphasizing a structural view, what is subjective situationism's anatomy of meaning?

It only takes Chapters 7 and 8 to develop this anatomy. The other four chapters of Part ii are all critical; you do not miss anything important in a constructive way by skipping them.

The first four paragraphs of Chapter 7 mainly serve to introduce widening the scope from a single sign user to sign exchanges between sign users. Several aspects of communication are reviewed, and other interpretations are suggested, from the perspective created in Part i.

A traditional linguistic approach to meaning is often constrained at the semantic level (see Chapter 5). From there, theorists try to explain meaning from a given sign outwards. First and foremost, they consider a sign as a, say, self-contained system. It is believed to naively represent reality through one-to-one correspondences between its elements and real objects.

It is however impossible to label such an approach simplistic. As its core assumptions still leave many aspects of meaning unexplained, subsequently, intricate elaborations are usually added. Highly complex theories result.

SCHOPENHAUER also provides inspiration to refrain from explaining meaning from an unnecessarily limited linguistic perspective. He argues for three modes of causality. One mode entails causes of which the effects are motivationally induced.

Chapter 7 suggests that labels of (a) motivation-oriented causes and (b) signs with constituting semiosis are actually synonymous. Even with this assumption – introducing causation as a ground for sign exchange! – the last paragraph of Chapter 7 does not detract from the principle of a sign's representational

nature. It is the sign's object that comes out differently, though. In general, its object is the sign engineer's will. For a particular sign, it is a collection of particular motives or interests. The metapattern is applied as a modeling technique (see Chapter 4) to indicate in more detail what a sign stands for.

In terms of cause and effect, a motive encompasses the process-as-planned from cause to effect. The sign engineer therefore accounts for the sign observer(s) in his sign annex cause. For it is the observer who is addressed to exhibit the effect as desired by the engineer.

The sign-is-cause view augments traditional concepts of language. For every sign now turns out vastly more intricately structured. The ontology of subjective situationism suggests that it is an insurmountable reduction to factor a sign into discrete elements while claiming that each element provides just a single contribution to the sign's overall meaning. Instead, a sign is better viewed as a convolution – of which a model representing objects with situationally distinctive behavior can be designed with the metapattern – much like a chromosome. As a potential cause, a sign reflects (also read: represents) its engineer in all his *multiplicity*. It therefore seems reasonable to posit that as far as representation goes, one and the same sign element – which already is a reduction, of course – serves in a multitude of configurations. Its contributions will of course vary with the configurations (also read: situations). A sign, then, is like a tight bundle that can be unwrapped in many ways. It is offered in exchange by the sign engineer. He aims it at one or more sign observers.

The ennead explains how a multitude of focus shifts along the ideal dimension, with the result of each interpretative step added to the body's (cognitive) mass, can generate a large variety in effect from a seemingly compact cause. By the way, this hypothesis only adds to the evolutionary advantage of sign exchange at this level of intricacy.

Chapter 8 is an immediate continuation from Chapter 7. Corresponding to the difference between cause and effect, what a sign represents is different for its engineer and observer, respectively. The metapattern is applied for showing their essential differences.

chapter 7

THE POLITICAL NATURE OF HUMAN EXCHANGE

All *actions* a sign user performs are ultimately determined by his will. It follows from SCHOPENHAUER's scheme which I have outlined in the last chapter of Part i. The will itself in the Schopenhauerean sense is rationally unknowable. The will is the ultimate ground of knowledge. And as its ground the will is *not* the intellect. Even less does the will coincide with the faculty of reason. For the reason constitutes the intellect as — only — one of its parts, or roots as SCHOPENHAUER specifies.

The relationship between the will and the intellect is even such that the intellect is an *instrument* of the will. Nothing more, nothing less. The insolvable puzzle for rationality is of course that the intellect by definition doesn't know, not essentially and wholly, what 'it' serves. The most a sign user can do with his intellect is to induce onto its objectified reality the existence of what it is instrumental for. He thus gains an at most partial belief. That is precisely what SCHOPENHAUER does, first in *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* (1813, 1847), and next in *Die Welt als Wille und Vorstellung* (1818, 1844, 1859). He engineers the sign *will* and thereby includes an ultimate background interpretant in his conceptual system (suggesting an ultimate object annex situation *as* reality).

The intellect does *not* control the will. The intellect *serves* the will. The Schopenhauerean configuration of concepts has profound implications for explanations what really happens when one sign user is involved in an exchange with one or more other sign users. My treatment of such exchanges makes up Part ii.

This opening chapter of the treatise's second part is dedicated to introducing additional concepts and terminology. My presentation in §§ 7.1 through 7.4 necessarily lacks systematic cohesion from the point of view of established paradigms. For I am first of all exploring basic concepts that I may later

fruitfully deploy in a *different* conceptual configuration. But already in § 7.5 the puzzle starts to come together with important pieces finding their tightly integrated position. Chapter 8 completes the picture of the anatomy of meaning as-a-dynamic-system.

In general I refrain from providing empirical evidence. For, as already indicated in the Introduction, empirically testable hypotheses that correspond with subjective situationism lie outside the scope of this treatise. I engage in ontological design as innovative speculation. It is finished when I reach a well-rounded ontology that suggests improvements in both *what* business information models construct as representing reality and *how* the modeler interacts with (other) stakeholders.

Chapters 7 and 8 develop sign structures that differentiate between sign engineer and sign observer. They allow for a much richer analysis of what a sign "stands for" (PEIRCE) than what VOLOSHINOV criticizes as "abstract objectivism." A conceptual information model is also a sign. The sign structures I present here illuminate more 'interestly' (SCHOPENHAUER) what such information models *represent*.

7.1 thematic constraints

As in Part i, in Part ii I attempt keeping concepts as widely applicable as possible. I make some limiting assumptions, though. I believe these constraints on my subject matter make the development easier to follow.

The first constraint reads that I suppose a sign user to be a human being, a person. I am therefore interested in exchanges between persons. But then, not all their exchanges are relevant for this treatise.

So, as a second constraint I limit my exposition to a particular category of exchanges. Now SCHOPENHAUER doesn't claim it as his original insight¹ but in *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* he already remarks on the nature of (ex)changes that (p 62)

[d]ie Kausalität also, dieser Lenker aller und jeder Veränderung, tritt nun in der Natur unter drei verschiedenen Formen auf: als *Ursache* im engsten Sinn, als *Reiz*, und als *Motiv*.

[t]hus causality, this director of each and every change, now appears in nature in *three* different forms, namely as *cause* in the narrowest sense, as *stimulus*, and as *motive*.

About changes of his first category, i.e., resulting from "cause in the narrow-

1. The classification of causal modes SCHOPENHAUER presents may now appear as evident. The early development of empirical science in the seventeenth century, however,

'causes' designs of widely competing views of causation. See *Causation in Early Modern Philosophy* (1993) edited by S. NADLER.

est sense," SCHOPENHAUER explains

daß der vorhergehende Zustand (die Ursache) eine Verändering erfahrt, die an Größe der gleichkommt, die er hervorgerufen hat (der Wirkung). Ferner ist nur bei dieser Form der Kausalität der Grad der Wirkung dem Grade der Ursache stets genau angemessen, so daß aus dieser jene sich berechnen läßt, und umgekehrt.

— that the preceding state (the cause) undergoes a change which in magnitude equals the change (the effect) brought about by that state. Further, it is only in this form of causality that the degree of the effect always corresponds exactly to that of the cause, so that the one can be calculated from the other.

With a stimulus, representing his second category of forms of causation, though,

sind [...] Wirkung und Gegenwirkung einander nicht gleich, und keineswegs folgt die Intensität der Wirkung, durch alle Grade, der Intensität der Ursache: vielmehr kann, durch Verstärkung der Ursache, die Wirkung sogar in ihr Gegentheil umschlagen.

— action and reaction are not equal to each other, and the intensity of the effect through all its degrees by no means corresponds to the intensity of the cause; on the contrary, by intensifying the cause the effect may even be turned into its opposite.

The third form of causality, SCHOPENHAUER reports,

ist das *Motin*: unter dieser leitet sie das eigentlich animalische Leben, also das *Thun*, d.h. die äußern, mit Bewußtsein geschehenden Aktionen, aller thierischen Wesen. Das Medium der Motive ist die *Erkenntniß*: die Empfänglichkeit für sie erfordert folglich einen Intellekt.

Daher ist das wahre Charakteristikon des Thiers das Erkennen, das Vorstellen.

Persons involved in exchange resort to *all* three forms of causation. I give the example of John wanting one of Bill's lower legs lifted, with Bill sitting down in a chair. John can make it happen "in the narrowest sense" of causation by lifting up Bill's leg. Then John carries its full weight (and overcomes any additional resistance). A stimulus would be a light tap on Bill's knee. When hit at the right spot, the proverbial knee-jerk reaction of Bill is to lift up his lower leg. Finally, John may ask Bill to lift his lower leg. This sign, or information, results in a motivational interpretant with Bill who then proceeds to perform the action himself. It is in this sense that GREGORY BATESON (1904-1980) remarks (1972, p 381):²

The technical term "information" may be succinctly defined as any difference which makes a difference in some later event.

I restrict the main argument of this treatise to exchanges based on signs which

are engineered. It is irrelevant whether the engineer is 'signing' consciously or unconsciously. As the previous chapter has demonstrated, any sign is to some extent the product of irrational determinants.

Suppose John attempts to lift Bill's leg by his own sheer force or by administering a stimulus. Then Bill usually takes such an action *also* as a sign, often even primarily so. His motives are engaged by the exchange, too. Bill may, or he may not, like John to pull his leg by cause in the narrowest sense, or by stimulus. Next, Bill may perform a – by definition – motivated (re)action based on John's action *taken as a sign*.

The third constraint limits the sign-based exchanges of persons to business. Instead of striving after a formal definition I offer some concepts closely related to that of business. Actually, already in 1932⁴

[t]he various senses in which the word is now used all show loss of relation to those of 'busy.'

I believe restoring this orientation at action as the primary sense of business is productive. For then the most important characteristic of business is that it is *not* conducted in private. Of course, private is a problematic concept, too. My emphasis is that business, sooner or later, always requires transactions, i.e., actions involving two or more persons. Transactions are exchanges, vice versa.

A business organization may very well consist of a single person. No 'business,' however, is viable when it doesn't do 'business' with other parties. I don't find it relevant for the concept of business whether or not transactions are commercial. Organizations and persons in both the public and the private⁵ sector are all engaged in business.

- 3. Along these lines, sign and design are synonymous. And the sign engineer is of course a sign designer. No, excuse me, he is a design designer. That is, a designer. Or a signer, for short, which completes the loop. That such a circular movement occurs should not come as a surprise for I started out from the assumption of a *sign* user. The relief sketched by introducing concepts such as engineer helps to lead the loop(s) to an interpretation from a focus with a higher precision.
- 4. See the lemma *business* (p 138) in *The Universal Dictionary of the English Language* (1932) edited by H.C. WYLD.
- 5. On purpose I have reused the term private, rather than profit. The change of focus is designed to alert the reader to a different context, making it clear that here 'private' is the signature standing for a different object than the homonymous signature a few sentences earlier. There, private was even placed in opposition to business. Such differences should underline the importance of the *situational* nature of behavior. Only when signs are recognized as a configuration of signature, context, and intext is it possible to interpret reality as an unambiguous configuration of object, situation, and behavior.

The conduct of business requires information. The premise of this treatise is that it is often both possible and beneficial⁶ to apply tools for information processing. Tools are increasingly counted upon to store, process, distribute, etcetera, information in correspondence with the design⁷ models specified for them. Such a model is also called a conceptual information model. It is *conceptual* because there is not yet any immediate construction involved. It is an *information* model because it is oriented at construction – and implementation, use, maintenance, and, ideally, also eventual removal – of a tool that is more generally called an information system.

I can now succinctly express the fourth constraint. The anatomy of meaning I present here in Part ii concerns the sign exchanges between persons who are involved in the modeling of an information system for business.

With these constraints stated, I right away follow with a disclaimer to the extent that *they are not really fundamental*. I therefore repeat what I have written at the start of this paragraph. These constraints should especially help to provide assistance imagining where and how to put this theory to practice. But again, I pretend my suggestions only as an example. I believe the anatomy of meaning that Part ii adds to subjective situationism is just as generally applicable as what Part i suggests about the individual sign user.

7.2 politics of modeling

Digital information technology is increasingly applied for information systems. Its digital nature requires highly analytical dedication at construction. Often a person with (some) experience in computer programming is 'promoted' to the job of developing conceptual information models.

The traditional career path is the cause of much confusion about the nature of modeling. For regularly the technical specialist tends to persist in his rational-analytical attitude. Then he first of all misses that he himself is actually not completely reasonable, at all, but too a large extent motivated by preintellectual interests. Secondly, with such an attitude he fails to accept that other per-

6. Stated like this, it is jumping to a conclusion. I have included this mention of benefits in this one-sided manner to draw attention to the often implicit assumptions about the application of information technology. Rather, different persons will have different interests and corresponding perspectives on advantages and disadvantages. Information

modeling as a process should very much be concerned with making *different* assumptions (also read: interests) explicit.

7. In several places, for example in *Informatiekundige ontwerpleer* (1999), I argue that the terminology of analysis and design should be reversed.

sons have interests for which they cannot find or, anyway, cannot articulate 'reasons.'

The negation or, often even worse, neglect of interests has all sorts of effects. I assume the most important variables are the intensity of interests and the power balance in the exchange. Negating or neglecting interests can even have to opposite effect. Suppose one person makes a proposal to another person in which the former doesn't take latter's interests into account. When the other has both strong enough interests to disagree and feels powerful enough to oppose, he may in fact continue pursuing his own interests with increased intensity. Failing to take interests seriously is the one sure way of *not* developing a conceptual information model that is sufficiently accepted.⁸

For an understanding of what happens in human interaction a radically political "image of organization" (G. MORGAN, 1986) is most helpful. I characterize an exchange as *political* when more than one interest among more than one participant (also read: stakeholder) is involved. So, when John lifts a stone in his enduring privacy, I consider it an unpolitical act. However, it immediately *is* political when someone else has an interest in that stone and therefore in what John's lifting of it may bring about. ¹⁰

8. I am aware that the start of this paragraph doesn't rest on sound empirical research. I offer it as my personal observation. I think it is valid enough as an introduction to my emphasis on politics.

9. Though assuming the rational nature of behavior, I. MANGHAM also views an individual person as unique. This is already sufficient 'reason' to adopt the political perspective of The politics of organizational change (1979, p xi): "I believe that at the hub of all social life is the process of face-to-face interaction[. ...] I consider nearly all behavior to be fundamentally political in the sense that when one individual interacts with another. more often than not he is motivated to do because the encounter provides him with some benefit, even if that benefit may be nothing more than a reduction of uncertainty." In my anatomy of meaning, questionbegging reservations such as "nearly" and

"more often than not" are completely absent. As if such positive clarity still needs an excuse, G. JORDAN and C. WEEDON state in their *Cultural Politics* (1995, p11): "In this book, we make a scandalous claim: *everything* in social and cultural life is fundamentally to do with *power*. Power is at the center of cultural politics. It is integral to culture. *All signifying practices – that is, all practices that have meaning – involve relations of power*. They *subject* us in the sense that they offer us particular subject positions and modes of subjectivity."

10. In *Politics & Philosophy* (1991), s.s. KLEIN-BERG has devoted a separate chapter to "definitions of politics." He mentions (p 19) "a number of concerns that may be relevant to the concept of politics." He continues to state that (p 24) "definitions of politics are to be assessed not as right or wrong but as more or less appropriate to the task in hand. What complicates matters is that we cannot assume

An action is usually only labeled political when interests *might* conflict. The problem with limiting what is political to the value of an action attribute is of course that a criterion is required for what counts as conflicting. This difficulty is bypassed altogether when *every* (possible) exchange between persons is considered political. From a Schopenhauerean point of view it is also perfectly consistent to do so; every person is interest-driven by nature. Recognizing all multiperson exchanges as essentially political prevents a purely rational approach that would severely limit fulfillment of 'real' interests.

Much practical advice on conduct in human interaction in fact simply assumes the irrational nature of determinants. A book like *You Can Win at Office Politics* (1984) by R. BELL serves as a popular illustration.¹¹ The author states his "basic decision-making principle of game theory" as follows (p. 5):

For each of your choices, consider only what you don't want but are afraid you might get, and pick the alternative that looks best when viewed in this light.

The single interest, or motive, that BELL is addressing appears to be the avoidance of fear. Apparently he sees it as fundamental in man. His advice reads that a person becomes aware of his fear(s), then assesses whether or not those fears are justified, and when they are attempts to avoid them by 'acting' away from that 'danger zone.'

I don't believe that human behavior is only about getting out, and staying out, of trouble. When conditions are favorable it is also about getting into a

agreement about what that task is." It is precisely for this reason that I propose a 'definition' of politics at the level of the individual interest holder. A distinction that KLEIN-BERG emphasizes is that between observer and participant. He offers as a definition (p 25) "[f]rom an observer's perspective [...] that politics is that area of human activity which is undertaken in pursuance of any participant's definition of how the affairs of a community ought to be regulated." What is left unexplained is the concept of community. I will attempt to illustrate it as a consequence of personal politics.

11. There is a host of books with practical advice, often written with highly practical psychological acumen. The classic text of this genre is *Games People Play* (1964) by E.

BERNE. C.J. SINDERMANN targets an audience of scientists with Winning the Games Scientists Play (1982). Some other examples are The Gentle Art of Verbal Self-Defense (1980) and The Gentle Art of Verbal Self-Defense at Work (2000) by S. HADEN ELGIN, Office Warfare (1985) by M. MOATS KENNEDY, and Emotional Intelligence (1995) and Working with Emotional Intelligence (1998) by D. GOLEMAN.

Such publications can all be shown to build, either implicitly or explicitly, on behavioral theories of meaning. And that is precisely what the term pragmatism is also applied for as a label. Almost invariably, the concept of situation appears. Another example of a scientific treatment featuring meaning as situational is *Meaning, Communication, and Value* (1952) by P.KECSKEMETI.

situation of opportunity, and staying there and preferably even improving upon the opportunity. I agree with BELL, however, that irrationality of behavior is natural. It is SCHOPENHAUER's contribution, following KANT who follows HUME, to radically recognize the limits of rationality and even build a conceptual (also read: subsequently rational) system from that insight.

I proceed to call a person holding an interest a *stakeholder*. An especially valuable aspect of this concept is that stakeholders may also identify *themselves* as such. A proponent doesn't get every claim to stakeholdership honored. But especially, and regardless of right or wrong, rejection is a highly political act on the part of the rejector.

Mainly for purposes of illustration I mention some types of (potential) stakeholder regarding business information modeling. With such variety it is evident that dynamics of interests soon become highly complex.

I start with the simplest stakeholder configuration imaginable. Then a particular person uses a completely isolated information system. Without any noticeable effects elsewhere it may of course be wondered why the person uses it in the first place. It is nevertheless conceivable. Now suppose, too, the tool in question is designed, constructed, and implemented all by just that single person, too. Throughout the information system's life cycle he is the only stakeholder. It indeed is a rare case.

With any information system of some complexity, several persons are involved in its conception, design, construction, use, management, audit, etcetera. Even more people may be using it as their tool for operational activities. And many persons are affected by its results. They are *all* stakeholders. And there is one critical activity where their influence has most impact for real consequences. They must join conceptual information modeling with their voices. For it is through modeling ¹² at the conceptual stage that a tool is *essentially* determined. Specifying some of the roles persons ¹³ may occupy at conceptual information modeling helps to appreciate the extent of stakeholdership.

There will be a person whose formal responsibility it is that the information

12. At this point I don't assume anything about the eventual model's quality. It could very well be that no model is drawn up. But such absence fundamentally determines the tool, too. So, all that I am stating here is that there is some activity, and I call it modeling, during which the major characteristics of the tool are specified, implicitly or explicitly.

13. It is customary to entitle organizational entities with roles. I don't believe, however, that a committee, for example, can exhibit interests in the Schopenhauerean sense. Therefore, I persist in analysis at the personal level. The introduction of other than persons I consider a practice of reductionism. Any collective entity should be decomposed into the participating persons. They at least exhibit 'real' interests.

system becomes available. He is the *sponsor*. It is important to realize that there are good sponsors, bad sponsors, and persons with sponsoring qualities that lie somewhere in between. All I am arguing here is that there *is* a sponsor, whatever his abilities.

During the activity of modeling, by definition the corresponding – version of the – tool is not yet available. So, at that stage there are no users but *prospective (direct) users*. Supporting their work or, for that matter, leisure activities, education or whatever is the raison d'être of the tool. Now with a large-scale information system it is normal that not every user makes the same use. It helps to classify prospective users. In extremely varied and therefore complex cases, *every* individual user may need to be directly involved in conceptual modeling.

Once it is operational, keeping an information system in working condition requires system management. At the time of conceptual modeling, a variety of such tasks may lead to different kinds of *prospective system managers*. There may also be *prospective security officers* and *prospective auditors*.

An information system is made operational through all sorts of activities by all sorts of persons. They usually act in a temporary capacity, their involvement ending, at least under the heading of their corresponding roles, when their change-oriented tasks are fulfilled (or, what regretfully also happens, are miserably bungled). I give some examples of types of change agent.

The collection of related activities to get an information system operationally established is usually called a project. Then there is also a *project manager*.

When the information system requires software engineering, another role during modeling is that of *prospective software engineer* or *programmer*.

And there is the role of *conceptual modeler*. The more stakeholders there are, the more his role is directing the modeling process, rather than specifying in detail the actual model all by himself.

It is easy to extend the list of (potential) stakeholders. Customers may be affected by a new information system, and suppliers. There may be additional shareholders to consider when the changes affect their 'stakes.' And all sorts of government agencies.

Any attempt at a complete list of stakeholders is in vain. Especially regarding technological developments, old specializations fall into decay and new specializations appear on the scene. The upshot is that stakeholders may be many, and varied. Their number and variety make it especially important to conceive of modeling as a process in a political arena.

For 'practical' conceptual grounds in the arena of business information modeling I extend subjective situationism with an explicit anatomy of meaning. In preparation I first remove some traditional theoretical confusion about the concept of meaning.

Does etymology provide any insight? Causing me to research word origins, and my subsequent proposal for the 'object' of meaning, are some writings in the English language on "the meaning of meaning." Without fail their authors feel compelled to make clear that there are actually two major meanings of interest. The first is that a particular person may mean something. His meaning is closely associated with his intention, opinion, etcetera. In short, it is something intrapersonal. The second important meaning of meaning concerns, not a person, but a sign. It is interpersonal. In this respect the meaning of a sign is taken as what it objectively stands for, i.e., its meaning is the 'other' object. The underlying assumption of realism is of course that the object that is 'meant' really exists.

For example in German this whole matter is originally hardly relevant. The word *Meinung* only has connotations¹⁵ with individual knowledge: Ansicht, Anschauung, Standpunkt, Urteil, Wertschätzung. And for what a sign means there exists a completely different word: *Bedeutung*. With separate terms available no confusion arises about meaning as exists in English.

The modern English language is the result of many influences. *The Concise Oxford Dictionary* (edited by D. THOMPSON, 1998) explains that (p ix) "[t]he earliest sources are Germanic, Norse, and Romanic." I would say that the original *Bedeutung* of the English word meaning coincides with *Meinung*. I derive support for this position from *Herkunftswörterbuch* (edited by G. DROSDOWSKI and P. GREBE, 1963) that relates the original *Bedeutung* of the verb *meinen* to *wähnen*.

14. See for example The Meaning of Meaning (1923) by C.K. OGDEN and I.A. RICHARDS. Their book is interesting in many respects. It presents, on page 11, the semantic triangle. The authors don't refer to PEIRCE at that point, though. But his work is treated, and elaborately quoted from, in one of their appendices. It is plausible that the triangle of OGDEN and RICHARDS is a direct simplification of PEIRCE's foundation of his theory of signs. My interpretation is that the fundamental indirection shifts in the process of their derivation. With PEIRCE, no direct relationship appears between object and interpretant as the sign mediates. OGDEN and RICHARDS changed it to an indirection

between referent (PEIRCE: object) and symbol (PEIRCE: sign), with the thought or reference (PEIRCE: interpretant) as the mediating factor. See Figures 2.4.1 and 2.4.2. The interpretation by OGDEN and RICHARDS is subsequently taken up as the canon for linguistic studies, generally without recognition of the Peircean origin of the triangle.

Another publication, among many, on the philosophy of meaning is *Meaning* (1972) by S.R. SCHIFFER.

15. See the lemma *Meinung* (column 2398/2400) in *Deutsches Wörterbuch* (1971) edited by G. WAHRIG.

And the latter is described in *Deutches Wörterbuch* (edited by G. WAHRIG, 1971) with the verbs: vermuten, fälschlich annehmen, sich einbilden, glauben. The root of *wähnen* is of course equal to the root of *Wahn*: illusion.

With the *Bedeutung* of *Meinung* so clearly associated with the individual knower, say, with 'me' and 'mine,' and with *Meinung* as the probable source of the English term of meaning, how does meaning in English acquire yet another *Bedeutung*? In fact, this second *Bedeutung* is ... *Bedeutung*. ¹⁶

The *Universal English Dictionary* (H.C. WYLD, 1932) is most helpful by distinguishing two groups of *Bedeutungen* for the adjective mean. One group derives from what is in modern German the word *gemein*. Its old connotations are with common. Even exchange is mentioned in *The Universal English Dictionary*. Those origins lead to the modern *Bedeutungen* of mean, like undistinguished, inferior, mediocre, squalid, stingy, etcetera. These later developments, however, don't concern me here.

The second group of *Bedeutungen* of the adjective of mean arrive at a later stage in the English language. For they have their origin in a word that reads *moyen* in modern French. I assume that *gemein* and *moyen* have a joint ancestor. But the *Bedeutungen* of mean, inspired by the French influence, lack any social connotation: middle, average, in between.

What use is this inventory? Doesn't DE SAUSSURE state that a sign is arbitrary? Actually, it is exactly because of its arbitrary nature that I explore the range of *Bedeutungen* that meaning may be associated with. For I want to continue this treatise with a – far more – precise *Bedeutung* for meaning. I propose to apply the Peircean triadic terminology and my own extension into the ennead (for the ennead see § 4.5, especially Figure 4.5.2).

The term meaning does not show in my ennead. In fact, PEIRCE already leaves it out of his original triad. And what I like about the historical Bedeutungen, no, I should say about objects, of the adjective of mean is the emphasis on an exchange where the participants meet somewhere in between. Meaning, I therefore suggest as its Bedeutung, is the process of establishing an exchange. Then meaning is actually synonymous with communication. And it is not a sign that has meaning. Quite the opposite, it is the process of meaning that requires a sign. Meaning is not a property of an individual sign user or a particular sign. Meaning is the whole frame of reference for sign exchange.

A consequence of this redefinition of meaning is that shared meaning is no longer a contradiction but a pleonasm. For meaning includes, by definition, an exchange. What stakeholders share is participation in the exchange.

16. The reader who by now has the firm impression he is reading the script of a sketch to be performed by Monty Python is

mistaken. My analysis is quite serious. I have nevertheless made no attempt to suppress any surrealistic signatures. An exchange requires 'a middle.' Such a mean, however, does not predetermine the *quality* of the exchange. As VOLOSHINOV remarks (1929, p 13):

The reality of the sign is wholly a matter determined by that communication. After all, the existence of the sign is nothing but the materialization of that communication.

But isn't all this just playing with words? If they share meaning by definition of their exchange, surely they share something else, too? Shared interpretants, however, is a contradictio in terminis. For an interpretant is essentially individual. They cannot be shared between individuals. This has been eloquently put by E. VON GLASERSFELD who argues in *Aspects of Constructivism* (1996, p 6)¹⁷ that

it is one thing to assert that, as far as one's experience goes, the meaning others attribute to a word seems to be compatible with one's own, but quite another to assume that it *has* to be the same.

17. For a book-length treatment by VON GLASERSFELD see his *Radical Constructivism: A way of knowing and learning* (1995). It is interesting that SCHOPENHAUER is actually mentioned once, there, albeit in a derogatory fashion. I believe that VON GLASERSFELD, like PEIRCE, doesn't appreciate the degree to which his own conceptual scheme resembles SCHOPENHAUER's.

Besides VON GLASERSFELD, as an eyeopener for looking beyond the limited positivist meaning of meaning I also recommend
R. ROMMETVEIT. See for example his Oullines
of a Dialogically Based Social-Cognitive Approach
to Human Cognition and Communication (in: The
Dialogical Alternative, Towards a Theory of
Language and Mind, 1992 edited by A.H.
WOLD). The resemblance to the ideas put
forward in this treatise, which are developed
from a different angle, is indeed remarkable
and stimulating. It carries the promise of further synthesis (see also note 29, Chapter 3).

For a phenomenological treatment of meaning see *Das Zwischenreich des Dialogs:*Sozialpsychologische Untersuchungen in Anschluss an Edmund Husserl (1971) by B. WALDENFELS. Similar ground is covered by J.V. IRIBARNE in

Husserls Theorie der Intersubjektivität (1987).

J.B. O'MALLEY presents "a radical social theory" in *Sociology of Meaning* (approx. 1972, pp 1-2): "[T]his radically critical perspective involves the deconstruction of any description that would uncritically assume the non-problematic status – ontological, or semiological – of what can only be meaningfully constituted in its actual encountering. [...] Constitution, as this present inquiry discovers it to be, is the dialexical process of encounter, its constitutive praxis. Which is to say that such praxis is as endemically social as it is individual."

R. ROMMETVEIT, in *On Message Structure* (1974), theorizes about "the architecture of intersubjectivity" while criticizing (p 2) "the optimism and the faith in their own self-sufficiency displayed by transformational grammarians and psycholinguists of the Harvard-M.I.T. school." He argues that (p 101) "[m]essage structure [...] will in part be assessed as a sequential structure by which semantic potentialities inherent in what is said (and hence shared perspectives and categorizations) are nested on to particular entities and aspects of a temporarily shared

He maintains that (p 5)

the basic point [is] that the way we segment the flow of our experience, and the way we relate the pieces that we have isolated, is and necessarily remains an essentially subjective matter.

[... W]e cannot afford to forget that knowledge does not exist outside a person's mind.

VON GLASERSFELD continues (p 5):

This issue has recently been somewhat confused by talk of shared knowledge and shared meanings. Such talk is often misleading because there are strikingly different ways of sharing. If two people share a room, there is one room and both live in it. If they share a bowl of cherries, none of the cherries is eaten by both persons. This is an important difference, and it must be borne in mind when one speaks of shared meanings. The conceptual structures that constitute meanings or knowledge are not entities that could be used alternatively by different individuals. They are constructs that each user has to build up for him- or herself. And because they are individual constructs, one can never say whether or not two people have produced the same construct. At best one may observe that in a given number of situations their constructs seem to function in the same way, that is, they seem compatible. [... p 6] The process that leads to such compatibility, however, is not one of giving, taking, or sharing meanings as an existing commodity, but rather one of gradual accommodation that achieves a relative fit. [...] Only repeated use and failures to achieve the desired response will bring about adjustments. [...] Hence, no matter how one looks at it, an analysis of meaning always leads to individual experience. [...] From this point of view, then, the task of the educator is not to dispense knowledge but to provide students with opportunities and incentives to build it up.

Meaning is the sign-based exchange through which each participant individually effects his objectified realities. For an objectified reality is subjective. The subject's intellect is instrumental and constituted by uniquely individual interpretants. It is therefore also always a subjective measure to what extent another individual 'shares' one's own objectified reality. No objective measure exists for what participants share in their knowledge. Each participant applies his own measures. The quality or, in terms of DE SAUSSURE, the value of an exchange is always experienced personally.

7.4 irreverent suggestions

Participants are conditioned for sign-based exchanges, for participation in the *process* of meaning. WITTGENSTEIN (1953) calls such preparations to participate in a language game *Abrichtung*, or training. Preparations are of course conducted through sign exchanges, too, with nurture starting from and devel-

world." Other relevant books by ROM-METVEIT are Words, Meanings, and Messages (1968) and, edited together with R.M. BLAKAR, *Studies of Language, Thought and*

oping nature.

I favor WITTGENSTEIN'S German word because it so bluntly marks the major purpose of education, that is, the interests of educators. It helps gaining awareness that the world of meaning is political and therefore often far from egalitarian. VOLOSHINOV was acutely aware of this (1929, p 21):

Every sign [...] is a construct between socially organized persons in the process of their interaction. Therefore, the forms of signs are conditioned above all by the social organization of the participants involved and also by the immediate conditions of their interaction. When these forms change, so does the sign.

As becomes clear later on, my own position is even more radically dialogical. For the engineering "construct" and the observation "construct" are different, i.e., there is actually no incontestably *single* sign "between socially organized persons in the process of their interaction." The meaning as a middle ground *connects differences*, rather than establishing a shared identity of interpretants

Of the two major trends VOLOSHINOV identifies in the philosophy of language, it is already clear from § 5.7 that abstract objectivism does not apply to my theory. Individualistic subjectivism is an equally invalid label. VOLOSHINOV argues that (p 84)

[it] also took the monologic utterance as the ultimate reality and the point of departure for its thinking about language. [... It] approached it from within, from the viewpoint of the person speaking and expressing himself.

My anatomy of meaning includes the viewpoints of *all* participants in the sign exchange. The focus is not on the sign engineer to the exclusion of the sign observer, vice versa. Actually, whether involved in the particular exchange as an engineer or as an observer, I consider each individual participant as approaching the sign monologically. As a result, though, their *communication* is essentially dia- or even multilogical.

In this paragraph, I address several myths surrounding the correspondence of knowledge between different persons.

First of all, the concept of egoism must be understood here in a strictly Schopenhauerean sense. With will over mind, it is impossible for a person not to act egoistically. But this egoism does not preclude, at all, that a particular person does not respect, take into account, etcetera, other persons, or, for that matter, other parts of the world. On the contrary, as SCHOPENHAUER makes clear. It is precisely with his intellect, and SCHOPENHAUER points to the faculty of perception rather than of reason, that man can escape from the otherwise

Verbal Communication (1979).

Reasoning along similar lines, for example also strongly criticizing CHOMSKY's linguistic

theories, is C.A. KATES in *Pragmatics and Semantics, An Empiricist Theory* (1980).

immediacy of the will. With his intellect, a person adds the dimensions of time and/or space to his actions. He becomes capable of *motivated* empathy. Figure 7.4.1 provides a highly simplified sketch of the two-dimensional range of egoism.

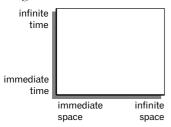


Figure 7.4.1. The world of egoism.

Suppose a particular person attempts to guide his actions with an orientation at both infinite time, and infinite space. Then he surely deserves to be called an altruist. According to the conceptual system of SCHOPENHAUER he is nevertheless still just as must an egoist. All that is different are his, say, behavioral parameters for time and space. Even the widest orientation imaginable reflects personal interests.

What orientation a person habitually applies is undoubtedly determined by some configuration of nature and nurture. In addition, situationalism, with its emphasis on behavioral variety grounded in different situations, points to the possibility that the time/space orientation of a person may situationally vary, too

It may not be deduced that I am in favor of egoism. That is nonsense. On the assumption that behavior is preintellectually interest-based it is pointless to be for egoism, or against it, for that matter. The Schopenhauerean concept of egoism must at any rate not be confused with strictly one-sided exploitation in the sense of traditional Darwinism. It is obscene, for example, to think that a victim of rape voluntarily succumbs. When the victim complies with such 'order' s/he must surely attempt to avert even greater harm to self and/or others. Interests therefore underlie avoidance of more disadvantage just as much as promotion of advantage.

It is difficult to avoid an a priori normative approach to the anatomy of meaning. It is continually tempting to reason from assumptions such as: successful communication, integrity of participants, rationality of interests, etcetera. If there is anything to be learned from SCHOPENHAUER it is to guard against wishful thinking and self-fulfilling prophesies.

Secondly, and as a corollary of pervasive egoism, every exchange is interestladen. Take the simple case of an exchange in which two participants are involved. Now John initiates it. Suppose he greets Bill. Why does John extend his greeting? And assume that Bill hasn't yet responded but is still interpreting John's sign. Why does his interpretation run the course that it does? The only point I make here is that underlying John's sign is a large number of assumptions.

Much of analytical philosophy traditionally assumes that the natural character of a message is propositional, i.e., that it explicitly and objectively reports on the state of the world. It is for example the view of early logical positivism culminating in the earliest work of WITTGENSTEIN (1921).¹⁸

Such propositions, however, are exceptional. If they exist at all. In fact, John probably doesn't mean – in the sense of placing in the middle – any proposition when he already holds that Bill entertains similar assumptions. This brings education back into focus. Its purpose it not so much to teach how to

18. I find it characteristic for the continued stronghold of analytical philosophy that any shift away from its core assumptions by one of its original proponents is still heralded as a philosophical innovation. It usually happens with complete disregard for those who have voiced more balanced views in the past. In this vein, for example H. PUTNAM (1926-) receives favorable criticism from M. LIEVERS in NRC Handelsblad (newspaper issue of September 29th, 2000) for his latest book The Threefold Cord. All I can recognize from the review is that PUTNAM has now also finally achieved a position that integrates realism and idealism. From my position well outside logical positivism I fail to see why that is such an important intellectual event.

A famous example of a 'converted' positivist is of course WITTGENSTEIN with his *Philosophical Investigations* (1953). Much of the fame of J.L. AUSTIN also derives from what is considered a departure from a strictly analytical point of view. One of AUSTIN's publications is critically examined in the next chapter. Another example is R.M. RORTY (1931-) who only later in his philosophical career takes up a critical position against positivism,

too. His iconized book is Philosophy and the Mirror of Nature (1979). I agree with much that RORTY argues, but again I fail to see where his essential originality lies. On the design of information systems T. WINOGRAD affirms a change of attitude in a book written together with F. FLORES (Understanding Computers and Cognition: A New Foundation for Design, 1986, p 8): "The task we have undertaken in this book is to challenge the rationalistic tradition, introducing an alternative orientation that can lead to asking new questions. In developing this new orientation, we were led to a critique of the current mythology of artificial intelligence and its related cognitive theories, drawing conclusions that contradict the naive optimism[. ...] Our ultimate goal, however, is not a debunking but a redirection. The alternative we pose is not a position in a debate about whether or not computers will be intelligent, but an attempt to create a new understanding of how to design computer tools suited to human use and human purposes." I agree with their emphasis on tools. However, my anatomy of meaning is even more radically different from naive realism.

elaborate propositions. Rather, it serves to *eliminate* the need for recurrent propositions. Erstwhile participants at the particular educational program are counted upon to 'share' the impressions of their *Abrichtung*.

Thirdly, because a person is usually untrained at formulating propositions, the signs he engineers mostly take an extra irrational turn. Whether or not Bill accepts this from John is dependent on many aspects. I make no pretense at exhaustive explanation but only informally mention some variables. 19 Most fundamentally, Bill checks how John's sign might effect his own interests. Does John seem to promote them? Or does he intend harm? And what can Bill himself do in response to promote, or at least defend, his own interests? What especially complicates life for Bill at such moments is when John's sign arouses conflicting interests in him. What feels right for one situation may turn out wrong in another. This naturally causes Bill to expand his situational horizon when he is rationally inclined. Then the instrument that his intellect is for his will opens up, so to speak. Acting primarily on irrational impulse, though, he takes the opposite approach and narrows his action to a limited situation. Closing his intellect, he suffers the consequences when indeed another situation forces itself upon him. Why for example not insult your neighbor? It seems like a bad idea to Bill when it stops his neighbor from presenting him with that second-hand book he has been craving to add to his collection. Or? The concept of responsibility is closely related, i.e., it may be understood as a function of the situational scope for behavior. The wider the scope, the more responsibly does a person act (at least in his own opinion). Acting on conflicting interests can only occur with maximum rationality from within a situation that brings them all together.²⁰

It is implausible Bill always investigates the full range of possibilities. His interpretation is undoubtedly influenced by, when available, previous knowledge about John. How does Bill feel about the distribution of power between them? Does he feel dependent? Independent? Or even on the contrary, does he believe that John is dependent on him? Probably the most important variable controlling Bill's interpretation is trust. Does he feel trusting toward John?

Complex relationships hold between – feelings of – power and trust. I have no expertise in those matters. Here I establish enough credibility for my proposal that purely rational sign-based exchanges are rare, when they occur at

19. For a structural approach consult *Interaction Concepts of Personality* (1969) by R.C. CARSON.

20. Then, again, such a situation is subjective

knowledge. For that reason, a person may be invested with a special role which is aimed at securing a view of a situation that reflects interests of other persons. Examples are referee, arbiter, and judge.

all. So, I believe that especially the concepts of power and trust are necessary for an exposition on the anatomy of meaning.

Suppose that John is the managing director of a middle-sized company. Bill is one of its 600 employees and works as an inventory clerk. One day, John steps into the office room where Bill and several of his colleagues are busy with the manual information system of the inventory department. John is accompanied by a person unknown to the employees. The stranger is now introduced as the project manager. The plan, he declares, is to switch from a manual to a computerized information system. John adds that everybody will benefit, though there of course can be some difficulties during the project.

What is Bill's impression? Frankly, I don't have a clue from such a sparse account. But one thing is sure, it is never completely rational. It could be that he sees John for the first time, too. Or perhaps Bill is the son of the company owner and is 'learning the ropes' so he can soon take over the job of managing director. Whatever their relationship, it would be a severe mistake by John to assume that Bill is disinterested. For he is not. He cannot even be disinterested. And he most likely has quite *different* interests from those of John.

My fourth irreverent suggestion, then, is that the degree to which participants align their actions, or contrast them, is predominantly a matter of how they each experience their interests are served. And what a particular person believes his interests are is much less controlled by his intellect than is often assumed, especially by himself. Of course, the fiction of the free will of man is necessary for many social processes. I fervently support it for many purposes. But that fiction may turn into a liability when the intellect attempts to gain control against the will whose instrument it ultimately is.

Fifthly, a person who gains an awareness that his intellect doesn't independently and completely determine his behavior also realizes all that much sooner how dependent on that intellect he really is. Admitting he can never rationally know his own will in its entirety, he at least attempts to increase his self-knowledge. He then behaves more responsibly. And recognizing the same irrationality in his fellow human beings, he also tries to understanding them as equally individualized objectifications of the will. The paradox is that acceptance of irrationality enhances the rationally objectified reality, both intrabody and external to the individual's own body. The most elaborate expression – and inspiring attempt to make it rationally productive – I am familiar with of precisely this paradox is SCHOPENHAUER'S *Die Welt als Wille und Vorstellung*.

A sixth notion is that ethics can be simply understood as prescriptions for values of time and space (situations), followed by some rules of conduct for the empathic egoist thus 'situated.' In different situations, often widely different behaviors are allowed, ordered, or whatever the force of rule is.

The rules, however, always work from the inside of a person. Saying that social

rules exist is only short-hand notation for the situation in which individual members of that society have each internalized habitual behavior. Such 'rules' are ultimately always imposed by other individuals. Again, that is the primary task of education. It takes practice – and earning a degree of servility – to become a functioning member.

I repeat it is only over this matter of priority that I disagree with VOLOSHI-NOV. While I argue from a psychological perspective, he does so from a sociological one (1929, p 13):

Individual consciousness is not the architect of the ideological superstructure, but only a tenant lodging in the social edifice of ideological signs.

While our explanatory concepts originally differ considerably, our explanations come out very similar. For VOLOSHINOV recognizes that "the social edifice of ideological signs" is *not* absolute, but changes as a result of "behavioral ideology," i.e., of individual contributions (p 20):

Social psychology exists primarily in a wide variety of forms of the "utterance," of little *speech genres* of internal and external kinds - things left completely unstudied to the present day.

And (p 91)

we shall use the term *behavioral ideology* for the whole aggregate of life experiences and the outward expressions directly connected with it. Behavioral ideology is that atmosphere of unsystematized and unfixed inner and outer speech which endows our every instance of behavior and action and our every "conscious" state with meaning.

In other words, the category of behavioral ideology allows VOLOSHINOV to include a radical subjectivist perspective, after all. Elsewhere, he indeed favors an explanation at such an even more detailed level, that is, of particular sign exchanges rather than genres. I agree with that position (p 66):

[A] synchronic system is not a real entity; it merely serves as a conventional scale on which to register the deviations occurring at every real instant in time. [...] Any system of social norms occupies an analogous position. [... T]hey exist only with respect to the subjective consciousness of members of some particular community.

My seventh point that might be more or less divergent from common wisdom is that taken in its widest sense ethics is what many exchanges are really about. John may want Bill to behave in a particular way not just this once. Suppose he aims for Bill to integrate, as a behaviorial pattern, what continues to serve his interest. For example formal education usually involves complex configurations of exchanges. John as a teacher probably doesn't benefit directly from the results of Bill's *Abrichtung*. But John is of course promoting his own interests when accepting a salary for training Bill. Only when its chain character is recognized is it possible to identify individual persons-with-particular-interests. An analyst overwhelmed by complexity commonly resort to aggregate concepts, such as culture, or society. The immediate consequence of aggrega-

tion is that the focus shifts from individuals. But it is always an individual person with particular interests who acts, even when it is to maintain the 'culture' from which he feels he benefits more as it is than from changing it.

Take subjective situationism itself as another example. It is only natural that I argue it solves problems and creates opportunities. But do the solutions actually work? Are there really *only* opportunities, and no risks? It of course depends on persons, their situations and their interests. I offer subjective situationism here to promote *balanced* relationships with room for development for *all* participants in relevant situations. However, the risk of misappropriation by the already more powerful is undeniable. They may seek to increase their power further still. Can subjective situationism provide them with an extra advantage? It probably does. But I believe that the opportunities far outweigh the risks. And whoever does not acknowledge the essential nature of empathy can hardly blame subjective situationism. For again and again I emphasize it as a key concept. The real risk always lies with the person who pursues his interests without ecological regard.

7.5 a natural escalation of the sign

I pursue my more or less anecdotal preparations for a subsequently more systematic treatment of the anatomy of meaning. That is, my method is mainly to start from the opposite of what is generally considered normal, i.e., I depart from what counts as the modern norm.

At least in analytical philosophy and logical positivism the canon for sign-based exchange is the propositional statement. Under such realist assumptions, every proposition can be decided to be objectively true or false. As a matter of procedural principle here, I do not agree. My continuing act of two gentlemen illustrates how the contents of the sign grow naturally when starting from irrational origins of interests.

The zero-base for my exchange theory is the case where John has a need but one that is unfelt by himself. So even though Bill might be able to fulfill it, John is incapable of emitting a sign. He also does not become frustrated that Bill does not (re)act. As I said, for now I assume John doesn't have either a preintellectual nor an intellectual registration of his need.

The next case is that John does feel that, for example, his back itches. He wants Bill to scratch it as, for whatever reasons, he cannot reach the irritated spot himself. When this happens all the time, and when Bill is always happy to oblige, John may just grunt²¹ a single syllable to send Bill scratching.

21. Later, I discovered that the example of a grunt is already employed by H.P. GRICE in

Meaning (1957). It seems that he is still reasoning from the language system and mean-

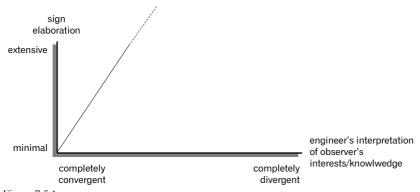


Figure 7.5.1. Elaboration of the sign related to estimated interests and knowledge of the observer.

ings that are contained within language by convention (on meaning as convention see also, in Chapter 5, my critique of ECO's A Theory of Semiotics). GRICE distinguishes between natural and nonnatural meaning. My interpretation of GRICE's concept of natural meaning is that it basically pertains to a statement about objective reality. Nonnatural meaning involves intentions of the speaker. And GRICE writes (p 58): "Suppose I discovered some person so constituted that, when I told him that whenever I grunted in a special way I wanted him to blush or to incur some malady, thereafter whenever he recognized the grunt (and with it my intention), he did blush or incur the malady. Should we then want to say that the grunt [nonnaturally meant] something. I do not think so."

My view is the opposite, to which I add that a sign is not primarily engineered to inform the observer about the engineer's intentions. GRICE denies meaning to the grunt because "the recognition of the intention [...] is for the audience a reason and not merely a cause." It shows little appreciation for the differential nature of causes, such as SCHOPENHAUER presents (see § 7.1). The refusal to see signs as causes for effects in all modes, that is for effects in the narrowest

sense, reactive stimuli, and motivationally induced effects, has kept language philosophy unproductively constrained. This I believe to have amply demonstrated through extended discussions of AUSTIN (see Chapter 9) and SEARLE (see Chapter 10).

In Relevance: Communication and Cognition (1986) D. SPERBER and D. WILSON argue that (p 24) "[h]uman interaction is largely determined by the conceptualization of behaviour in intentional rather than physical terms. The idea that communication exploits this ability of humans to attribute intentions to each other should be quite intelligible, and even appealing, to cognitive and social psychologists." Not surprisingly, my anatomy of meaning therefore turns out to closely resemble their theory which especially develops ideas of GRICE. As SPERBER and WILSON propose (p 155), "an act of ostension is a request for attention. Someone who asks you to behave in a certain way, either physically or cognitively, suggests that he has good reason to think it might be in your own interests, as well as his, to comply with his request. This suggestion may be ill founded or made in bad faith, but it cannot be wholly cancelled. If a request has been made at all, the requester must have assumed that the requestee would

How can a minimal sign often have considerable effects? The answer is that the sign engineer appraises the sign observer. The result of this empathic factor in semiosis is incorporated in the sign. The more the sign engineer feels (also read: believes) he can rely on interests and knowledge already present in the sign observer, the less his sign has to cater for them.

Thus I offer it as an important law of sign-based exchange that: The sign engineer elaborates his sign in reverse proportion to his estimate of the sign observer's *own* interests and knowledge. This relationship is shown in a simplified manner in Figure 7.5.1. It implies that *no* universally optimal way to engineer a sign. *It all depends on the participants in the exchange instance.* What do they each want (will, motives, interests), and what do they each know (objectified reality)? VOLOSHINOV is on this track of reasoning where he argues (1929, p 37):

The understanding of any sign, whether inner or outer, occurs inextricably tied in with the *situation in which the sign is implemented.* [...] It is always a *social situation.* [Introspection] is in actuality inseparable from orientation in the particular social situation in which the experience occurs. [... *T]he sign and its social situation are inextricably fused together.* The sign cannot be separated from the social situation without relinquishing its nature as sign.

So, with a highly knowable observer a minimal sign will stand for just as much as what a more elaborate sign causes a less knowable observer to objectify as his reality. *In a particular relationship* the observer grows increasingly familiar with the engineer's interests. A sign engineer can therefore engineer his relevant sign with correspondingly increased integration. Greater compactness is more efficient while keeping the sign effective. Through familiarity, the chances of evoking the desired effect(s), i.e., compliance by the observer, are at least equal. As compactness reflects familiarity, the engineer's changes at compliance by the observer are likely even enhanced.²²

Figure 7.5.1 also suggests that many sign engineers will not bother to approach other persons by sign when they feel there are no interests and knowledge to, say, harvest. Is it worth the investment? Politics always has important economic aspects, too. Suppose a particular person is not willing to try and convince another person through a sign. He may then first resort to other power politics, i.e., create a dependency by the other person *and* making him aware of it. Next, even a minimal sign might be enough to gain cooperation for fulfillment of an interest.

have some motive for complying with it." An important difference is that I do not make *any* reservations. An instance of sign exchange is *always* a request on the part of the sign engineer.

22. This view entails that concepts of syntax and, especially, semantics require critical reexamination and subsequent reconstruction of the concept of semiotics. It adds a powerful argument to triadic irreducibility against reduction of semiotics.

Can interests be objectively compared? It follows from subjective situationism that the ground for a comparison are the interests of the participant who executes the evaluation. The interests and knowledge of for example a sign observer may then be said to converge with (or diverge from) the engineer's interests to the extent that the observer will act (or refrain from acting) in accordance with the interests, and subject to the judgment, of the engineer.

Every single instance of exchange is asymmetrical. And for all participants it is riddled with – asymmetrical – uncertainties. The engineer brings to the middle ground between the observer and himself an expression of his interests while paying attention, in order to enhance chances of his success, to the interests the observer. In his turn, the observer may take up a particular sign. He does so from his own interests but then his empathy 'forces' him to pay attention to interests of the engineer. Their middle ground is not present before the exchange instance, for example as its precondition. Rather, the exchange instance constitutes a middle ground. Interest is the operative variable throughout. Despite his different priority i.e., with social ideology, I believe that the explanation by VOLOSHINOV is extremely insightful (1929, p 40):

In each speech act, subjective experience perishes in the objective fact of the enunciated [p 41] word-utterance, and the enunciated word is subjectified in the act of responsive understanding in order to generate, sooner or later, a counter statement. Each word [...] is a little arena for the clash and criss-crossing of differently oriented social accents.

In my account, what "perishes" through the exchange is the expression by the sign engineer of his will. And the exchange is the arena, not for social accents, but for individual interests.

I emphasize that I am trying to give a *realistic* account of the dynamics of sign exchange. F. INGLIS puts the question (1988, p3):

If the chances are that someone is fixing things to suit their own and nobody else's interest, how far does it get us to say so?

I believe a more thorough understanding helps to counteract abuse of power. When every human exchange is political it is best – with *best* as an ecological measure – to act on the basis of (ethical) rules that are as explicit as possible to the actor himself. Of course, the concept of abuse is again problematic. Its 'definition' here presumes my very own interests, reflecting choices for relevant values of time and space. Owning up to this subjective ground of my treatise, by the way, is also all about being scientific. For it is unscientific to suggest objectivity when it evidently doesn't follow from the grounds of subjective situationism.

The law of reverse proportionality, stated above, is of course a simplification. What compounds the issue is that comparison between interests and knowledge in strictly quantitative terms is an example of reductionism. Analysis at an aggregate level will often be misleading. What really counts are – qualitative – differences between particulars.

With Bill still willing to scratch, the single grunt by John might not have been clear enough, though. What is the exact spot where John feels he is itching? Striving for proper gratification of his need John has to include in the sign an precise enough indication of his relevant body part. A small addition may be sufficient when Bill just doesn't know which one of John's regular problem spots is playing up this time around. In fact, it is impossible to clearly distinguish in the sign between what stands for John's interest and what refers to the desired location of manipulation. John entertains the Gestalt of an itch-at-the-spot. He may analyze it, and thus commit a reduction, to yield in his objectified reality a particular situation with objects and their behavior. From such analysis he may engineer a sign with corresponding elements. He industriously specifies context(s), signature(s) and intext(s). However, those are John's structural elements of the sign. Bill may interpret the sign differently. When recognizing a different signature, right away his focus and further interpretation don't correspond with John's interest 'behind' the sign.

In what follows I apply an artificial distinction. On one side I place both preintellectual interests and interests that 'known' as motives in objectified reality. On the other side there is the rest of the sign user's objectified reality. It entails a disruption of the sign user's Gestalt which is mitigated when the interest is structured in the sign as the context of the (other) objectified reality. Figure 7.5.2 sketches the (meta)structure of John's sign at this stage of escalation.

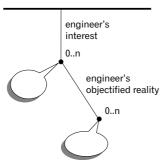


Figure 7.5.2. You scratch my back.

It is here still presumed that the sign's *particular* engineer is known. The abstraction from John onto engineers in general is shown in Figure 7.5.3. It helps to keep the participants in clear view when the 'middle' of a sign exchange is protracted. That is for example why I am explicitly named as its author *as part of* this treatise. It reminds the reader who the sign engineer is.

I hypothesize that the essential nature of *any* sign exchange is that the sign engineer attempts to get his interest across to the sign observer(s). The sign itself, as the medium of meaning, stands for its engineer's interests, rather than establishing a proposition about the world in general. Meaning, or a sign exchange, is then successful for the engineer to the degree at which the observer 'correctly' includes the engineer's interest in his objectified reality through perceptive and/or conceptual interpretants *and acts upon it*. This measure is ultimately elusive, though. There is no absolute or even intermediary way of specifying correctness of the observer's interpretation of the engineer's interest. Where success lies for the observer is in his – experience of – grasping of the engineer's interest. For the engineer the measure of success is the observer's reaction to his sign. John experiences he is successful with his particular sign only when Bill scratches his back and does so properly.

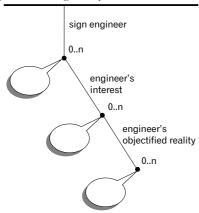


Figure 7.5.3. The signature of the sign engineer included in the sign.

I make no pretense at outlining a comprehensive theory of human exchange. My aim is to build a credible case against (unproductively) reductionist concepts. VOLOSHINOV still assumes that the middle ground of a sign exchange is also a common ground (1929, p 68):

[I] t is an always changeable and adaptable sign. That is the speaker's point of view. But doesn't the speaker also have to take into account the point of view of the listener and understander? Isn't it possible that here, exactly, is where the normative identity of a linguistic form comes into force?

My answer to his last question is negative. Or does he apply to "the normative identity of a linguistic form" the characteristic that (p 66, also quoted above) "it merely serves as a conventional scale on which to register the deviations occurring at every real instant in time"? If so, I am again in strong agreement for an explanation is always required at the level of all relevant particulars.

Consistent reference to participating individual persons in the exchange uncovers unproductive assumptions behind concepts at the aggregate level. The idea that a sign has a fixed, social 'meaning' is a prime example of oversimplification. Rather, I favor the essentially individual orientation of PEIRCE's account of semiosis. Every process of sign use may cause the interpretants in the *subjective* intellect of the sign user to change. It is the continued practice of sign use that keeps corresponding interpretants stable, or that can shift them, sometimes considerably.

Entirely different signs necessarily come into play when John can no longer assume Bill's cooperation. Supposing he can make it clear enough where exactly he itches, John can either attempt to make his own interest (more) credible, or seek to activate an interest of Bill. In the first of these two cases, the sign still stands unambiguously for John's objectified reality from his own perspective. He may accomplish this by inferring behavior as a situational object from the particular interest or motive. Then he represents the particular behavior. When John paints himself credibly for example as a bed-ridden patient, his interest in itch removal is more likely to be served by Bill than when John is a bank manager conducting a meeting.

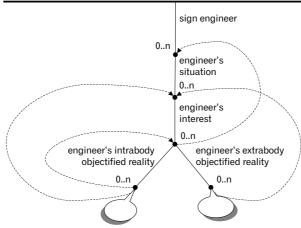


Figure 7.5.4. The interests of the sign engineer as situational objects, too.

Figure 7.5.4 shows how the structure of signs is extended to accommodate focus on what situations the engineer believes to exist for himself. I fully acknowledge that this model is circular, even on several scores. For according to earlier assumptions any situation only 'exists' in the objectified reality of the sign user. Then, how can specification of objectified reality depend on a situation when that very situation depends on, indeed, specification of objectified reality? I don't pursue generative epistemological explanations such as

provided by JEAN PIAGET (1896-1980). I simply add relationships to the model, indicating that something like feedback must occur in the sign user's intellect. A similar feedback loop must be assumed from the intrabody objectified reality to interest. Finally, a feedback relationship is included from interests to sign engineer. This corresponds to SCHOPENHAUER's axiom that an individual essentially knows himself as a collection of interests or motives. Actually, this loop for feedback is two-stepped. For an interest is not known directly, but only as a motive in the intrabody objectified reality – of the intellect – of the individual.

From this point of the Schopenhauerean escalation the contrast with the sign (meta)structure characteristic of the philosophy of pure realism must be evident. Realism, or materialism, starts from the notion of an ontology that is independent of knowledge. This absolute structure is then assumed to be faithfully represented in signs. See Figure 7.5.5 for the realist metastructure of signs.

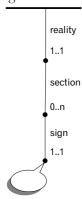


Figure 7.5.5.
Realist metastructure of signs.

A strictly realist approach detracts completely from the interests of the participants in the exchange, not to speak of the situational nature of those individual interests. It presumes middle ground, or meaning. But in fact, that middle is *not* a ground in the sense that it exists independently from any instances of exchange. On the contrary, a middle is only established when participant are involved in a particular exchange as sign users. The 'real' ground of meaning therefore consists of the interests underlying the *particular* sign use.

I have already hinted at the alternative of addressing the interests of the sign observer. It is in these cases, that is when John tries to address Bill's interests, an essential split becomes characteristic of the sign. Of course, it can still only stand for John's objectified reality. But the sign is next supposed to express (also read: represent) interpretants 'about' Bill's interests and knowledge. For

the sake of my exposition I make the naive assumption that discrete parts of the sign correspond to John's interpretants. Then one part of the sign stands for John's objectified reality as seen from the perspective of his own interests. Another part represents John's objectified reality from the perspective of Bill ... as perceived by John, of course. A similarly obscure formulation is that the second part pertains to John's objectified reality from the perspective ... of his perspective on Bill's interests. Such recursion reflects that human beings have this ability of empathy.

To speed up my account of sign escalation from the ground of interests, I continue by right away suggesting that John interprets Bill as a situational object. Especially relevant is the sign engineer considers the sign observer's interests situational objects, too. Figure 7.5.6 diagrams the structure of such signs. Please be reminded of my necessarily naive assumption on parts of the sign. As a model Figure 7.5.6 probably approaches more closely the configuration of interpretants than how actual 'parts' of the sign are structured.

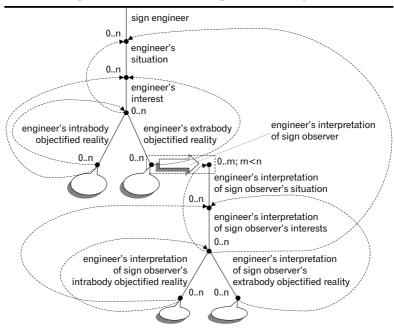


Figure 7.5.6. You should be happy that you may scratch my back.

From the node of the extrabody objectified reality of the engineer a subset is derived. The elements of this subset pertain to the sign observer as interpreted by the sign engineer. There may of course be more than one observer addressed by the engineer. For every observer thus 'present' in his interest-based extra-

body objectified reality, the engineer can now place his interpretations of the observer's interests. He can even interpret the interest-based intrabody and extrabody objectified realities of the observer, including feedback mechanisms. I also add a feedback relationship between the sign engineer's interpretation of the sign observer's interests on the one hand, and – his interpretation of – *himself* as sign engineer. And how he sees himself as sign engineer influences his self-knowledge in general. A situation such as personship, from which sign-engineership would then be derived, is not shown in the figures.

I define first-order egoism as the exclusive attention to one's own interests. A person exhibits second-order egoism when he acknowledges the interests of another person. Empathy is equivalent to second-order egoism. It is important to recognize that second-order egoism, or empathy, only occurs *on the basis* of first-order egoism. The interests of the other are always understood within the framework of the interests, or will, of the self.

No attempt at classifying interests is made. The general concept serves me well for the ontology of subjective situationism. Concluding this chapter I only remark on some mechanisms for addressing interests. A common approach in our society is to aim at the need for monetary reward. Many people also go to great lengths for even the smallest dose of celebrity, as an increasing number of television shows proves. In § 7.2 I already mentioned that persons are easily scared; they often comply with the interest of the sign engineer under his threat. Actually, I assume everybody does, given a serious enough threat to others and self.

The emphasis on addressing the interests of the (prospective) partner in the exchange is well known from sales. It backfires sooner or later in all walks of life when the addressee does not find his interests properly respected. A strategy of many sign engineers is leaving the scene before realization of deceit hits the sign observer.

So far, the escalation has progressed on the assumption that just a single sign is exchanged from John to Bill. However, in all but extremely simple matters several signs need to be exchanged *in both directions* for any sensible meaning to occur. This calls for analysis at the level of *relationship* between participants in exchanges. The next chapter explains how an interpersonal relationship is in many ways a memory for future meaning.

prelude 8

Chapter 8 draws the constructive design in this treatise to an end. It completes the explanation of meaning as a social process (started in Chapter 7) from largely psychological characteristics of participating sign users (see Part i).

Taking the ideal dimension of semiosis seriously, a sign engineer by definition projects his interpretants *onto* the sign. He assembles a cause aimed at achieving a motivationally effected response from the observer. Any response by the original observer would of course immediately place him in the position of an engineer. But as a sign observer, by definition he develops interpretants *from* the sign.

It is already impossible to establish with certainty that the sign as the engineer believes to have emitted is indeed what the observer holds for the sign in their exchange. Leaving this problem aside, and assuming that at least the sign is common, the difference between cause and effect that underlies the difference between engineer and observer makes for different representational structures. For both the engineer and the observer, the sign stands for what the engineer wants from the observer. The anatomy of meaning according to subjective situationism is captured by the slogan *every sign is a request for compliance*. As the engineer builds his specific cause from his will, the vital difference is that the observer can only make such an interpretation guided by his own will as background interpretant, too. Every participant's uniqueness makes the difference.

With different representational structures of the sign outlined for the engineer and the observer, Chapter 8 moves to a short discussion of conditions for compliance. First of all, compliance requires attention oriented at the *overall relationship* between the persons who, in this particular instance of sign exchange, act as sign engineer and sign observer. Their relative power and trust are therefore important determinants of both compliance and how their

relationship develops further under the impetus of the particular sign exchange.

What does all this mean for conceptual information models? They certainly are *not* value-free blueprints. As signs, they are political instruments (see Chapter 7). An information model is also a request for compliance, just as any reaction to it is, positive, negative, or otherwise.

When such is the nature of conceptual information models, ignorance about it goes at the expense of quality. Some stakeholders gain in the short term, and often for much longer, from upholding the dispassionate character of models. But others lose, which endangers constructive relationships. Professional modelers especially, as they are directly involved with stakeholders and through their involvement become immediate stakeholders themselves, must be aware of the politics underlying their work. Information modeling scientists must include compliance as an important theme in their teaching and research.

The last paragraphs of Chapter 8 have actually already moved from developing an anatomy of meaning to offering recommendations that are based upon it. After Chapter 8, you can skip to Chapter 13 which is the final chapter of this treatise. As an epilogue Chapter 13 is more generally occupied with some of the problems that subjective situationism can solve, and opportunities it can create, with respect to conceptual information modeling.

Chapter 9 through 12 are in a philosophical sense all critical, rather than constructive. They boil down to the conclusion that the language action paradigm popular for information modeling is too limited. It needs to cut its limiting linguistic (read here also: semantic) roots. But first Chapter 8 continues to present an anatomy of meaning erected from radically different grounds.

chapter 8

REQUESTS FOR COMPLIANCE

The last paragraph of the previous chapter presents a progression of engineer-based structures of signs. Escalating from grunt to (more) comprehensive representation I have demonstrated that a sign-as-object depends on the sign engineer's expectation of the exchange situation. For my further development of an anatomy of meaning *only* the conceptual result of that progression counts. This chapter continues from the so far most elaborate structure as shown in Figure 7.5.6.

8.1 from prospects to suspects

I emphasize my axiom that *every* sign, regardless of its expansion, stands for *all* those engineer-based prospects. For example both the single grunt and the elaborate scientific treatise are analyzable from exactly the same structure. The actual sign-as-object of course differs according to what the sign engineer wants to achieve for himself on the one hand, and what he considers a priori present as interests and knowledge in the sign observer on the other hand. According to VOLOSHINOV (1929, p 96):

The outwardly actualized utterance is an island rising from the boundless sea of inner speech; the dimensions and forms of this island are determined by the particular *situation* of the utterance and its *audience*.

Anyway, the observer always develops his own (also read: subjective) interpretation. What the observer suspects from the sign about the engineer's prospects is therefore governed by an observer-based structure of signs.

The distinction between [a] engineer-based sign structure and [b] observerbased sign structure is precisely why my anatomy of meaning is more radically dialogical that VOLOSHINOV's philosophy of language. As one of the propositions outlining his theory eclipsing both abstract objectivism and individualistic subjectivism he mentions (p 98):

The structure of the utterance is a purely sociological structure. The utterance, as such, obtains between speakers.

I understand this as the assumption of a *single* structure, i.e., without regard for what I propose as the essential difference between [a] a self pursuing interests through an other and [b] a self being confronted with interests of an other, and thereby being expected to comply with them. Assuming, instead, *two* sign structures that are characteristic for the *different* roles engineer and observer play in sign exchange is a decisive step in arriving at an anatomy of meaning with sufficient explanatory and behavioral variety for postmodern life. VOLOSHINOV is already adamant that (p 99)

[t]he theory of passive understanding precludes any possibility of engaging the most fundamental and crucial features of meaning in language.

However, does he also take the next step? Does he conceive of understanding by an observer as an activity that is essentially different from the activity of sign engineering? My impression is that VOLOSHINOV indeed does for he writes that (p 102)

each of the distinguishable significative elements of an utterance and the entire utterance as a whole are translated in our minds into another, active and responsive, context. *Any true understanding is dialogic in nature.*

What VOLOSHINOV doesn't design is the concept of *structurally different* contributions to communication. Through characteristic sign structures I fundamentally acknowledge the difference between engineering and observation in sign exchange.

I take it that the observer-based sign structure envelopes the engineer-based structure. The latter is thereby of course transposed to the observer's frame of interpretation. For added is a superstructure that actually establishes the sign observer's interpretation frame. The complete observer-based structure is outlined in Figure 8.1.1.

I repeat that the engineer-based structure does not appear *as such* in the observer-based structure. For it is now all about the observer's interpretations. To avoid cluttering the model, no feedback relationships are shown. The cardinality of nodes is also omitted. They are all the same, or similar, to what Figure 7.5.6 shows in those respects. The substructure of the observer-based structure corresponding to the original engineer-based structure is indicated separately.

The resulting observer-based structure of signs is even more elaborate than the engineer-based structure. The extension reflects a deliberate choice on my part. It is of course possible to extend the engineer-based structure in a similar manner. That is, the engineer then takes his interpretation of the (potential) observer's extrabody objectified reality into account. No doubt, that interpretation includes the observer's interpretation of himself, i.e., of the engineer. From complete absence to enlightenment, his sign also stands for that extension of scope.

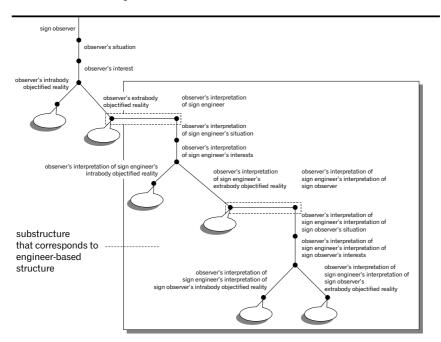


Figure 8.1.1.

Do you want me to scratch your back?

As I said, I abstain from including references to such recursion in the engineer-based structure. Whenever its need arises it can easily be added. From the observer perspective, however, I find it immediately relevant to draw attention to what the observer actually recognizes as the engineer's impression of him in, and especially through the sign, i.e. with the sign as the mean(s) of their exchange.

In the course of his private process of sign use the observer creates his own signs, with his own semiosis following the *internal* enneadic dynamics of the intellect. See Chapter 2 for PEIRCE's original triad and my development into a hexad, and Chapter 4 for my subsequent extension of semiosis into an ennead of concepts. Later in this chapter I have more to say about such alignment of different kinds of sign structures (see especially § 8.5). Here I remark that the observer of the original sign is the engineer of all the subsequent signs that originate during his internally intellectual process of sign use (semiosis).

I offer it as an additional hypothesis that every internal transition from one ennead to the next is as much an exchange as what occurs externally between different persons as sign users. For example JAMES JOYCE (1882-1941) reflects on such dynamics through his literary device of the interior monologue or stream of consciousness (BECKSON and GANZ, 1960).

I have not raised this congruence with much emphasis earlier for fear of distracting the reader from my argument on *interpersonal* exchanges. As I continue with the latter, these remarks on enneadic dynamics are only meant to provide collateral support. But indeed, the same explanation applies. It has the bonus of making the distinction between internal and external less problematic. For it doesn't really matter where the boundary is drawn.

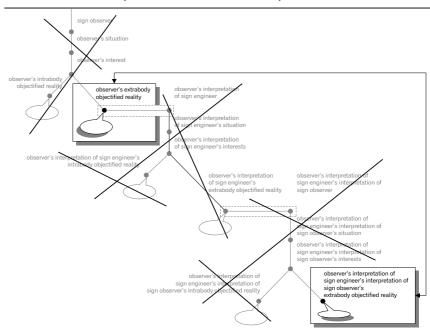


Figure 8.1.2.

The exception of the observer's interpretation of objective meaning.

Another point I repeat is that the engineer-based structure of Figure 7.5.6 is by no means supposed to be exhaustive and definitive. It undoubtedly can be augmented, modified, etcetera, on the basis of additional speculation. Earlier in this paragraph I have already provided a suggestion myself. And of course the observer-based structure of signs is equally open to improvement. It might be an improvement in both to, for example, reverse the order in which situation and interest are modeled. But at their current stage of development those models already adequately serve the purpose of more extensive specu-

lation on the anatomy of meaning. Much in the same way as Chapter 7, I explore limits and opportunities. I don't pretend to offer a completed, comprehensive theory. What follows are primarily necessary preparations.

In this vein I consider Figure 8.1.1 sufficiently representative of the (meta)structure of the configurations of interpretants that a particular observer develops from a particular sign. On those grounds it is all the more evident that many conditions must be fulfilled in order for a sign to be understood in the traditional sense of a priori meaning.

Derived from Figure 8.1.1 is Figure 8.1.2. It shows by everything that is crossed out what needs to be specifically eliminated from analysis. A more subtle expression is that for naive realism the observer apparently *brackets* most elements of his observer-based sign structure. All that is left are two structural elements that should necessarily match for such 'objective' meaning to occur for the observer. Against the background of the overall observer-based structure it may be considered an exception, or a 'special case.'

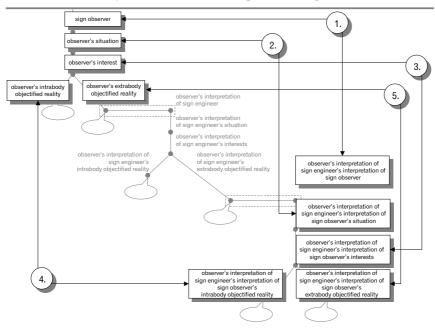


Figure 8.1.3. Interpretation modeled as dynamics of comparisons by the sign observer.

Meaning implies much more than a single comparison, though. Figure 8.1.1 suggests that at least several pairs of structural elements are compared. What interpretants an observer develops from a particular sign depends on the dynamics of *all* such comparisons. This explains why the same sign can lead to

even widely divergent interpretations with different observers. Even the same observer, but at different times (and/or situations), arrives at different interpretations of what 'objectively' looks as the same sign.

Also derived from Figure 8.1.1, Figure 8.1.3 shows five direct comparisons supposedly made by the observer during his own process of sign use in observation mode. They are numbered for convenience. The observer-based sign structure is now easily recognizable as an analysis tool. It not only highlights what conditions must be fulfilled for so-called 'objective' meaning to occur. More importantly, it is now possible to analyze in a highly structured way when and why the interpretative processes of observers take directions that diverge from expectations the sign engineer holds. Take for example the first comparison. Does the observer feel that the engineer addresses him properly? It can make an enormous difference to the – further – interpretation of the sign.

A systematic exploration of paired comparisons between elements from the observer-based sign structure is not pursued here. In the course of my argument, though, I regularly return especially to Figure 8.1.1 and to what it summarizes about the anatomy of meaning.

8.2 in search of interest compliance

The naive approach to meaning is that a sign has all positive qualities. Positive labels the belief that an individual sign exhausts in isolation what it stands for. It is supposed to literally and absolutely represent its object.

I don't hold that belief. The articulated engineer-based and observer-based structures presented in the final paragraph of the previous chapter and in the first paragraph of the current chapter, respectively, might indeed still suggest the theoretical possibility of independent completeness of a stand-alone sign. But I doubt whether any such sign is even practically engineerable. I therefore propose a radical reversal. It is more enlightening to investigate what a particular sign does *not* provide when it is studied disentangled from an instance of exchange. Although admittedly far from comprehensive, first of all the engineer-based sign structure of Figure 7.5.6 is well-suited for such a negative approach, that is, establishing what is explicitly missing from a particular sign.

Before embarking on such an analysis I point out that its premise is already contradictory. I mentioned that a sign could be studied outside an instance of exchange. That is nonsense as 'study' is an exchange, too. For it is now the student acting as observer. Of course he may conclude that the sign engineer includes, say, a scientific student-stakeholder in his audience. Or that he even primarily aims his sign at such an audience. This stresses the importance of

recognizing the observer(s) as targeted by the sign engineer. Is the sign originally directed at the actual observer? Or doesn't this observer count for the sign engineer and is his particular observation therefore beyond the interests of the sign engineer? For example, do I believe that Homer composes his poem for an all-time audience? Then, there still is an immediate message for me in his work. Otherwise, I am observing the remnants of an exchange in which I am not originally intended to be involved. It is similar when I overhear a discussion that is not meant for my ears. In all those cases it is more precise to state that the study should abstract from both the original engineer and whom he originally addressed as observer(s). What the student especially needs to bring to his observation is an awareness of himself, the situation(s) of study, his situational interest(s), and his relevant objectified realities. And then again, responding to a sign for which the sign engineer didn't include the actual observer in his planned audience, the observer turns engineer and brings his interests into play for the engineer-turned-observer. Of course I cannot contact Homer to tell him I find he's written a great poem. Many other persons, however, are within reach of sign exchange where I can (also) act as sign engineer.

Once it is accepted that a sign is practically never completely positive, i.e., always lacks fulfillment in the sense of its engineer-based structure, the obvious question is: Why? The equally obvious answer is, at least from my Schopenhauerean perspective, that interests of the sign engineer determine which of his prospects, and how, are given expression in the sign. That is, a sign is always essentially political. See also the previous chapter. But the engineer's politics may be preintellectually as well as inadequately expressed. The former happens to the extent that the intellect is not involved in producing the sign. And the latter because the intellect may not contain a reliable interpretant of the engineer's will and constituting interests.

The continued emphasis on the predominance of interests serves to shift the attention to the stage of *preparing* for a sign, rather than to the sign itself. Suppose that John's back itches once again. Because of an injury he cannot possibly reach the irritated spot himself. Then, a person whom I have already introduced as Bill, but who is still completely unknown to John, appears on the scene. Of course it takes a real John and a real Bill in a real situation to learn what will actually happen. Again, VOLOSHINOV has already indicated this clearly (1929, p 85):

[E]xpression-utterance is determined by the actual conditions of the given utterance-above all, by its *immediate social situation*. [...] The *word is oriented toward an addressee*, toward *who* that addressee might be[... p 86 W]ord is a two-sided act. It is determined equally by whose word it is and for whom it is meant. As word, it is precisely the product of the reciprocal relationship between speaker and listener, addresser and addressee. Each and every word expresses the "one" in relation to the "other." I give myself shape from another's point of view, ultimately, from the point

of view of the community to which I belong. [...] Above all, [whatever kind of utterance] is determined immediately and directly by the participants of the speech event, both explicit and implicit paticipants of the speech event, in connection with a specific situation. That situation shapes the utterance[. ... p 87] The immediate social situation and its immediate social participants determine the "occasional" form and style of the utterance. The deeper layers of its structure are determined by more sustained and more basic social connections with which the speaker is in contact.

With subjective situationism so far explained, it is by now familiar ground that the axiomatic nature of – the concept of – community is denied. As relevant background I favor the particular relationship of stakeholders, or what H.H. CLARK (1992) calls the "arenas of language use." I also believe that it is because VOLOSHINOV practically concentrates his interests on "the word" that he probably implicitly assumes it offers (p 68) "the normative identity of a linguistic form." I find the more general concept of *sign* theoretically liberating. Otherwise I strongly recommend the responsible way VOLOSHINOV treats (p 99) "meaning [as] one of the most difficult problems of linguistics."

Commenting on the meeting of John and Bill I add an assumption. John is feeling uncertain about the stranger whose name he even doesn't know yet. Now John can immediately go all out directly for his own interest and request the stranger to scratch his back. Because of his uncertainty, he probably does not. What he basically wants to learn first is an orientation at the stranger's interests. Does he directly inquire after those? Most likely, he doesn't either. He might wait for the other person to produce a sign, let Bill actively deal with the uncertainty. (I am abstracting here from the obvious idea that already many sign exchanges takes before the first words are spoken.) Suppose John does take the initiative in speaking. Then he probably tries to avoid any explicit mention of his interests, or an immediate inquiry after those of the other. He may simply start with a general greeting, such as "Hello." The reaction of the stranger already provides him with much information. Suppose that Bill returns the as yet impersonally designed greeting. VOLOSHINOV (1929, p.94):

The actual reality of language-speech is [...] the social event of verbal interaction implemented in an utterance or utterances. Thus, verbal interaction is the basic reality of language. [... p 95] Any utterance [...] is only a moment in the continuous process of verbal communication. [...] Verbal communication can never be understood and explained outside of this connection with a concrete situation. Verbal intercourse is inextricably interwoven with communication of other types[.]

John may next provide, as a separate sign too, his personal introduction. What is happening is that a chain of signs gradually supplies information as postulated by the engineer- and observer-based structures. These may now also be recognized as overall structures whose gradual fulfillment governs the strategy of the *collection* of specific sign exchanges. Each *separate* sign can be laid out against such structures, too.

After John gives his own name, at least in Western society Bill already has a much easier task of establishing the continuity of his partner at meaning. In general, the series of exchanges receives an impulse for constructive continuation whenever a sign decreases uncertainty. Of course, this raises the question as to what constitutes a series. I propose that a participant dynamically adjusts, based on his interests and the potential of their fulfillment, the extent of his involvement with other participants. It is seldom a one-sided implementation to continue or end a particular series of exchanges, however. Given enough freedom one participant may actually want to stop, but could feel forced by others to continue.

All individual signs contribute to the establishment of the exchange participants' relationship in the objectified reality of John (and, of course, of Bill too; for the time being I mainly follow John as the sign user of interest, that is of my interest as a student of their exchange). With that *relationship in mind*, John interprets the next response sign by Bill, John prepares and executes his own next sign, etcetera. My conclusion is that the extent of what is missing from a particular sign is determined by the *memory* that the sign engineer has of the relationship between the participants in the series of exchanges. As their relationship develops different areas of the overall exchange-oriented sign structure receive emphasis.

The uncertainty at any stage of any relationship is far beyond my expertise to properly model in detail. However, for the sake of explaining an adequate anatomy of meaning I feel it is sufficient to add that the sign engineer entertains an ongoing estimate of the chances of *compliance*. Will the observer, with his behavior, comply with the interest(s) the engineer holds? I believe *uncertainty about compliance explains the anatomy of meaning*. For signs are engineered with the purpose of eliciting, first of all, reactions that should inform the engineer about the potential of compliance by the observer. Only when the engineer is confident enough about the observer serving his particular interest will he shift the emphasis of the (next) sign to that interest itself. Often, of course (more) certainty about possible compliance can only be gained by informing about the interest in question, too. For the sake of simplicity of my exposition, though, I will maintain that the engineer's prospects pertinent to his immediate interests are discernible, and are indeed also addressed separately.

I underline that, one way or another, every sign is a request for compliance. This assumption lies at the core of the anatomy of meaning.

The anatomy is an integrated part of the ontology of subjective situationism. The scope of this treatise is the design of this ontology, that is, an exercise in speculative thought. I therefore also don't pretend to offer any empirical, but only anecdotal, support for compliance seeking as the essence of

signs. I don't believe it can be positively proven, anyway. It necessarily remains a speculation, a fiction. I design it as a ground for (further) explanation. And I add that other theories of meaning are likewise unempirically grounded. So fundamentally, I exchange one or more traditional systems of meaning-determining axioms for a more productive one.

There exists a tradition of *functional* explanations (BÜHLER, 1934). Usually, there are two or three such functions distinguished. Often, as one of language's functions, a volitional function is included (G. MANNOURY, 1948). J.O. HERTZLER (1965, pp 38-57) even compiles a classification of twelve "major general functions of language." However as far as my research shows, what I call *request for compliance* has so far at the most been classified as one among several functions of language. When at all included, its importance in a functionally articulated system varies according to different theories. In some cases it does indeed appear predominant, but still not radically as the *single* function. Not surprisingly, volition (also read: will) receives emphasis in psychoanalytic orientations. For example psychotherapist H.C. SHANDS writes in *Speech as Instruction: Semiotic Aspects of Human Conflict* (1977, pp 9-10):

[I]t is my conviction that every sentence uttered by any human being has as a principal function the instruction of another or others.

Again, my hypothesis reads that what SHANDS calls "instruction" is in fact not "a principal function" but the *only* function of every sign. His approach is reminiscent of VOLOSHINOV's (and BAKHTIN's) dialogism. As SHANDS states:

The ancient philosophical idealization of an ultimate <u>monism</u> must, it seems to me, be abandoned in favor of a term that is, as many appropriately human terms are, internally contradictory. The term I suggest is a <u>dualistic monism</u>, to convey the importance of the communication-system as the basic <u>unit</u>.

He continues:

To say that every utterance is an instruction is not to say that each is obeyed. [...] To a very considerable extent, the history of any person's experience is that of discovering ways of increasing the number of respondents susceptible to 'my' instruction[.]

Why should an observer comply with an interest held by an engineer? He needs to be convinced that the required action serves his own interest. For the observer is just as much an egoist as the engineer is. That is what I derive from SCHOPENHAUER. The range goes from promotion of an extreme advantage on the one side, to avoidance of an extreme disadvantage on the other side. There are opportunities and risks, respectively, interpreted. The "mathematical approach to idealized problems of competitive conflict or games" is called game theory (J. BEISHON and G. PETERS, 1972, p 319). What complicates matters is that problems of choice among participants are often impossible to compartmentalize realistically (and neatly). A person will have several interests, mostly with divergent positions on the scale between opportunity and

After additional research I would now say that L.E.J. BROUWER, who was closely acquainted with MANNOURY, for that matter, applied for sign exchange an equally radical orientation at the Schopenhauerean will. See also note 29a in Chapter 3.

risk. His action reflects how he has weighed them. Only his action does.

The engineer *will* try to learn what interests an observer has. In what situations do they apply? Next, the engineer should have an idea about what the observer considers specific advantages and disadvantages. When an alignment of their interests seems possible the engineer must choose what (dis)advantage(s) to emphasize, accompanied by arguments.

Power translates into exchanges. A precondition for an observer action in the interest of the engineer, as requested by a sign, is that the observer pays attention to the sign, in the first place. Why is it of interest to the observer to be ... observant? He must believe to forfeit advantages, or suffer disadvantages, without such alertness and all it may subsequently lead to. The ultimate rewards and punishments then, are "causes in their narrowest sense" or stimuli. The strongest arguments are physical, bodily. It is in full accordance with SCHOPENHAUER's axiom that a person's body is an objectification of the will, with the intellect 'only' serving as its instrument.

Meaning is not confined to a separate realm of motives. All three realms, or modes, of causation are intimately connected. Human participants usually interpret any physical cause or stimulus as pertinent to the motivational realm, too. At least between human beings, *every act is a sign*, notwithstanding its engineer's primary purpose.

When somebody hits you, you may incur an injury from the blow. But you have also been served with a highly impressionable *sign*. This *integration* into an overall approach to behavior is what the interest-based anatomy of meaning achieves. The physical blow is equally analyzable as the strictly verbal insult. And it can be traced how insults may escalate into physical violence or, the other way around, how violence may be tempered and the relationship continued on a (more) semiotic footing.

For a human observer, what counts for his interpretation of signs is not the promise or threat of actual consequences. His objectified reality projecting them does. It also accounts for behaviors *as if* rewards and especially threats are present for a person long after they have ceased to really exist.

Signs aim on behalf of the engineer at the observer's interests and subsequent evocation of corresponding behavior. Because the engineer drives the sign exchange from his own interests it should not come as a surprise that many signs are intentionally misleading. They often don't explicitly represent the interests they are essentially engineered to serve. Those are, of course, the interests of the sign engineer. Unless he is sufficiently sure about their interests' alignment, the engineer will feel he is taking unnecessary risks by exposing his own interests. Why should he? When the observer notices some misalignment compliance is subsequently all the harder, if not impossible, to secure. An as yet untrusting observer, though, may request that the engineer

provides more information about his interests. When the engineer holds a narrow opinion of his situation, i.e., operates within very limited boundaries of time and/or space, he may unfaithfully reply with what he thinks the observer likes to hear as confirmation. Sincerity is promoted by extended relationships where all participants respect the dynamically evolving power balance.

8.3 meaningful memory of relationship

A particular meaning is not a property of a sign. Rather, meaning is a property of the sign exchange between participants. That is, meaning resides in their relationship. It is the sign that is a property of that meaning, not the other way around. What the sign lacks is still always present in their relationship, including all the complexities resulting from the strictly individual nature of generating interpretants. As VOLOSHINOV writes (1929, p 106):

There is nothing in the structure of signification that could be said to transcend the generative process, to be independent of the dialectical expension of social purview. [...] There is nothing [...] that could be said to be absolutely fixed.

The concept of – interpersonal – relationship is necessary to remove sign exchanges from the framework of singular encounters. An exchange instance never occurs in isolation. A multitude of exchanges contributes to relationships between persons. How one participant behaves during one exchange is reflected in the distinctive memories of all the participants, to be applied on future occasions. Relationship is therefore the key concept for responsibility, for moral behavior, too.

The observer-based sign structure helps to illustrate what a mature relationship between persons presupposes for their subsequent sign exchanges. I now sketch the picture from the perspective of the sign observer.

The sign engineer is known by the sign observer. It follows that, in direct contact, the engineer's identification already lies in his producing the sign. No further identification is required. When the observer only meets the engineer in a single kind of situation, no reference to it needs to be included at all. As Figures 7.5.6 and 8.1.1 make clear, distinction is required between the situation of the engineer and that of the observer. However, when the observer thinks that these situations coincide or, even, are identical in their relationship, the memory of their relationship contains all the information for the interpretation of specific signs. Please note that (BOWKER and STAR, 1999, p 236)

[i]f all history is in this sense history of the present, then one might surely think of memory as ineluctably a construction of the present. [...] The memory comes in the form not of true or false facts but of multifaceted stories open to interpretation. [... Therefore,] remem-

bering what was actually happening [is] an elusive positivist goal.

What often fails to be explicitly addressed is the particular interest of the sign engineer. When the interests of the observer remain equally unmentioned it is difficult to judge whether or not the sign engineer is expounding on his first order objectified reality. Or does this represent his second order objectified reality, that is, his interpretation of the observer's objectified reality?

Assuming mature relationships and without paying attention to interests at all for analysis, the hypothesis seems plausible that the sign is only oriented at - what all participants believe to be - a shared, intersubjective, and possibly even objective reality. Instead, subjective situationism maintains that all participants at the most fundamental level share is their relationship, at whatever stage of its maturity. And even then they can, and will, have very different ideas about that relationship.

Participants often don't rest continuation of their relationship on agreement on identities, situations, interests, and objectified realities. Rather, it is on their agreement *not* to put those respective prospects to the test of discussion, that is, by avoiding conflict they continue their relationship (acquiescence: N. RESCHER, 1995). Such non-intervening behavior must not be confused with similarity of interpretants and underlying interests that different participants hold. For when participants are forced, by whatever circumstances, to deepen their interest in each other, many relationships do not survive.

Many mature relationships just grow. They are the natural product of socialization, education, etcetera. It is precisely because those relationships evolve so gradually into maturity why it is difficult to experience them as the alpha and omega of meaning. An orientation at relationship dynamics, however, is more encompassing and productive. Consciously confronted with the start of a relationship, it becomes much clearer how they develop, and what the role of signs is. At the early stages of a relationship participants are especially moved to eliminate uncertainty about compliance. They therefore dedicate initial sign exchanges to establish individual credentials. Participants learn about each other: Who are you? Authenticity in, and by, signs is an important issue. Figure 8.1.3 indicates that the sign observer not only seeks out (more) certainty about who the sign engineer is. He also wants to gain assurance, see comparison no. 1 indicated in Figure 8.1.3, about the engineer's proper identification of himself.

Their need for rapid assurance makes participants look for short-cuts. One way is to try to find out: Who do you know whom I know? And in what capacity? Such moves serve the purpose of transferring the impression about an older acquaintance onto the new arrival. Here, a form of morality can already be seen to work. The referral to a third person may serve to 'bind' them both to – what they may consider as – the rules of their respective older relationships with that same person.

8.4 the group as personalized abstraction

I consider any group a special kind of third 'person.' Actually, it is a personalized non-person. It is not human, but human-like.

Personalization serves the purpose of attributing interests. *Only* a person can have human interests. Whatever object gets allocated human-like interests must therefore itself first be perceived as human-like. It is established and personalized from the perspective of – some interests of – the participant(s) who promote(s) the personalization. For only when a particular group is personalized in his extrabody objectified reality does a member comply with its interests. But a group really doesn't have interests, only individuals with bodies do.

What happens when a group is interpreted much *as if* it is a person. It is then eligible for participation in relationships with the human participant taking the 'personalized' interests of the group completely seriously. But a group is always only an instrument, too. It is easy to discover whose interests are really at stake by suggesting non-compliance. Anarchy always causes mobilization of 'arguments.' The key interest holders are usually not those applying the arguments along the full spectrum of modalities (causes in the narrowest sense, stimuli and signs) As I just indicated, key figures are the individual persons causing the 'applicators' to move. They direct their affairs indirectly.

Why does a person go out of his way to prevent or, when events escalate, counteract non-compliance? A sufficient explanation is not that supposedly deviant behavior is *actually* detrimental to the well-being of the person who wants to maintain control and has *invented* or, even more often, has 'inherited' the personalized group-concept to do so. It suffices for him to *believe* that non-compliance is a threat. Most successful at controlling is of course the person who is unaware of the personalized non-person as the invention for his own particular interests. For his actions are the least influenced by his rational faculty.

The enormous variety in actual sign fulfillment relative to its overall engineer-based structure prevents any detailed treatment. And the variety of interpretation by an observer looks even greater. Similar in approach to all but the last paragraph in the previous chapter, my analyses in this chapter have been largely anecdotal. All that I really attest to is that the sign should primarily be considered as a means to promote the interests of the sign engineer.

When limited to a single exchange it is the sign observer who is addressed to comply. This concept of compliance illustrates there are no a priori, universally valid ethics for sign use. Suppose that, indeed, every instance of exchange stands on its own. This amounts to the complete absence of memory in the participants. The scope is then ultimately narrow. With just one shot at a sign, and without the prospect of reward for integrity, or of punishment for decep-

tion, the sign engineer feels 'free' to choose the singularly optimal sign strategy.

Again, it extends the scope of this treatise by far to give a detailed overview of sign variety. In 'normal' signs the engineer designs a *mixture* of sincerity and falsehood. All the elements of the overall sign structure are candidates for any configuration. Does the engineer need the observer to trust him? Is his own reputation credible? If not, why should he not forge his identity when he can make the fraud sufficiently believable? He can also try to deceive the observer by for example seduction. When the engineer successfully plays on the observer's vanity the credibility of the remainder of his sign is greatly enhanced. For he may then expect the observer to apply less scrutiny.

A person can almost count on receiving praise when he also shows a most obvious handicap, is what E. DOUWES DEKKER (1820-1887) — writing under the pseudonym MULTATULI — has the protagonist of his *Max Havelaar* (1860, pp 139-140, my translation from the Dutch) explain. The novel is originally published as an attempt, not to abolish, but to have an impact on Dutch colonial rule over present-day Indonesia with the purpose of ending the exploitation of its peoples. It survives as an acutely psychological account of human behavior and abuse of power in general:

I believe to know the answer. About the dead, too, we are always told how good they were. They are awarded qualities which were absent while they were alive. I suppose it's because they no longer stand in anybody's way. Every man is more or less the next man's competitor. We would like to have everybody else completely and in everything in an inferior position to ourselves. Good manners and even self-interest, however, forbid us to express this openly. For very soon, nobody would believe us, even when we would speak the truth. So, we habitually find detours [...] It is not looked upon favorably to always criticize – which would be conspicuous – and that is why we like to exaggerate a positive quality. But we do so with the objective being of letting the bad quality stand out. It is only in getting the latter noticed that we are interested, but in doing so we want to appear impartial.

The sign observer can also give misleading accounts of his situation and interests. He may try to establish his objectified reality as the absolute, objective reality. As I said, endless variations are possible. The numbered comparisons in Figure 8.1.3 provide an indication of what an alert observer ponders upon during interpretation.

An effective measure for promoting sincerity is to create continuity across sign exchanges. Memory is then indispensable. It enables the origin, growth, and maintenance of relationships. An advantage gained as the result of one exchange can then turn into a disadvantage at the next. Regretfully, it is not quite as simple as this to secure integrity. The memory that is the relationship in objectified reality may just as well propagate an advantage of one participant to the disadvantage of another. The fear of harm may even receive reen-

forcement through every act of compliance. This is, by the way, exactly why it is impossible to comprehensively and systematically sketch the implications of the sign structures presented in Figures 7.5.6 and 8.1.1. There are many variables involved, each with many possible values. In this treatise I only attempt to provide a taste of a radically interest-based anatomy of meaning.

I return to the group concept. Above, I have more or less suggested that investing authority in an aggregate such as a society necessarily reflects personal interests. Here I position such an aggregate as the implicit participant in all exchanges. When John acknowledges that in putting Bill at a disadvantage he would also take advantage of the 'person' society, precisely that realization may prevent him from actually behaving that way. For another of his interests is thereby brought into play. When he does pursue the action that is disadvantageous to Bill, anyway, and society's interests can be shown to have suffered, John may just be held publicly accountable. Of course, this rarely happens when John involves Bill in an exchange with signs, only (but there are limits to the freedom of speech). The principle of society, that is, of a personalized participant who is implicitly present at every exchange, remains the same regardless of the realm of exchange (also read: mode of causation, i.e., physical, stimulus, motivational).

Especially in a postmodern society, with its characteristically wide variety and high dynamics of situations, diversity needs a counterbalance for the sake of continuity (even of variety and dynamics). Integrity in behavior usually suffers from such diversity because a person may soon believe that he will only be held partially accountable. In order to establish the connection between different situations it becomes increasingly important that the sign engineer is properly identified. When situations are allowed to exist without any ethical continuity it is more likely that aberrations occur (and overall continuity suffers).

8.5 power and trust

Does the distribution of power, perhaps, determine compliance? Yet again, the issue is more complex. For a sign is not neutral with respect to power. In fact, the sign engineer engages in a sign aiming at *redistribution* of power when it serves his (other) interests. Suppose he believes himself more powerful than the observer, but feels that the observer does not acknowledge it sufficiently. Then the sign engineer may choose to attempt at convincing the observer through sincerity. The observer, on the other hand, may feel himself superior in power to the extent that he doesn't even notice the engineer's sign. When he still wants to convince the observer, the engineer has to resort to engineering

something 'stronger' than a sign. It may help to get the observer (back) on the track of sign exchanges, or whatever kind of exchanges the engineer desires. But actually hurting somebody with physical violence may not be the primary reason for future compliance. Rather, the blow on the head, for example, is both intended by its 'engineer' and interpreted by its 'observer' as a sign that stands for renewed, more severe injury. Rewards are distributed with much the same idea; they should promote expectation of future, greater rewards.

Another strategy for the engineer is to appear more powerful than he actually is. Integrity doesn't make him successful by definition. His fraudulent ploy may just work. But then, it may not. With his – attempt at a – Marxist orientation, VOLOSHINOV draws a similar conclusion (1929, p 23):

Existence reflected in sign is not merely reflected but *refracted*. How is this refraction of existence in the ideological sign determined? By an intersecting of differently social interests within one and the same sign community, i.e., *by the class struggle*. [... v]arious different classes will use one and the same language. As a result, differently oriented accents intersect in every ideological sign. Sign becomes an arena of the class struggle.

When "social" is replaced by the adjective individual, and "class" by the noun individual, what comes out is an outline of my theoretical position. VOLOSHI-NOV continues:

This social *multiaccentuality* of the ideological sign is a very crucial aspect. By and large, it is thanks to this intersecting of accents that a sign maintains its vitality and dynamism and the capacity for further development. [...] The very same thing that makes the ideological sign vital and mutable is also, however, that which makes it a refracting and distorting medium. The ruling class strives to impart a supraclass, eternal character to the ideological sign, to extinguish or drive inward the struggle between social value judgments which occurs in it, to make the sign uniaccentual. In actual fact, each living ideological sign has two faces, like Janus. [...] This inner dialectic quality of the sign comes out fully in the open in times of social crises or revolutionary changes.

The last sentence predates KUHN (1962) who later distinguishes between normal and crisis science. VOLOSHINOV is already without illusions about the fate of an attempt at crisis science when it is evaluated from the perspective of normal science (p 23):

In the ordinary conditions of life, the contradiction embedded in every ideological sign cannot emerge fully because the ideological sign in an established, [p 24] dominant ideology is always somewhat reactionary and tries, as it were, to stabilize the preceding factor in the dialectical flux of the social generative process, so accentuating yesterday's truth as to make it appear today's. And that is what is responsible for the refracting and distorting peculiarity of the ideological sign within the dominant ideology.

Human exchange being essentially political, *every* sign is also about (re)distribution of power in relationships. See also publications by M. FOUCAULT (for example 1971) and *Language & Symbolic Power* (1977-1984) by P. BOURDIEU.

An explicit focus on "interpersonal manipulation" apply R. CHRISTIE and F.L. GEIS (editors) in *Studies in Machiavellianism* (1970). Commenting on laboratory experiments reported by contributors to their collection they conclude (p 358):

In interpersonal situations which are fairly well structured, in which there is no face-to-face contact, and the affect involved is not irrelevant to task achievement, high Mach[iavellian]s do not outcon and outbargain low Machs. [...] It is in interpersonal situations which are relatively unstructured, in which face-to-face interaction occurs in an affectively complex situation in which there is latitude for improvisation, that high Machs tend to win. Our interpretation is that high Machs tend to read the situation and remain detached from the affective distractions, among them other persons; although low Machs are equally capable of sizing up the situation, they get caught up in the interaction process with the other person(s), and this interferes with "rational" behavior. Sometimes it is not so much that high Machs win as that low Machs lose. [...] The advantage the high Machs have in manipulating others is that they seem more accurate in their views of others' weakness in general, and that the low Machs permit themselves to be run over and outmaneuvred by the intransigent highs while clinging to their idealistic interpretation of how people should behave.

Leaving the still overly objective conceptualization of CHRISTIE and GEIS aside, the problem is that it is often impossible to factor out exactly what subset of the sign addresses the issue of power. Now suppose that the power distribution between John and Bill is stable for the moment. My guess is that it contributes to Bill's response to John's sign. Of course it does. How their relative power positions are integrated in his objectified reality is not the sole determining factor, though. Because of their relationship, succumbing to the power of John may relate strongly to one of Bill's interests. But he most likely has other interests, too. So, Bill's (re)action will depend on their balance. His intellect will help him 'calculating,' SCHOPENHAUER suggests, but sometimes with detrimental results. The intellect is an all but perfect instrument. It is this essential indeterminacy of the - conceptualization of the - relationship between will and intellect that precludes an exhaustingly systematic exposition of, among others, the anatomy of meaning. Instead of hiding the necessarily prerational axioms from my explanatory apparatus I have chosen, like SCHOPENHAUER does for his conceptual system, to explicitly confront and include such axioms.

Any action by Bill adds to the memories both John and Bill each subjectively maintain of their relationship, including any effects on the power distribution.

Another important but equally problematic concept for explaining preintel-lectually interest-based behavior is that of trust. It is also not a simple variable. Though Bill may trust John, he may not comply with the interests John puts up for gratification. John just doesn't appeal positively to his own interests, Bill may conclude. Apparently, John also doesn't hold sufficient power over Bill to secure his compliance with negative appeal.

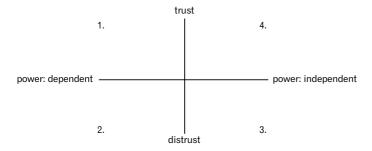


Figure 8.5.1. Power and trust in the interpretation of signs.

Though likely intimately interwoven, here I simply consider the concepts of power and trust orthogonal. This ordering device already allows me to make some additional remarks. Figure 8.5.1 is drawn from the perspective of Bill, the sign observer in this case. His power relative to John's is represented on the horizontal axis. On the extreme right, Bill is completely independent from John. And on the extreme left, he is completely dependent on him. The vertical axis depicts the degree of trust Bill places in John. At its higher end Bill's trust is complete. At the lower end Bill has complete distrust.

Whole-hearted compliance probably occurs in the upper left-hand corner [1]. When Bill is completely dependent on John it is unlikely that some other of his interests may win out. With trust defined as the feeling that the other will not act against the interests of the self, Bill will undoubtedly comply and thus, being positively motivated to do so, serve John.

In the lower left-hand corner [2] Bill complies. However, he does at the expense of interests he would favor without being up against John's power. Two things may happen. His distrust may turn out to be unmerited, or so he believes, anyway. He then adjusts his memory of their relationship accordingly. Next time around he complies with less aversion. On the other hand, when his distrust is confirmed he probably dreams of, or even prepares for, some significant redistribution of power.

The upper right-hand corner [3] may find Bill complying. It only happens, though, when at present no other interest is more urgent. And in that area he defends, or even improves, his power position. Of course, when Bill contemplates *not* to comply he has to give more attention to how John might react to his refusal. Will it lead John to distrust him (more)? Could it eventually lead John to instigate changes in their distribution of power?

Refusal of compliance seems certain in the lower right-hand corner [4]. How he does act, or not, is even more dependent on his interpretation of how John places himself relative to Bill in such a power-trust grid than with his

non-compliance in the upper right-hand corner. Will John shift his position? It follows that an unanswered sign of John may lead to the largest changes in their memories as relationship.

On qualitative terms it looks like Bill complies more often than not to an interest-implied sign by John. A quantitative measure might come out altogether differently, though. Again, I cannot refer to empirical research but the personal feelings of the majority of persons probably are that they are both superior in power to and distrustful of other persons.

I repeat that analysis on the basis of such one-dimensional concepts of power and trust is simplifying matters much. I try to suggest a general flavor of the variety of reactions to a sign. I also hope to make a credible case for it that degrees of power and trust are not established by a single sign exchange. They are properties of whole relationships between persons. By and large a relationship evolves through exchanges in all media. Signs are important but then a human relationship incurring only signs would not be fully human. It may happen that the use of signs is abolished for other media (realms, modes of causation). Such revolutions to the worse are common. Revolutions to the better, though not unknown, are indeed rare. Relationships mostly evolve to improvement, rather than suddenly change for the better.

The political nature of all human exchange has been the central assumption underlying the previous chapter. With a related concept, this chapter argues that the promotion of interests through sign exchanges is *diplomatic* in nature. Like personal politics, personal diplomacy is a key concept for an anatomy of meaning with additional explanatory power. The terminology of diplomacy serves to integrate signs into a larger framework for relationships. For diplomacy is never an end to itself.

Earlier I have already hinted at the increasing variety of sign situations. Even the same set of persons is often involved in (many) different relationships. John and Bill play tennis together. John has an account at the bank where Bill works. Bill visits John as his dentist. And Bill helps John trouble-shooting his business and private computerized information systems. Bill also helps John with his private tax papers. John, who is also good at plumbing, has installed Bill's bathroom. Etcetera, etcetera. Such variety is taken as characteristic of postmodern society. Invariably an individual participant will internally have to negotiate between his interests pertaining to different situations when situations have not been made explicit. So, what is usually known as a conflict of interests is, rather, their confluence. The situational variety compounds issues such as I have introduced in the current paragraph under the heading of power and trust. It is therefore adamant that a realistic anatomy of meaning takes situational variety into account. This is precisely what the proposed engineer- and observer-based sign structures offer. In Figures 7.5.6 and 8.1.1,

and all other figures preceding and derived from them, the concept of situation must of course be interpreted as situational, too. How for example the sign engineer views situations in his objectified reality is dependent on how he views himself as a *situation* that encompasses his intellect, i.e., his subjective instrument for himself as a unique objectification of the will.

8.6 limits and opportunities of empathy

The notion of comparison of structural elements constituting a *single* sign has been introduced in § 8.1. Does it imply that all an observer is looking for is whether or not his interpretation of the engineer's interpretation matches his own original interpretation? Of course, that would be the stake when the observer's interest is only to confirm himself. But what if the observer is interested in learning? If so, divergence between his original interpretation and what he interprets the engineer to indicate should not cause him to reject the sign but, rather, to embrace it. A serious anatomy of meaning must also support explanation of how an observer's interpretants can develop with dramatic turns under the influence of signs, and their suspected engineer(s).

Interest in learning from exchange should therefore strongly correlate with empathy. It is the observer taking the engineer seriously, be it positively or negatively. It can now be simply abducted – to use PEIRCE's expression for hypothesis – what promotes learning, and what not. It is strongly promoted when the observer recognizes relevant interests addressed in the sign. Those might not be immediately recognizable, though. What empathy achieves for the observer is that his own first-order interests are momentarily suspended. The time lapse should be sufficiently long for an evaluation of interests such as the sign suggests to the observer. Of course, nothing the observer does is interest-less. That is why I propose learning, or empathy, as an interest in its own right. When the observer feels that, after all, relevant interests are implied by the sign, he may proceed to consider what he interprets as the situations, and objectified realities that the sign represents.

Empathy, too, is not without its limits. Evaluation may take so long that the observer's reaction, when it finally comes, is overdue. It is for example highly empathic to consider what the driver of a car is up to. But when he threatens to overrun the observer, suspension of own interests may be entirely the wrong strategy. It is wiser to immediately jump aside. Another risk is that of loss of investment. At first it might seem that the observer could learn from the sign. But all efforts could also be in vain. Especially when an engineer applies skillful deception, an observer may have to go to much trouble to arrive at the decision that the sign was uninteresting, after all. It also happens

that the a priori estimation of a large investment precludes the observer to actually make it. He is apparently not ready to abdicate a belief derived, probably with much commitment and energy, from an earlier sign or series of signs. What has grown into a conservative attitude of the sign observer is of course a major obstacle for diffusion of innovations (ROGERS, 1962).

Without immanent danger, the advantages of empathy often outweigh its disadvantages. As SCHOPENHAUER indicates, a person only has extremely scarce knowledge of himself as objectified will. A suspension of earlier known interests, other than desire to learn, may lead to increased self-knowledge at precisely that level of interests. As interests provide the situation for most other knowledge, any improvement in the integration of self-interests in objectified reality undoubtedly has beneficial effects throughout the intellect. Less fundamental opportunities occur at the levels of 'disinterested' perceptive and conceptual interpretants. Probably most learning as far as the number of adjustments goes, especially at a more advanced age, concerns changing such relatively superficial interpretants, rather than interests.

Many difficult problems rely for their solutions on activation of empathy. Suppose John cannot solve a problem he experiences. Bill can only genuinely help John to solve it when he puts John's interests first. As this is impossible, with priority, Bill needs to address an interest of himself. It works when Bill's interest does not conflict with the interest of John underlying the solution. Sufficient empathy is often acquired through the prospect of a return service. It is in this respect, too, that the personalization of community or society is influential. Then anyone may return the favor. Or compliance is offered as a commercial service. In that case in return for a monetary reward Bill suspends his other interest in favor of supporting John's interest. Such relationships are pervasive in (post)modern society. They culminate in professionalism where professionals and their clients are largely interdependent.

Closely related to empathy is cooperation. It can be seen as a relationship where compliance is felt by each participant to occur fairly balanced. Because cooperation is a relationship, too, it needs maintenance in order to continue functioning properly. The sign structures from the previous and from this chapter clearly suggest what aspects signs must treat. Without proper maintenance, the quality of a relationship may deteriorate to the point where participants no longer suspend their own interests but, instead, concentrate on them immediately. That is the annihilation of cooperation.

With all participants sufficiently motivated, i.e., with their interests being served, joint efforts at problem solving may be undertaken. Contrary to popular wisdom – and to several main currents in science, too – the anatomy of meaning presented here supports the view that participants don't have to share identical meaning. Rather, the key concept is role. What role(s) do(es) a

particular participant optimally play in the overall scheme of cooperation? There doesn't even have to exist a master plan of roles. Cooperation continues as long as everybody is convinced of the adequacy of both his own role(s) and the roles others play. Participants are often only dimly aware of other persons and their particular roles, or even not at all as in the proverbial ant colony. Each person is perfectly happy with his own role as the world.

Empathy in cooperation can be promoted through – more awareness of – interdependencies. But it still doesn't imply that participants should become more similar, identical even, in their interests and knowledge (N. RESCHER, 1995). They can achieve most together when they especially address their role distribution. Then, for each role, the particular incumbent should be left to perform it how he sees fit.

It may nevertheless be attempted to arrive at a joint model of reality. That model theoretically starts with a sign that is the aggregate of participants' signs. As it is practically prohibitive, even to create a single positive sign as the complete fulfillment of the engineer-based sign structure (see Figure 7.5.6), merging such signs into an integrated sign is especially out of the question. Attempts at modeling – what is assumed as the – shared reality usually take the turn of *isolating* the structural element of the extrabody objectified reality. It is treated as the one-and-only objective reality. In fact, this is precisely how I proceeded myself in Chapter 4 where I introduced the modeling technique of the metapattern. However, it should always be kept in mind that such an isolated approach assumes alignment of all other structural elements of the engineer- and observer-based sign structures.

So, whenever the jointness of the model does't materialize it is necessary to pay explicit attention to all other structural elements, that is, to the subjectivity of the participants' objectified realities. It is most likely for a joint model that further elaboration is 'situated' within specific roles. Whoever holds a role provides the description of situational behavior of relevant objects. Especially when highly specialized descriptions are required it is impossible for any role incumbent to completely understand what an incumbent for another role specifies. What is traditionally called shared meaning is therefore particularly inappropriate when different specialists are involved to solve a problem. Again, optimal cooperation is achieved at the level of role differentiation. This emphasis on necessarily very limited understanding of contributions by others requires from each participant that he trusts other participants highly. Is this realistic?

With specialization automatically comes uncertainty about what (other) specialists contribute. A person who doesn't consider himself a specialist probably feels especially dependent, i.e., uncertain about support of his own interests. But everybody within the scope of cooperation – a scope estab-

lished of course with wide enough boundaries in time and space – deserves to be labeled a stakeholder. The interests of *all* stakeholders need to be taken seriously for they are, by definition, *all* important to secure the benefits of cooperation. Change is all too often obstructed, successfully or not, when benefits are experienced to become (more) unevenly distributed. And the less-powerful stakeholders usually even feel worse about oppression when they are never openly told.

8.7 focal dynamics and structure types

A sign is engineered, I propose, *from* an engineer-based structure. And it is observed *toward* an observer-based structure. I sometimes refer to those structures as metastructures. They are thereby distinguished from the, say, normal structure of a sign. How a sign is normally structured follows, in this treatise, from the irreducible ennead (see § 4.5). With the metapattern, a sign is modeled (also read: structured) as a collection of nodes and their relationships. Nodes in a model are especially engineered for focus. With focus, the observer interprets the node in question as a particular signature. It determines both a particular context and a particular intext. With different nodes in the sign, the observer can shift his focus, leading him to develop different background and foreground interpretants from what he experiences as an encompassing sign.

As an intermediary remark I want to emphasize that the metapattern can be taken literally, or figuratively. In its figurative sense, any sign can be attributed a structure that only appears highly formalized in literal metapattern applications. So, for example this treatise, too, is full of nodes. For each node, what can be fruitfully considered its context, and what its intext? Precisely because a text as this one is not formally structured as the metapattern prescribes, the reader is left much to his own devices. But there are benefits from a more flexible format, too. The engineer may want the observer to experience greater freedom to pursue his own interests, with the observer indeed happy to do so. Anyway, when I continue to write about signature, context, and intext, I am referring to a formal model that has been engineered with – the rules of – the metapattern. Those must be easier to imagine for the reader.

A sign (also read: model) of some complexity requires many shifts of focus by the observer for his thorough comprehension. Now, the observer-based sign metastructure can assist the observer where to direct his focus. He may want to ascertain the identity of the engineer. Does the sign contain sufficiently reliable information about its originator? Etcetera.

A particular sign only has a single actual structure. Or, approached the other

way around, from the engineer-based metastructure a particular sign may be produced (or from an observer-based metastructure interpreted). An instantiated structure does not provide insight into the anatomy of meaning. It is too detailed. And the metapattern *as technique* is too general. In fact, the metapattern is also used to model both the engineer-based and the observer-based sign metastructure.

Here, anatomy is supposed to entertain an abstraction over sign instances. An intermediary abstraction may then be assumed to occur between actual signs and modeling technique. It is best explained with characteristic means. Such are the proposed metastructures, i.e., for engineering and observation, respectively.

In an admittedly idiosyncratic fashion, in Part ii I have so far developed an anatomy of meaning as my original creation. But is it? In the remaining four chapters I enter into a critical discussion comparing it to some established theories of meaning and/or communication.

prelude 9

From equating an engineered sign with an engineered cause it simply follows that a sign is an act. In fact, the Schopenhauerean action perspective has contributed to development of the sign's representational structures (see Chapters 7 and 8) that differ widely from what traditional linguistics and language philosophy propose.

Rather than starting from a general action view, that is, a view that at the minimum brackets existing theories of language, the analytical philosophy of language has not radically challenged its own assumptions. It has elaborated into embracing action from the perspective of language. From the basic idea that speech involves either true or false statements about reality, another concept has *evolved*. The reasoning is that there is also a different kind of speech, i.e., the speech that acts. Built upon the positivist foundation of truth-value, or at least unable to radically deny it, the concept of speech act has arisen.

The anatomy of meaning in this treatise does not uphold a distinction as between, say, truth-speech and act-speech. It holds that *every* sign is an act.

Speech act theory, as the evolution of analytical philosophy of language is named, is very influential. Well-known proponents are AUSTIN, his one-time student SEARLE and, labeling his theory that of communicative action, HABERMAS. Alone or together, their works are also referred to in theories of information modeling as constituting its language action paradigm.

Modeling theories based on the analytical language action paradigm have mostly uncritically appropriated concepts from speech act theory and from related developments such as the theory of communicative action. It is not difficult to see why. For traditional information modeling applies identical assumptions.

Chapters 9 through 12 attempt to fulfill the requirement for critical appraisal of some primary sources. A chapter on MEAD, Chapter 11, is added to chap-

ters devoted to the three theorists already mentioned. In itself, MEAD's ideas are already interesting. He is included here because of his strong influence on HABERMAS. The latter cannot be properly appreciated without first seeing key concepts from MEAD (and from AUSTIN and, to a lesser extent, SEARLE) in their original perspective.

This series of critical chapters starts with AUSTIN. It is especially illuminating to see what the purely linguistic ground of his concept of *illocution* is, a term nevertheless echoed far and wide as a key concept for information modeling. From the perspective of this treatise, it adds an unnecessary distinction. As *every* sign is a request for compliance, grounds to explain meaning should be cleared from *all* primary propositional assumptions. *All* speech *is* act.

It is not that the language action paradigm does not go far enough. The problem is that it certainly introduces a much-needed theme, i.e., action, but regretfully develops it inconsistently and therefore continues theorizing in a direction that is unproductive for comprehension of variety. Whatever theories of information modeling are derived, they are bound to suffer from similar contradictions. Reviewing such modeling theories, too, has been left outside the scope of this treatise.

chapter 9

AUSTIN'S UNHAPPY ILLOCUTION

Before reviewing some publications by other authors as announced at the end of the previous chapter, I speculate on the general nature of discussion. See the first paragraph below. It first of all contributes to – an appreciation of – the model of the anatomy of meaning presented here in Part ii as an integral part of the ontology of subjective situationism. Secondly, a general background helps me prevent repetition when separately discussing the selected publications. Perhaps most important about § 9.1 is, thirdly, that it demonstrates the need to reach for grounds is serious discussions. Arguments should touch on, and possibly lead to adjustment of, axioms participants hold. Otherwise, issues remain unresolved and conceptual confusion continues unchecked.

After § 9.1, the remainder of this chapter, and by far its larger part, contains an actual review. I choose to start my discussion of different theories of meaning and communication with a publication by JOHN L. AUSTIN (1911-1960). AUSTIN is credited for pioneered a philosophical theory of speech acts. His particular theory is further developed by JOHN R. SEARLE (1932-) whose first book on speech act theory I discuss in the next chapter. Then, in Chapter 11, I introduce and comment upon the explicitly social-psychological view on meaning of GEORGE H. MEAD (1863-1931). The theories of, among many, many others, MEAD and AUSTIN, and to a lesser extent of SEARLE, are integrated by JÜRGEN HABERMAS (1929-) into his social theory of communicative acts. It is taken up in Chapter 12.

Publications of these four authors all directly or indirectly influence theories and subsequently practices of business information modeling. However, their application is usually uncritical in the sense that the conceptual grounds they rest on are taken for granted. I believe they once deserve especially *critical* assessment. My comments, like those on ECO in Chapter 5, indicate that the

requirements of information modeling for complex business processes are better served by conceptual grounds that radically recognize the subjective individuality – and pervasive situatedness – of every stakeholder.

9.1 in the interests of discussion

In *Die Welt als Wille und Vorstellung* SCHOPENHAUER recognizes basically two types of interpretants: perceptive and conceptual. He adds that a conceptual interpretant, or a concept for short, is ultimately derived from perceptive interpretants. The transition from perception to reason entails, and here I include my own speculations, an abstraction resulting from both specialization and elimination. For it is not so much that properties of a group of perceptive interpretants are eliminated. Rather than having any distinct properties, I propose a perceptive interpretant is still a whole. So, conceptualization eliminates such wholes. It is interest-driven – like perception already is, actually – hence the specialization. The resulting concept, directly or indirectly derived from one or more perceptive interpretants, is now *constituted by a limited set of properties*. See Figure 9.1.1 for an abstract overview of this admittedly highly speculative idea. But if its 'reasonable,' why not?

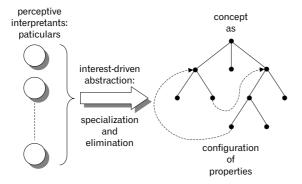


Figure 9.1.1. Properties are established by conceptualization from perceptive interpretants, and onwards.

The influence of interests on conceptualization elegantly explains that even from the same collection of perceptive interpretants often very different concepts evolve (just as, in the first place, different perceptive interpretants originate from encompassing reality). For a particular concept reflects one or more *particular* interests. Figure 9.1.2 captures the interest-driven differentiation in the conceptual realm of the intellect. The resulting concepts may overlap in (some) properties. In Chapter 4 the metapattern has been presented as a mod-

eling technique for ordering such multisituational objects. Examples are not included here.

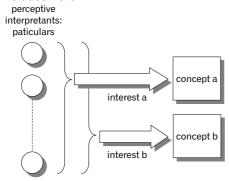


Figure 9.1.2. Conceptual differentiation is interest-driven.

As perceptive interpretants are necessarily distant from the objects in encompassing reality they stand for, concepts are distant from perceptive interpretants. So, concepts actually stand doubly removed from objects. I repeat, after SCHOPENHAUER and PEIRCE among (many) others, that a sign user never directly knows about objects. He postulates them from signs (and signs are postulated to account for objects). After the sign has served the purpose of initializing and possibly further informing an instance of a sign use process, the resulting interpretants are believed to stand for objects. I add that the mechanism of mind must also be somehow recursive. For how else could a sign user himself experience his concepts differently from when they, too, are deduced from signs that are perceived?

Conceptualization is therefore not a process of eliminating properties but of, rather, eliminating wholes and replacing them by a set of parts, i.e., properties. This explains why a conceptual interpretant is often 'reasonably,' and positively, *defined* by a configuration of properties. However, a perceptive interpretant *by definition* cannot be conceptually defined through properties. For its essential nature is to be, not so much propertyless, but even entirely *void* of properties. It simply is *not* a concept. Again, properties are only established through the transition from perceptive to conceptual interpretant.

Whether or not conceptualization involves removal or creation of properties, as SCHOPENHAUER already points out there are infinite ways to 'define' concepts, that is, to configure properties. When persons conduct their discussions on a, literally, reasonable level, they are comparing concepts. It could accidentally happen that their mutual positive definitions in reaction to a particular sign are sufficient for them to – believe to have reached – agreement. But properties are concepts, too. Uncertainty about one concept then invites inquiry after other concepts.

Sooner or later, contradictions necessarily also arise within the conceptual scheme of an individual sign user. For it is unavoidable that an extended derivation finds an earlier concept lacking. Its 'source' may not have the required properties, those being either insufficient, or providing an ill-suited classification after all, or both. A concept that has already been derived could even reappear as a property, several steps later in derivation. This all is more likely to happen when interests shift.

My concept of contradiction much resembles what s.D. ROSS calls aporia, that is, a perplexing difficulty. In *Metaphysical Aporia and Philosophical Heresy* he proposes (1989, pp 3-4):¹

By *aporia*, I mean the moments in the movement of thought – including but not restricted to metaphysics – in which it finds itself faced with unconquerable obstacles resulting from conflicts in its understanding of its own intelligibility. Such conflicts cry out for a resolution that cannot be achieved within the conditions from which they emerge. The result is either the termination of the thought or heresy: a break in the limits of intelligibility.

I hold it is the function of axioms to serve conceptual development without running into such contradictions *too soon*. And I consider a contradiction as premature, i.e., appearing too soon, when it occurs somewhere 'between' the axioms and the concept which currently is under scrutiny for helping to determine, in a Peircean sense, the conduct of the sign user. Figure 9.1.3 gives a generalized example. Please note that nodes are now indicating concepts. But what, incidentally, is the difference between concepts and properties? Does it not depend on the level of inspection, only? As with object, situation, and behavior in general, I believe it does.

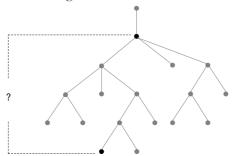


Figure 9.1.3. Discovery of contradiction in conceptual derivation.

1. Ross distinguishes three main "forms" of aporia (1989, p 4): contradiction, multiplicity and limitation. As one of its forms, his concept of contradiction is subordinated to his concept of aporia. The very point of subjective situationism, however, is that multiplicity

need not pose conceptual problems. And with contradiction as my general concept in this respect, I therefore suggest different 'reasons' for its occurrence than ROSS does for aporia.

The sign user may of course ignore the contradiction. I suppose it happens often enough. For his faculty of reason doesn't control itself but, as part of the overall intellect, is an instrument of the will. And I don't want to argue about the *degree* of self-control, if any, of the intellect/reason as it is irrelevant here. Anyway, when somebody indeed ignores a contradiction his participant in the discussion will rightly feel it is useless to continue the argument.

Now suppose that the original sign user acknowledges at least the possibility of a (premature) contradiction and, given a particular possibility, wants to investigate the opportunity of solving it. It is then useless to look for a solution in further refinement of concepts. On the contrary, a solution can only be found in moving toward his axioms. The starting point of analysis is the node in the hierarchy of conceptual derivations where the contradiction originally becomes manifest. Moving up the conceptual hierarchy one node at a time, the particular node may be discovered that is the cause of the contradictory effect elsewhere. That particular concept should then be changed, provisionally at first. For the new concept may not be a solution. In fact, it may even introduce new contradictions, and even higher up in the hierarchy of conceptual derivation. In addition, contradictions may now occur down other paths in the hierarchy. When the new concept survives the tests, it deserves to be made permanent. It is not paradoxical that such permanence is limited, i.e., it should be maintained until a relevant contradiction is experienced. That sets off a new process of conceptual tuning, etcetera.

All derived concepts must now be correspondingly adjusted. Actually, it cannot possibly happen through exhaustion of all possibilities. For both the rigor of testing and the breadth of adjustment are, again, limited by the intellect as instrument. Please note that the intellect also 'contains' motives; they represent interests and, ultimately, the all-encompassing will. As I have indicated in § 8.6 it requires proper motivation to invest effort.

The distance between the cause and effect of a conceptual contradiction – but are there any other contradictions then conceptual? – and the complexity of the hierarchy of conceptual derivations, are measures for the efforts facing the sign user should he attempt to remove the contradiction completely. But again, he naturally will only do what – he feels that – is in his interests. Suppose that somebody else, a so-called other, points out a contradiction to him. Now that is 'only' the reflection of an observation by another person. Is that observation correct? Is a belief warranted? As always, a belief results from semiosis and is essentially subjective. Why should self accept what other expresses as a belief? A fundamental obstacle to acknowledging a contradiction is precisely ... that very contradiction. But suppose, too, that the sign user overcomes this obstacle through empathy, trust, relative powerlessness, feeling secure, or whatever, and indeed considers the possibility that he himself

entertains a premature contradiction. Why should he remove it? Because somebody else has informed him about it, doesn't he primarily serve the other's interests when he works on its removal? For why does the other point it out to him?

Contradictions usually arise from axioms. It is only natural because *it is the axiomatic system of the sign user that rules the generation of properties, and thus of concepts*. It follows then that removal of contradictions often implies an adjustment of the axiomatic system. And it also follows why such adjustments, at least with major changes involved, are rare, when not practically impossible. For basically changing axioms has consequences for the whole hierarchy of conceptual derivations. With the intellect already attending to its business-as-usual, efforts required for simultaneous fundamental reconstruction of the contents of the reason seem prohibitive.

Conceptual reorganization is throughout possible, though. But in practice it is only feasible on a limited scale. Subjective situationism, especially when situation is seen as a recursive concept, allows for differentiation of axiomatic systems. When the prematureness of a contradiction can be localized, 'only' the pertaining axiomatic system and situational hierarchy of derived concepts need adjustment. Of course it can still be a task too formidable for a sign user to consider. But awareness of the situational nature of axioms may help to overcome resistance. His personhood is only threatened when the highest-level situations he has defined for himself — and that would be his overall self-image or -knowledge — require major changes in axioms. Lowel-level situations, with their corresponding lower-level axiomatic systems, can be handled with less consequences for fundamental self-knowledge.

A rational discussion is best possible when partners openly acknowledge the axiomatic nature of their (subsequent) concepts, and are willing to – try to – let their signs stand for especially their axioms. In this respect SCHOPEN-HAUER conducts his arguments exemplary. His tragedy is that many people are, literally, *not interested* in such discussion practices. Another obstacle is that many persons don't consider the behavioral differentation they themselves so clearly exhibit. Someone may resist to change his concepts because he feels that would wholly change his mind. Any change is already less threatening, however, when it is recognized to apply to a limited situation and corresponding behavior, only.

As I have suggested before, the *depersonalization* of axiomatic systems has reached its pinnacle in (early) logical positivism (and in fundamentalist religions, of course). Its proponents declare fit for discussion only what can be rationally discussed and, they think, decided upon. And all that should of course proceed strictly according to their *own* belief of what is rational. An opponent with less power is simply forced into a so-called double bind; what-

ever strategy he chooses, the positivist always finds fault with him.

Axioms are not rational themselves but, more fundamentally, govern the transition to reason. However, logical positivists don't recognize them as 'initial conditions' for conceptual systems. Instead, they emphasize the irrational side of axioms. Thus axioms, metaphysics, ontology, etcetera, are banned from discussion. Whoever wants to discuss those, i.e., whoever reflexively speculates on grounds, is declared being unsystematic, unscientific, etcetera.

With the taboo on speculation lifted, SCHOPENHAUER's work can again be interpreted much closer to its original perspective. His genius as I see it is to elaborate on axioms, first and foremost. Already in *Über die vierfache Wurzel des Satzes von zureichenden Grunde* he fully ascribes to their necessarily irrational nature as ground for rational understanding. And precisely how he handles the apparent paradox between irrationality and rationality, foreshadowing empirical discoveries in for example psychology, serves to avoid many (other) premature contradictions. The majority of the text of *Die Welt as Wille und Vorstellung* contains an elegant display of his conceptual system with world, will and interpretant as its most profound axiomatic concepts, that is, as rules for derivation of (other) concepts from perceptive interpretants, and onwards.

Differences between axiomatic systems explain why discussions often do not result in agreement. Participants who, in theory, can learn most from each other are, in practice, least liable to do so. I suggest a discussion is especially rational when participants at least agree on their disagreement. This should be an invitation for them to compare axioms, first principles, or whatever they choose to call their fundamental concepts. Any additional agreement can only follow from axiomatic correspondence. Where detailed agreement is required, first of all a generative axiomatic system is 'installed' in persons. Maybe it deserves to be called inducation, rather than education.

Concluding this preparatory paragraph I remark that agreement is always subjective, too. It is one person's interpretation of the similarity between his relevant interpretants and those of one or more other persons, or even their identity as his essentially subjective interpretation.

9.2 an adolescent's diary

Subjective situationism immediately directs attention to several properties of AUSTIN's book *How to Do Things with Words*. It starts with the fact that AUSTIN actually does not write it himself. In 1955, he gives a series of twelve lectures. The book, originally published in 1962, results from editing of AUSTIN's lecture notes by J.O. URMSON and M. SBISÀ. This raises the question about the

actual partner in my discussion here. In the light of his (?) doctrine of infelicities, it is indeed a pertinent question. For doesn't "convention" require for a "happy" "uptake" of a book that its author is unambiguously known? When those terms are taken seriously, at least on its own terms the book therefore seems destined for an unhappy fate. It has, on the contrary, become highly influential. Can its popularity be taken as anecdotal confirmation that convention does not deserve the emphasis AUSTIN gives it? Does it mean that it met with a happy fate because the doctrine of infelicities it explains is nonsense? But then, maybe that emphasis was not AUSTIN's in the first place. What are the contributions of the editors?

Suppose for simplicity's sake that AUSTIN is the book's immediate and only author. Still another reason hampering clear judgment is that AUSTIN theorizes from what I consider are implicit assumptions. That is, he fails to suggest his axioms. It means that I, as the reader of his book, have to make such assumptions myself. But are they similar enough to those AUSTIN actually holds?

Often in sign exchange, the relevant axiomatic systems of the participants are complementary enough for unproblematic compliance by the reader to the interests of the author. Compounding the lack of axiomatic clarity in *How to Do Things with Words* is AUSTIN's own perplexity. My conclusion is that he shifts his assumptions during his argument. Now that also need not be too much of a problem for a reader. On the contrary, when deftly applied in an essay, the writer indeed helps the reader explore a wide range of semioses. But it is counterproductive, as it is in AUSTIN's case, when it happens (too) implicitly, and too often. He goes off in recurrently opposite directions, in an allegedly analytical work. He makes it hard, even impossible, to trace his logic or, for that matter, his lack thereof.

I am sure it is highly unconventional when discussing concepts but, sensing the value of a pragmatic turn, I first want to characterize the author from my general impressions of *How to Do Things with Words*. I do so by a short metaphor. My view of the author is that of a highly intelligent person, now in his adolescence. He grows up and continues to live in a closed, well-protected and secure community. At the time of his writing he is deeply pondering, as any adolescent is prone to do, what principles he sees the adult persons in his community living by. He doubts their important concepts. Several he cannot accept any longer. He replaces those for his own designs.

It is of course no coincidence that the adolescent writes a diary during this period of conceptual turmoil. *How to Do Things with Words* is that diary, with AUSTIN cast in the role of adolescent. The diary records both his development and helps him with 'How to Think Things Through.' Too soon, however, he himself declares his period of adolescence consummated. It now appears he has only superficially modified the conceptual scheme of his elders. The really

fundamental concepts survive unanalyzed and intact. Thus he perpetuates those in his own scheme. And the few concepts he changes acquire their intermediary positions prematurely, eventually leading to more, not less, contradictions.

Other persons upon reading his 'diary,' and many more who only hear about it, don't recognize how he is unsuccessful about integrating his newly coined concepts. As sometimes happens when confusion in conceptual integration lacks a critical audience, isolated items from AUSTIN's admittedly hesitant terminology are separately appropriated for other purposes. *Without* the original reservations they appear elsewhere as final, uncontestable.

It is a fate that no author's work deserves. Here I especially refer to AUSTIN's terminology of performative, illocutionary and perlocutionary. When my metaphor of adolescence somehow fits AUSTIN, and illuminates his 'interest' in *How to Do Things with Words*, from the perspective of reception he is a more tragic figure than SCHOPENHAUER. The latter doesn't have his integrity compromised as the former. One might call it an advantage of neglect.

I next demonstrate how interpretation is facilitated by AUSTIN's portrait as an adolescent in a small community, with *How to Do Things with Words* as his diary. I definitely don't want to unduly ridicule or honor him. I acknowledge his intellectual struggle. But I strongly feel that it could have borne more fruit through wisdom, rather than mistaken reason alone. My aim is a realistic assessment of his contributions.

9.3 the lure of action

The 'community' where AUSTIN resides is that of so-called language philosophy at Oxford University, England. The 'adults' whose views he draws into doubt must have been other language philosophers of this school. Strongly related is the community of analytical philosophers. He doesn't directly say so but his book supplies several clear-enough implicit references. One of them

2. What certainly augments the confusion is that AUSTIN's essay *Performative Utterances* has also been made widely available. It is, posthumously too, published first in his *Philosophical Papers* (1961) edited by J.O. URMSON and G.J. WARNOCK. It is later included in collections such as *The Philosophy of Language* (1985) edited by A.P. MARTINICH. As its title indicates, AUSTIN's other essay is entirely devoted to

establishing the concept of the performative utterance. He contradicts it by *How to Do Things with Words* where he favors illocution. Comparing his two texts makes it even clearer that illocution is the immediate descendent of performative.

A dense continuation of AUSTIN's speech act theory presents W.P. ALSTON in *Illocationary Acts & Sentence Meaning* (2000).

reads (p 1):

It was for too long the assumption of philosophers that the business of a 'statement' can only be to 'describe' some state of affairs, or to 'state some fact', which it must do either truly or falsely.

I believe it to be fair on my part to place AUSTIN within the confines of a small community. Seen from a wider perspective, it must be reasonable to assume that he can only be referring to the "business" of language philosophers. He doesn't mention philosophers who are not at all primarily interested in matters of statement. Or when they are, who don't have an orientation at truth value in mind. That SCHOPENHAUER posits the world as subjective interpretant is already evidence enough that philosophers are involved in other 'businesses,' too. PEIRCE (see Chapter 2) explicitly denies any use for metaphysical truth and falsity; he speaks of beliefs and doubts that are entertained by an individual person to – help him – guide his conduct. In fact, the whole movement of transcendental idealism avoids any questions about what is absolutely true or false. AUSTIN is definitely parochial when he generalizes from the perspective of his own community. Another example is (p 4):

[Q]uite commonly [does an utterance] masquerade as a statement of fact, descriptive or constative. Yet is does [...] do so, and that, oddly enough, when it assumes its most explicit form. Grammarians have not, I believe, seen through this 'disguise', and philosophers only at best incidentally.

His criticism is valid. But his extremely limited view of earlier philosophy sets the scene for AUSTIN's attempts at defining an identity for himself. For he is (p 12)

questioning an age-old assumption in philosophy—the assumption that to say something, at least in all cases worth considering, i.e. all cases considered, is always and simply to *state* something.

It is actually not all that old. It is the tenet of (early) logical positivism gathering force at the beginning of the twentieth century. AUSTIN lectures in 1955. Continuing to specify the target of his rebellion he once more declares (p 72):

One thing, however, that it will be most dangerous to do, and that we are very prone to do, is to take it that we somehow know that the primary or primitive use of sentences must be, because it ought to be, statemental or constative, in the philosophers' preferred sense of simply uttering something whose sole pretension is to be true or false and which is not liable to criticism in any other dimension.

Because it is really untenable that *all* philosophers hold such views about the nature of sentences it makes suspicious about AUSTIN's motives. What is behind his rhetoric? Or does he really believe there exists only one kind of 'true' philosopher, i.e., the language philosopher molded at Oxford? Why does he try so hard to convince?

I don't think I am doing him any injustice by calling attention to the dogmatic extent of determining his so-called opponents. His approach has the hallmark of the adolescent *creating* opponents out of his parents for purposes of practicing his independent existence. It is a natural, even necessary, development. It should prepare a person for dealing with *real* opponents, i.e., with persons who seriously hold significantly different views. But in *How to Do Things with Words* AUSTIN remains within the relative comfort of his closed community.

In passing I offer it as an observation that many language philosophers apply essentially introspective procedures for adding to their knowledge. There is often no report of a constructively critical treatment of work of other philosophers. For example WITTGENSTEIN notoriously abstains from providing references. I believe it actually betrays a singular opinion about the concept of language. *How to Do Things with Words* is completely self-conscious. There is no attempt to build upon, or enter discussion with – the works of – other persons.

Anyway, AUSTIN suggests different purposes or functions for language, besides allowing facts to be stated truly or falsely. Then (p 5),

the uttering of the sentence is, or is a part of, the doing of an action, which [...] would not normally be described as, or as 'just', saying something.

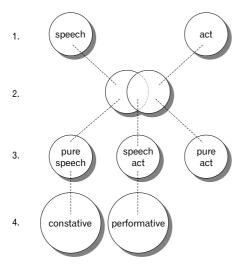


Figure 9.3.1. The conjunction of speech and act, followed by disjunction into constative and performative.

The key term, of course, is "action." And an action is what a person is "doing." My feeling is that AUSTIN must have been exhilarated by what he may have thought was the discovery of the missing link between speech and

action. He chooses to name the blend (p 6)

a performative sentence or a performative utterance, or, for short, 'a performative' [...] The name is derived, of course, from 'perform', the usual verb with the noun 'action': it indicates that the issuing of the utterance is the performing of an action—it is not normally thought of as just saying something.

There are indications that only later AUSTIN adapts the terminology of speech act.³ Indeed, it is an interesting conjunction of words. His earlier assumptions

3. An example of an earlier use of the concept of speech act, with references to yet earlier uses, provides the intriguingly current two-volume Handboek der Analytische Signifika by GERRIT MANNOURY (1867-1956). The Handboek was published in 1947 (volume I: Geschiedenis der Begripskritiek) and 1948 (volume II: Hoofdbegrippen en Methoden der Signifika). An important earlier publication by the same author is Mathesis en Mystiek: een signifiese studie van kommunisties standpunt (1925). MANNOURY states (p 79, my translation from the Dutch): "A word is just a word. Yet, every word has come into being and been born as a living work of human wonder and reality: as human will and act." Elsewhere in Mathesis en Mystiek, he already articulates a concept of language act.

In 1922 MANNOURY, a mathematician, cofounds the Signifische Kring (known in English as the Significs Movement) in the Netherlands. Other founders are psychiatrist F. VAN EEDEN and intuitionist mathematician L.E.J. BROUWER. The Signifische Kring takes its inspiration from ideas developed by VICTORIA WELBY (1837-1912) with whom VAN EEDEN has become closely acquainted (MANNOURY, 1949, pp 11-20).

In Handbook der Analytische Signifika, MAN-NOURY takes significs, a term he also derives from WELBY who publishes her Significs and Language in 1911, as synonymous with theory of relational instrumentation (Dutch: ver-

standhoudingsmiddelen). Productively reasoning from an extremely broad concept of language, he argues that community members conduct their relationships through language acts. Then, a speech-language act (Dutch: spreektaaldaad), or speech act for short, is a special kind of language act. On his terminology he remarks, with some examples included, that it has already become (volume I, p 16) "quite accepted." AUSTIN is therefore either not aware of earlier work on speech act theory or, when he is, unlike MANNOURY he does not acknowledge any of it in How to Do Things with Words (1962). On the concept of speech act, see for example also Sprachtheorie (1934) by K. BÜH-LER (1879-1963). It actually makes me wonder, again, what important precursors to my own theorizing I have missed. And what the fate of this treatise is. In all honesty, MAN-NOURY's book has been another freak discovery in a second-hand book shop. And I only found, and bought, it after completing my theoretical design that this treatise presents.

MANNOURY's concept of language act involves (1947, p 16, my translation from the Dutch) "behaviors of living organisms, especially human beings, which they exhibit with the purpose of exerting influence on each other." There is indeed much in his significs that returns in my anatomy of meaning. However, his theory lacks the *radical* orienta-

tion from the Schopenhauerean will resulting in the hypothesis that every sign is a request for compliance. MANNOURY distinguishes three language functions (indicative, volitional and emotive). The scheme of AUSTIN may also be understood as to involve three functions (locution, illocution and perlocution). And as Chapter 12 shows, HABERMAS applies a threefold distinction, too (rational, normative and expressive). My proposal is that requesting compliance underlies all sign exchange. MANNOURY holds that (1948, p 19, my translation from the Dutch) "every language act aims to influence the representational world, the distribution of affects or the volitional orientation of the hearer, that is, generally speaking, it aims to produce new psychic associations or reinforce existing associations." I don't believe that is principally what the sign engineer aims at. He is not so much interested in changing the sign observer as he is in reaping the benefit of compliance. That is his end, with the sign observer as his means. As I see it, elsewhere MAN-NOURY already comes close to drawing this conclusion where he writes about (1925, p 76) "a kind of wireless control of my fellow human beings in a direction which they would not have taken on their own accord." He also does already make the distinction (see here Chapter 8, above, for characteristic representational structures of the sign) between (1948, p 31, my translation) "speaker's meaning and hearer's meaning of a language act[.]" Once again, MANNOURY emphasizes that significs is the science of communication which considers language acts as wholes, especially concentrating on the psychic grounds in both speaker and hearer; it requires an interdisciplinary approach form which, in turn, contributing

disciplines can benefit (1948, p 48). Already in *Mathesis en Mystiek* (1925), MANNOURY inquires (p 19, my translation from the Dutch): "It is not so mucht the question whether speaker's meaning and hearer's meaning are sometimes different. Rather, can they ever be considered identical?" And (p 29): "There are few words of which the speaker's meaning differs to such an extreme from the hearer's meaning, yes, from the self-hearer's meaning, as the first person singular does."

The Zeitschrift für Semiotik publishes on so-called issues. In 1984, nr 4, the issue was European Semioticians between World Wars I and II. The magazine featured the article Searle is in fashion, Mannoury is not: speech and hearing acts in the Dutch Significs movement by H.W. SCHMITZ. As published on the Internet (http://ling.kgw.tuberlin.de/semiotik/english/ZFS/Zfs84_4_ e.htm#5), the article's summary highlights the importance of MANNOURY's theory: "The article compares the semiotic conceptions of Mannoury and the Significs movement in the Netherlands with the approach to the theory of speech acts developed later by Austin, Searle, and British Analytical Philosophy. In contrast with speech acts, language acts in Mannoury's sense are not mere applications of independently existing word meaning and sentence meaning but the basis for their genesis. Language acts are not restricted to speakers only but include the actions of hearers and the mutual expectations of speakers and hearers." The analytical significs of MANNOURY therefore also predates work by, for example, E.T. GENDLIN (see the bibliography for references).

probably are that a person can only speak a sentence *or* do an act. What he now draws attention to is a third possibility, i.e., of a person 'speaking an act' (or doing a sentence). Figure 9.3.1 sketches how letting partly overlap two concepts, previously thought totally disjunct, may lead to three adjusted concepts. And from those AUSTIN concludes to two types of speech: constative and performative.

Regretfully, though, AUSTIN doesn't grasp onto the symmetrical possibilities of his combination. Had he done so, his approach more openly recognizes non-linguistic, action-related concepts. Instead, he chooses to develop his theory of speech acts largely within his familiar – philosophy of – language framework. It is once again VOLOSHINOV who, at an earlier stage, already proposes a more balanced view (1929, p 95):

Any utterance, no matter how weighty and complete in and of itself, is only a moment in the continuous process of verbal communication. But that continuous verbal communication is, in turn, itself only a moment in the continuous, all-inclusive, generative process of a given social collective. An important problem arises in this regard: the study of the connection between concrete verbal interaction and the extraverbal situation[. ...] Verbal communication can never be understood and explained outside of this connection with a concrete situation. Verbal intercourse is inextricably interwoven with communication of other types, all stemming from the common ground of production communication. It goes without saying that word cannot be divorced from this eternally generative, unified process of communication. In its concrete connection with a situation, verbal communication is always accompanied by social acts of a nonverbal character (the performance of labor, the symbolic acts of a ritual, a ceremony, etc.), and is often only an accessory to these acts, merely carrying out an auxiliary role. Language acquires life and historically evolves precisely here, in concrete verbal communication, and not in the abstract linguistic system of language forms, nor in the individual psyche of speakers.

And (p 96):

This is the order that the actual generative process of language follows: *social intercourse is generated* (stemming from the basis); *in it verbal communication and interaction are generated*; *and in the latter, forms of speech performances are generated*; *finally, this generative process is reflected in the change of language forms*. One thing that emerges from all that has been said is the extreme importance of the problem of the forms of an utterance *as a whole*.

Indeed, AUSTIN recognizes several relevant aspects but, as I will continue to demonstrate, doesn't succeed in creating a sufficiently comprehensive conceptual scheme underlying meaning and communication.

9.4 mistaken primacy of the language system

How AUSTIN proceeds shows that truth value of what he now, contrasting it with performative, renames constative remains unproblematic to him. The utterance of a constative is what I equate with pure speech. See Figure 9.3.1. It indicates that AUSTIN doesn't start out to deconstruct the traditional concept of statement, but only to avoid (p 3) "many traditional philosophical perplexities [that] have arisen through a mistake," i.e., the mistake of taking all statements "as straightforward statements of fact." A constative utterance states facts, he persists. It does so correctly, or incorrectly. Actually, the success or failure of a constative is a binary measure. But what about success or failure of a performative? AUSTIN recognizes that the concepts of truth and falsity in traditional language philosophy are irrelevant for performative speech (1962, p 14):

Besides the uttering of the words of the so-called performative, a good many other things have as a general rule to be right and to go right if we are to be said to have happily brought off our action. What these are we may hope to discover by looking at and classifying types of case in which something *goes wrong* and the act [...] is therefore at least to some extent a failure: the utterance is then, we may say, not indeed false but in general *unhappy*. And for this reason we call the doctrine of *the things that can be and go wrong* on the occasion of such utterances, the doctrine of the *Infelicities*.

AUSTIN goes on specifying general types of conditions that must prevail at the time of the performative for it to meet with success. I believe this is precisely the point where he starts off creating more contradictions than solving them. As ECO much later after him (see Chapter 5), he essentially sees language independent from its users. Though AUSTIN implicitly renounces the program of logical positivism with its single attention to what he now calls constatives, he still holds on to the sentence as the fundamental unit of access to insight. Nor does he seriously attempt to widen his scope beyond a single sentence. His preoccupation with speech is an obstacle. He acknowledges that "a good many other things" are relevant "[b]esides the uttering of the words of the so-called performative." But precisely the use of "besides" alerts to what AUSTIN implicitly holds for his axiomatic system.

Concentrating the "happy" result of a performative on just that very sentence itself draws, of course, too heavily upon its necessary and sufficient conditions as properties of the language system. The more general concept of the sign already much simplifies matters. So, why not define fulfilled conditions, taken together, as a sign? It may then consist of partial signs, etcetera. It makes the original performative not the apex of the whole "happiness" but only one of its elements, often even a minor one, at that. And it respects a great variety of signs. It is also overly complex to demand that conditions are

fulfilled a priori. My idea is that the happiness of a sign depends on the a posteriori judgment (also read: interpretation) of the participants in the exchange. A corresponding anatomy of meaning decenters the – importance of the – language system in favor of the sign users.⁴ The increased – opportunities for

4. Outside the discipline of language philosophy the predominance of language is not at all axiomatic. As J.A.M. MEERLO remarks in Conversation and Communication, a psychological inquiry (1952, p viii): "This study [...] tries to direct attention to the forgotten problem of preverbal communication, to the unconscious creative means of communication. Speech is a psychosomatic process and language as such is only a very small part of the human means of contact. Indeed, it is often used as a compensation for loss of more direct communication." See also for example Kinesics and Context: Essays on Body-Motion Communication (1970) by R.L. BIRDWHISTELL (p 66): "By and large those who have discussed communication have been concerned with the production of words and their proper usage. Communication has been seen as the result of mental activity which is distorted by emotional activity. Thus, the conception has been that the brain, by definition a good producer of logical thoughts composed of words with precise meanings, emits these under proper stimulation. That is, good, clean, logical, rational, denotative, semantically correct utterances are emitted out of the head if the membrane between mind and body efficiently separates this area of the body from that which produces the bad, dirty, illogical, irrational, connotative, and semantically confusing adulterants. Good communication thus takes place if the unadulterated message enters the ear of the receiver and goes through a clean pipe into an aseptic brain. Of course, it is recognized

that the brain may be either imperfect or out of repair. The focus upon communication and its measurement from this perspective is dominated by such an atomistic and loaded conception of man and his behavior that research or theory about communication becomes prescriptive rather than descriptive." E. GOFFMAN writes Interaction Ritual: Essays on Face-to-Face Behaviour from the assumption (1967, pp 2-3) "that the proper study of interaction is not the individual and his psychology, but rather the syntactical relations among the acts of different persons mutually present to each other. None the less, since it is individual actors who contribute the ultimate materials, it will always be reasonable to ask what general properties they must have if this sort of contribution is to be expected from them. What minimal model of the actor is needed if we are to wind him up, stick him in amongst his fellows, and have an orderly traffic of behavior emerge? What minimal model is required if the student is to anticipate the lines along which an individual, qua interactant, can be effective or break down? [...] A psychology is necessarily involved, but one stripped and cramped to suit the sociological study[.]" See also Conversation Analysis (1998) by I. HUTCH-BY and R. WOOFFITT who stress that (p 14) "CA is only marginally interested in language as such; its actual object of study is the interactional organization of social activities."

Of related interest is Pragmatics of Human Communication: a Study of Interactional Patterns, Pathologies, and Paradoxes (1967) by P. WAT- – variety of the anatomy of meaning, presented in this treatise, also helps to detect flaws in theories such as AUSTIN's. His theory is not only more limited as a result but already derived from a significantly different axiomatic system.

His axioms force AUSTIN to explain all variety of language use from properties of single utterances. To support a realistic account, an utterance is attributed more and more with properties that actually belong to the persons participating in the utterance exchange. He first calls it the doctrine of infelicities, later the doctrine of illocutionary forces (p 100). However, an anatomy of meaning is only realistic when participants explicitly figure in it. And they must play their parts at central stage of the sign exchange.

Another objection is that AUSTIN's theory is less discriminative than he suggests. It is just as applicable to any other element (p 52) "in the total speech situation." Why does the linguistic element of the overall situation receive privileged consideration? The sentence involved may just as well appear as a condition, with another element 'bearing' the burden of the happiness of the action. It is once again instructive to return to SCHOPENHAUER. In *Über die vierfache Wurzel des Satzes vom zureichenden Grunde* (1813, 1847; p 49) he remarks on the artificial nature of attributing an effect to a single cause:

[D]ie Kette der Kausalität [...] ist nothwendig anfangslos. Demnach also muß jeder eintretende Zustand aus einer ihm vorhergegangenen Veränderung erfolgt seyn. [...] Daß, wenn ein Zustand, um Bedingung zum Eintritt eines neuen zu seyn, alle Bestimmungen bis auf eine enthält, man dies eine, wenn sie jetzt noch, also zuletzt, hinzutritt, die Ursache κατ' εξοχην nennen will, ist zwar insofern richtig, als man sich dabeian die letzte, hier allerdings entscheidende Veränderung hält; davon abgesehen aber hat, für die Feststellung der ursächlichen Verbindung der Dinge im Allgemeinen, eine Bestimmung des kausalen Zustandes, dadurch daß sie die letzte ist, die hinzutritt, vor den übrigen nichts voraus. [...]Bei genauer Betrachtung hingegen finden wir, dass der ganze Zustand die Ursache des folgenden ist, wobei es im Wesentlichen einerlei ist, in welcher Zeitfolge seine Bestimmungen zusammengekommen seien. [... F]ür die allgemeine Betrachtung darf nur der ganze, den Eintritt des folgenden herbeiführende Zustand als Ursache gelten.

[T]he chain of causality [...] is necessarily without beginning. Accordingly, every state that appears must have ensued or resulted from a change that preceded it. [...] If a state contains all the determining factors except *one* in order to condition the appearance of a new state, then, when *this one* ultimately appears, it will be called the cause "par excellence." This, of course, is correct insofar as we keep to the final change which is certainly decisive here. Apart from this, however, a determining factor of the causal state has no advantage over

ZLAWICK, J. BEAVIN BAVELAS and D.D. JACK-SON. They emphasize that (p 257) "it seems obvious to us that to view man only as a 'social animal' would fail to account for man in his existential nexus, of which his social involvement is only one, although a very important, aspect."

others for establishing a causal connexion of things in general, merely because it happens to be the last to appear. [...] On the other hand, if we consider the matter more closely, we find that the *entire* state is the cause of the one that follows. Here it is essentially a matter of indifference in what chronological order its determining factors have come together. [...] Yet for general consideration only the entire state, leading to the appearance of the one that follows, can be regarded as cause.

The obvious consequence of linking all conditions for performance to the single performance utterance is that those conditions become increasingly general. This is exactly what happens to AUSTIN when developing his conceptual scheme. He apparently doesn't really see any practical differences between conditions for truth versus falsity on the one hand, and conditions for happy performances on the other (p 20):

And the more we consider a statement not as a sentence (or proposition) but as an act of speech [...] the more we are studying the whole thing as an act.

He keeps focusing on 'act' but changes his tactics when his distinction between constative and performative no longer appears productive (p 55):

[I]s there some precise way in which we can definitely distinguish the performative from the constative utterance?

What his axiomatic system entails is brought out by the sentences which immediately follow.

[I]n particular we should naturally ask first whether there is some *grammatical* (or lexicographical) criterion for distinguishing the performative utterance.

It might be natural from the perspective of language philosophy as practiced at Oxford. It is, however, not natural to everybody who denies that a particular language system – and why should it be English, actually? – provides privileged, even direct, access to knowledge about the world and its structure. All that AUSTIN admits to is to (p 59)

an impasse over any single simple criterion of grammar or vocabulary.

It leads him to change his tactics, a change I comment upon shortly. But I first stress the continued privileged position of language *as a system* in AUSTIN's thought.

Nowhere in *How to Do Things with Words* does he focus on the speaker or the listener. Well, he does, but indirectly so when he writes that (p 143)

the intents and purposes of the utterance and its context are important.

Or (p 61):

The 'I' who is doing the action does thus come essentially into the picture.

He mentions it, and passes on. Nothing "essentially" changes in his approach. He doesn't see the need, nor the opportunities, for starting from precisely such "intents and purposes."

There is actually one important, overall question missing in his inquiry. It is: Why does somebody speak? Looking for an answer might have given him a 'sense' of direction. However, he continues to reason from the concept of language as an independent entity. For him a particular language user seems irrelevant for deciding on meaning. His assumption is that the truth value is already contained *within* the sentence. And by analogy, something that I shall call the felicity types are also considered a priori present *within* the sentence. At the same time he realizes it is not all that simple. So, he proposes repairs. Failing the proper tools he can never build a (more) consistent theory, though. He persists by completely shifting the meaning of doing to the sentence formula deemed appropriate during action. Why a person is doing something, AUSTIN therefore assumes to be codified within the language system, too. Infelicities, taken to their extreme, are a code for disapproval of conduct. But who decides? And again, why? Does the language system encompass morality, as AUSTIN suggests by his remark that (p 44)

[t]he whole point of having such a procedure is precisely to make certain subsequent conduct in order and other conduct out of order.

It is not only a scary notion, but one that I believe on reasonable grounds is utterly mistaken. His doctrine makes language the system for conservation of convention.

I certainly don't deny that convention may be maintained by the use of language. I even grant that a person urgently needs conventions, habits, methods, etcetera. But they are not ends, but always means. Reliable conventions free a person's attention for dealing with – the even greater urgency of – uncertainty, surprises, in short with everything that is (still) *unconventional* to him. My idea is that, characteristically, language is an instrument of *differentiation* of behavior. For an especially engineered sign can elicit (also read: cause) highly specific motivationally determined reactions (also read: effect). Below, I repeat my own emphasis. Here I first draw attention to AUSTIN's own suspicion of shortcomings (p 31):

It is inherent in the nature of any procedure that the limits of its applicability, and therewith, of course, the 'precise' definition of the procedure, will remain vague.

Again, my view is exactly the opposite. Where satisfactory conventions exist, persons involved use language only minimally. Language is first of all *not* an independent system. It is an *instrument* of sign users, applied individually for exchange. And, secondly, an individual person makes most characteristic use of language precisely when he feels convention is absent. Language is a tool par excellence to support flexible behavior. The highly ritualized uses AUSTIN mentions are in fact least exemplary for what a person can *do* with language. AUSTIN admits so himself because (p 146)

[i]t was [...] extreme marginal cases, that gave rise to the idea of two distinct utterances. It takes some time to sink in with him. Finally he urges (p 142):

But consider also for a moment whether the question of truth or falsity is so very objective.

He muses on:

Is the constative, then, always true or false? When a constative is confronted with the facts, we in fact appraise it in ways involving the employment of a vast array of terms which overlap with those that we use in the appraisal of performatives.

And (p 143)

[i]n real life, as opposed to the simple situations envisaged in logical theory, one cannot always answer in a simple manner whether it is true or false.

What does AUSTIN choose? Though he says that (p 145)

[i]t is essential to realize that 'true' and 'false' [...] do not stand for anything simple at all; but only for a general dimension of being a right or proper thing to say as opposed to a wrong thing, in these circumstances, to this audience, for these purposes and with these intentions[.]

all that he relinquishes is his earlier distinction between constative and performative. Or does he (p 148)?

The doctrine of the performative/constative distinction stands to the doctrine of locutionary and illocutionary acts in the total speech act as the *special* theory to the *general* theory.

I suppose AUSTIN doesn't want to go through the trouble of integrating his newly found insight into the nature of truth value with his doctrine of infelicities. That is why he leaves those contradictions unresolved in favor of another approach (p 146):

But the real conclusion must surely be that we need [...] to distinguish between locutionary and illocutionary acts.

9.5 formulas for failure

What warrants this firm statement as quoted at the end of the previous paragraph? It results from what AUSTIN himself considers a more fundamental analysis of speech acts. Above, I have already announced his change of tactics in the course of *How to Do Things with Words*. He needs a different approach to keep track of his original goal of compiling a list of so-called performative verbs. But (p 91)

[n]ow we failed to find a grammatical criterion for performatives. [...] It is time then to make a fresh start on the problem.

This shows, once again, the predominant position of language as a grammatical system in AUSTIN's conceptual make-up. He is like a map maker who expects to explain the full variety of the actual geography, not from his maps, but even from the tool set for making his maps. Because he awards a privileged reality to the tool set – he apparently views language as more real than another reality (?) it handles – "a fresh start on the problem" is more logical than adjusting and refitting the tools. His restart amounts to recognizing that

speech and action are, after all, not disjunct. AUSTIN now argues that speech is always acting, too. Of course it is. He presents (p 92) "the act of uttering certain noises" at the start of doing speech. Aggregating those noises results in words. Then there is the next-level act of configuring words "with a certain more or less definite 'sense' and a more or less definitive 'reference' (which together are equivalent to 'meaning')." This third-level act is the utterance.

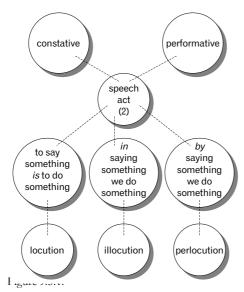
As a way of investigating how-to-do-things-with-words I don't recognize it as a profound start, but as a trivial one. It is hardly a novel idea. AUSTIN's conclusion is that every utterance is an act, too. But it surely is not the same 'doing' he has in mind when he sets performatives off against constatives. But soon he gets back on original his track. How soon can be demonstrated with the distinction implied in his statement that it will help (p 94)

to consider from the ground up how many senses there are in which to say something is to do something, or in saying something we do something, and even by saying something we do something.

Suppose AUSTIN is sincerely trying to be clear. Then what "ground" is he referring to? Several passages in his book suggest, as I have already indicated before, that he sees "ground" as provided by language, in particular by grammar. After all, it is his preferred tool set. He consistently applies it for guidance. He uses it to decide against the contrast between constatives and performatives (see the second quotation taken from p 146). And now he also makes "a fresh start on the problem" with it.

Only by recognizing that AUSTIN invests such authority in grammar can I arrive at a more or less logical reconstruction of his line of thinking whereby he – thinks that he – works "from the ground up." He argues now having a grasp on *all* speech being acting, too. He can now suggest a division. But on what "ground"?

In his second attempt he derives from English grammar three classes of speech acts. The last sentence quoted above, taken from p 94, is really central to *How to Do Things with Words*. On the surface it only suggests how he wants to proceed with the problem. But then it actually already contains a succinct account of his proposed solution. Though AUSTIN consistently fails to provide unambiguous guidance to such essential shifts in his conceptual system, his italics are an unmistakable indication. Figure 9.5.1 reconstructs his conceptual development. My reconstruction partly consists of retracting the hypothesis made for his first attempt at synthesis of speaking and doing. His second-attempt concept of speech act is correspondingly wider than it is at his first attempt. Before, speech act is the intersection of speech and action. Now it reemerges as the union of constative and performative, mainly because his departure from absolute truth value leaves AUSTIN without criteria to maintain their distinction.



The conjunction of constative and performative, followed by the disjunction into locution, illocution, and perlocution.

From his assertion that all speech involves action he concludes that, fundamentally, "to say something is to do something." But this, indeed, is a trivial result. He looks for criteria to recognize different ways of how-to-do-things-with-words. Otherwise he is left without a theory at all. He now hooks upon two grammatical forms as fundamental for classification of speech acts. He calls them (p 122)

the formulas:

'In saying x I was doing y' or 'I did y',

By saying x I did y' or Y was doing y'.

He immediately continues, writing in the past tense, that

it was because of the availability of these formulas which seem specially suitable, the former (in) for picking out verbs which are names for illocutionary acts, and the latter (by) for picking out verbs which are names for perlocutionary acts, that we chose in fact the names illocutionary and perlocutionary.

I find AUSTIN completely believable when he says that he has derived the names from "the availability of these formulas." In fact, I believe he even derives his entire theory from hardly anything *but* their availability. *How to Do Things with Words* is AUSTIN's very "unhappy" attempt to mold (see above for the relevant quotation taken from p 143) "real life" to what he now "envisaged in logical theory."

His theory covers three types of speech act. He realizes his two formulas are about special types. What is the third, general type? What does AUSTIN pro-

pose for its ground? What is elementary to doing something 'in saying' or 'by saying.' Customarily applying a grammatical perspective, his answer comes from merely eliminating the prepositions. AUSTIN is now back at where he started from but he doesn't seem aware of the circularity of his reasoning. He concludes that the third type of speech act implies *just* saying (p 94):

The act of 'saying something' in this full normal sense I call, i.e. dub, the performance of a locutionary act. [...] Our interest in the locutionary act is, of course, principally to make quite plain what it is, in order to distinguish it from other acts which we are going to be primarily concerned.

9.6 circular reasoning

AUSTIN doesn't develop the concepts of illocution and perlocution. Rather, he clasps onto grammatical formulas, labels those and subsequently develops a logical theory to make them fit. For compare the previous description of locution to what appears further on in his book. The performance of a locutionary act, he writes (p 109),

is roughly equivalent to uttering a certain sentence with certain sense and reference, which is again roughly equivalent to 'meaning' in the traditional sense.

The mention, twice, of "roughly equivalent" deserves special attention. What I have called the third-level of doing in every speech act that AUSTIN presents on p 92 doesn't hold these constraints. The last quotation from p 94 also does not. He now introduces them to make room – again, such is my reconstruction – for the two special types. For at this stage AUSTIN considers his three types disjunct. See also Figure 9.5.1, above. I repeat that he calls a locutionary act "what is roughly equivalent to 'meaning' in the traditional sense." The introduction of the term locution – which is essentially equivalent to sentence or utterance, but with some emphasis on doing - primarily serves to create the impression of a systematic classification of speech acts. Doing speech is locution. This assumption should make it logical that doing in doing speech is illocution. And doing by doing speech is perlocution. But what are the differences, if any, between them, other than allegedly different forms of expression? Does his case rest on anything else? AUSTIN gets carried away by his elegantly simple grammatical construction. Surely then, it must be the solution for an important problem? But he never sorts out his problem, let alone that he demonstrates how his proposed solution actually works.

I completely agree with AUSTIN that his initial distinction between constatives and performatives makes it necessary to inquire more closely into different ways of doing. However, his "fresh start" leads to even more contradictions. This time he doesn't address them by retracting the distinction between

locution, illocution, and perlocution. Nevertheless, *How to Do Things with Words* clearly shows that AUSTIN himself is already not convinced about the merit of this second – attempt at – classification. Actually for the remainder of his book AUSTIN is mostly concerned with reporting on contradictions arising from his three types of speech act. However, he can not bring himself to challenge what he thinks is a logic theory of grammar. He gives it precedence over everything from real life that he admits to be in discord. Recognizing contradictions he remarks (p 123):

Will these linguistic formulas provide us with a test for distinguishing illocutionary from perlocutionary acts? They will not. [...] Many of you will be getting impatient at this approach—and to some extent quite justifiably. You will say 'Why not cut the cackle? Why go on about lists available in ordinary talk of names for things we do that have relations to saying, and about formulas like the "in" and "by" formulas? Why not get down to discussing the thing bang off in terms of linguistics and psychology in a straightforward fashion? Why be so devious?' Well, of course, I agree that this will have to be done—only I say after, not before, seeing what we can screw out of ordinary language even if in what comes out there is a strong element of the undeniable. Otherwise we shall overlook things and go too fast. Maybe he even does what "will have to de done." But then it must have happened after his book, without known record. Here, AUSTIN sounds definitely desperate. In his confusion he forgets that the illocutionary and perlocutionary types of speech act, respectively, originate from his formulas. So how can they be used for testing his hypothesis, too? It is a straightforward vicious cycle. Again I borrow from WICKLUND (1990) the phrases that a structured background perspective is missing and that AUSTIN has thus literally formulated a zero-variable theory. It is not for lack of recognition of relevant variables, though. As I demonstrate presently with additional quotations, AUSTIN grasps that the meaning of language use cannot be established within the language system. It needs explanation from an outside perspective. As the last quotation makes clear, he feels he should fundamentally change concepts. Regretfully, he cannot reason how. I suppose he especially fails because his existing axiomatic system of language philosophy is still not challenged quite enough so that it can what essentially amounts to replace itself for something more comprehensive. Ultimately, with his unsuccessful challenge he only perpetuates the axiomatic system. It is probably already quite an achievement that he does leave his original idea of absolute truth and falsity. His more fundamental idea of the authority of language over its users, however, remains intact. Comparing him once again to a map maker, AUSTIN understands that it should be impossible to make a map that equals the world. Being of equal size of what it maps, where would it fit, for example? But he cannot bring himself to act that it really is impossible. His self-imposed blockade may be simply deduced from his remark on utterances that (p 89)

it seems absurd to suppose that all they describe or state, so far as they do this or when they do, is something about the speaker's beliefs or expectations.

According to transcendental idealism it is not absurd at all. In fact, precisely that belief occupies the ultimate ground in the relevant axiomatic system and, as such, for all derived concepts. For by its nature a sign stands for the interests and knowledge of its engineer. As the anatomy of meaning presented in the previous two chapters synthesizes, the scope of every sign actually includes both engineer and observer. A sign is a request by the engineer, made to secure compliance by the observer with one or more of the engineer's interests. But what the sign stands for "naturally" remain its engineer's interpretants, only. AUSTIN's quite opposite belief, i.e., in the absurdity of the personally interest-based nature of signs, effectively blocks any fundamental reorganization of his conceptual system. He does acknowledge that (p 60) "[a]ctions can only be performed by persons." Then why does he fail to "make a fresh start on the problem"? He still doesn't take the performers, rather than the isolated performance, really seriously. Because he does not, he never reaches the point where he can ask why performers perform the way they do, and why not the way they do not. As I have already said, AUSTIN is not at all blind to relevant variables. For example, he states that (p 99)

there are very numerous functions of or ways in which we use speech, and it makes a great difference to our act in some sense [...] in which way and which *sense* we were on this occasion 'using' it.

All he can say about it, however, is that (p 99) "[t]hese issues penetrate a little but not without confusion into grammar." So, he regrets their disturbing effect on grammatical logic as he sees it. But he doesn't see himself called upon to change that logic. Most importantly, he should have radically removed grammar from its axiomatic position in his conceptual scheme. There, in its traditional place, it keeps confusing AUSTIN about "real life" where he now wants to recognize three types of speech. The locutionary act, he proposes, is "the full normal sense" of saying something. Anything different from "the full normal sense" appears now defined as a "new and second sense" (p 99):

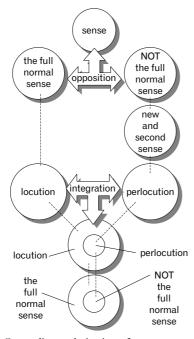
I explained the performance of an act in this new and second sense as the performance of an 'illocutionary' act, i.e. performance of an act in saying something as opposed to performance of an act of saying something; I call the act performed an illocution and shall refer to the doctrine of the different types of function of language here in question as the doctrine of 'illocutionary forces'.

There, AUSTIN writes that illocuation is "opposed" to locution. He does so by referring to his formula, only. With respect to the relationship between locution and illocution, one page earlier he maintains that

[t]o perform a locutionary act is in general, we may say, also and eo ipso to perform an illocu-

tionary act.

Is there an opposition, or not? Taking his juggling with senses seriously, locution and illocution exclude each other. Elsewhere he suggests that illocution, when it occurs, is integrated in locution. I comment on this below. Figure 9.6.1 already traces the contradiction. I don't have a problem with it that illocution should imply locution. But – without specifying relevant *different* situations – they cannot be opposed, too. Perhaps AUSTIN sees only some properties of locution and illocution integrated, while other properties are opposed. Then he must explain exactly which properties. As I have just indicated, he could have done so by distinguishing relevant situations. Without any such directions his conceptual system is contradictory. "The full normal sense" cannot be, at the same time, be the "new and second sense" that is defined as *not* "the full normal sense."



Contradictory derivation of concepts.

I repeat as my hypothesis it is his grammatical formula that leads him to state illocution as a concept. It is not an explanation in any serious *sense*. All he actually remarks is that there are other senses than "the full normal sense" in which language is used. Corresponding to such different senses, he argues, is the class of illocutionary acts. But AUSTIN has yet another formula available. With *all* other senses than "the full normal sense" already taken care of by illo-

cution, indeed, it is hard to image a third type of speech act. What is possible besides normal and not-normal? AUSTIN suggests (p 101):

[L]et us contrast both the locutionary *and* the illocutionary act with yet a third kind of act. He does use the word "contrast" but immediately follows with:

There is yet a further sense [...] in which to perform a locutionary act, and therein an illocutionary act, may also be to perform an act of another kind.

In just this single sentence, AUSTIN contradicts the opposition he has just defined between locution and illocution (see the quotation taken from p 99). He also hints that the third type of speech act does *not* contrast with the other two. My interpretation is that he wants to express that *every* speech act is locution. When a speech act incorporates not just "the full normal sense," but in addition one or more different senses – whatever they may be -, it is *also* an illocution. From such a scheme it is reasonable to expect that, just as the second type is conditioned by the first type, the third type is conditioned by the second. I favor this logic, but what are those additional conditions? They are again impossible to make out. However, I believe AUSTIN is reintroducing his original notion of speech as performance. Plain locution then corresponds to the absence of any performance conditions. I suppose AUSTIN would have defined illocution by the ruling of ... illocutionary conditions. In the same circular vein, it leaves perlocutionary conditions to define ... perlocution.

In the same paragraph where AUSTIN, as a consequence of the requirement for more conditions, places perlocution as a subset of illocution (which, in turn, apparently must be understood as a subset of locution), he associates perlocution with the production of

certain consequential effects upon the feelings, thoughts, or actions of the audience, or of the speaker, or of other persons: [...] and we may than say [...] that the speaker has performed an act in the nomenclature of which reference is made either [...] only obliquely, or even [...] not at all to the performance of the locutionary or illocutionary act.

Especially referring to the second sentence of this passage, I find it contradicts the start of the paragraph in which it appears. Is perlocution a subset of illocution, or is it not? If not, what senses different from "the full normal sense" are, after all, not determining factors of illocution but, rather, of perlocution? AUSTIN doesn't enlighten. My general impression is that illocution emphasizes intention behind the speech act. And a speech act is only considered a perlocution when the intended effect is actually achieved. This suggests AUSTIN is trying to conceptualize discrete *stages* of the process that the sign is engineered for to mediate. As long as the intention of the speaker is not fulfilled, it is an illocution-in-locution. From the moment the intended effect materializes it is a matter of perlocution-in-locution. But how does it make the *speech* acts different? Does AUSTIN include even the actualization of effects through speech acts into the language system? Does it rule behavior as far as

the execution of motivational impulses are concerned? And are, after all, illocution and perlocution more act than speech?

The confusion mounts where AUSTIN says that a perlocutionary act is (p 99) "what we bring about or achieve by saying something." It sounds – another contradiction – like the act is equal to the result of the act. But isn't the act a cause, and what is achieved its effect? A sensible statement AUSTIN makes about their relationship is that with locution, illocution and perlocution (p 109) "we have three [...] different senses or dimensions of the 'use of a sentence' or of 'the use of language'." His use of the word 'sense' I find overstretched. Nevertheless, from the anatomy of meaning presented in this treatise it is quite possible to make 'sense' out of AUSTIN's types as dimensions of a particular sign exchange. Then, illocutionary about the sign as a request for compliance is that it is a request by the engineer. And perlocutionary about the sign is that it aims at compliance by the observer. However, AUSTIN never reaches such simple integration of concepts. He keeps creating, rather than solving, contradictions. Another example is (116):

[T]he illocutionary act as distinct from the perlocutionary is connected with the production of effects in certain senses. [...] Unless a certain effect is achieved, the illocutionary act will not have been happily, successfully performed. [...] An effect must be achieved [...] if the illocutionary act is to be carried out.

It looks like the description AUSTIN has given earlier of perlocutionary acts. Does the distinction between illocution and perlocution, after all, does not correspond to cause versus effect? Is a perlocution just a happy illocution? But then, what are the "certain senses" of illocution? And what are they of perlocution (p 118)?

So there are three ways, securing uptake, taking effect, and inviting a response, in which illocutionary acts are bound up with effects; and these are all distinct from the producing of effects which is characteristic of the perlocutionary act.

But wherein lies the distinction? I cannot see how it is helpful when AUSTIN states that (p 119)

[i]t is characteristic of perlocutionary acts that the response achieved, or the sequel, can be achieved additionally or entirely by non-locutionary means [...] More important is the question whether these responses can be achieved by non-conventional means [...] But it is difficult to say where conventions begin and end.

Again, AUSTIN tries to explain by repeating his assumptions. But is he now really arguing that perlocution is not-locution? Or is it just that, in general, there are other – types of – means, besides speech? With every speech act a locution, is perlocution still a speech act? Or is he back to non-speech doing? He also cannot escape from the idea that the language system somehow should incorporate conventions. And what use is convention as a criterion? By the way, even theoretical considerations evaporate when such criteria can-

not be properly specified in practice, i.e., to hold in "real life."

A few pages further on, AUSTIN sums up. I don't attempt to go into detail as to what AUSTIN might mean there by "force." In general, I think it is a new name for infelicity, but now positively formulated (p 121):

[W]e distinguished the locutionary act [...] which has a *meaning*; the illocutionary act which has a certain *force* in saying something; the perlocutionary act which is *the achieving of* certain *effects* by saying something [...] Illocutionary acts are conventional acts: perlocutionary acts are *not* conventional.

AUSTIN himself provides a succinct commentary on his theorizing effort (p 133):

If we are in general always doing both things, how can our distinction survive? In the face of all contradictions he already recognizes himself, AUSTIN should actually not have given his distinctions any change at survival, at all. But he holds on to them with increasingly contrived arguments (p 147):

[I]n general the locutionary act as much as the illocutionary is an abstraction only: every genuine speech act is both. [...] But, of course, typically we distinguish different abstracted 'acts' by means of [...] the different types of nonsense which may be engendered in performing them.

I have no interpretation to offer that might clear such confusion, eliminating any contradictions. Or is a locution what he has earlier called a constative, and an illocution a performative? I suspect this correspondence is far greater than is clear even to AUSTIN himself. With the distinction between constative and performative retracted, he should have done the same with the unhappy distinction between locution and illocution (and perlocution).

One result he achieves is important, of course. It concerns relinquishing the concepts of absolute truth and falsity. But that is hardly an original contribution. Thinkers outside language philosophy have long since held such axioms. But AUSTIN, apparently unaware⁵ of conceptual developments elsewhere in time and space, persists in his new-found perspective (p 149):

We may well suspect that the theory of 'meaning' as equivalent to 'sense and reference' will certainly require some weeding-out and reformulating in terms of the distinction between locutionary and illocutionary acts (if these notions are sound: they are only adumbrated here).

5. I hasten to add that other conceptual developments may also be highly relevant, if only I knew about them. Actually, writing this treatise greatly assists me in recognizing ideas from a wide range of traditionally separated disciplines. I could list many publications I have collected especially after completing the manuscript. There is indeed so much more

potential for conceptual synthesis; I really feel I have only scratched the surface with my conceptual grounds. In general, without the possibility of being omniscient, a researcher should at least be aware of his – extremely – limited scope. It helps to induce additional semiosis, often resulting in changed interpretants.

I don't believe his notions to be sound. Actually, AUSTIN's use of the word "adumbrated" is somehow "happy," even. Its "full normal sense" is not only that those notions are outlined in his book; another sense of adumbrated is that they are placed in the shadow, i.e., darkened. Certainly his incomplete and contradictory concepts cannot help improve the anatomy of meaning presented in the previous chapters. On the contrary, it may be productively applied to analyze AUSTIN's examples. Based on the anatomy of meaning from Chapters 7 and 8, the next paragraph shows that other interpretations than AUSTIN used for the development of his concepts are possible, and highly plausible.

9.7 sign user-centered analysis

Of the examples AUSTIN builds his initial case upon, three apply to highly ritualized activities. When a man says "I do take this women to be my lawful wedded wife," he is not making a statement about the world that is either true or false. AUSTIN has it that the utterance is doing the marrying. He therefore calls it a performative utterance (p 14):

Suppose we try [...] to state schematically—and I do not wish to claim any sort of finality for this scheme— some at least of the things which are necessary for the smooth or 'happy' functioning of a performative. [...] I fear, but at the same time of course hope, that these necessary conditions will strike you as obvious.

A.1 There must exist an accepted conventional procedure having a certain conventional effect, that procedure to include the uttering of certain words by certain persons in certain circumstances, and further,

A.2 the particular persons and circumstances in a given case must be appropriate for the invocation of the particular procedure invoked.

B.1 The procedure must be executed by all participants both correctly and B.2 completely.

 $(\Gamma.1)$ Where, as often, the procedure is designed for use by persons having certain thoughts or feelings, or for the inauguration of certain consequential conduct on the part of any participant, then a person participating in and so invoking the procedure must in fact have those thoughts or feelings, and the participants must intend so to conduct themselves, and further, $(\Gamma.2)$ must actually so conduct themselves subsequently.

First of all, a modern business reader can recognize much of workflow management theory in Austin's conditions A.1 to B.2. But his idea of what makes a performative happy represents a myopic focus to single out one particular sentence to 'do' the whole procedure. He relegates everything else to the status of condition. Apparently only the utterance acts as single cause (see § 7.4 for SCHOPENHAUER on the artificial nature of single causes). But a procedure

is essentially a system. While I believe VOLOSHINOV makes an "unhappy" move by introducing the concept of theme besides that of meaning I support his analysis (1929, p 100):

[T]he theme of an utterance is determined not only by the linguistic forms that comprise it [...] but also by extraverbal factors of the situation. Should we miss these situational factors, we would be as little able to understand an utterance as if we were to miss its most important words

All elements are therefore performatives in AUSTIN's sense. They are not all "the uttering of certain words" but they are, as far as participants need to establish interpretants, all signs. Does the bride have a bouquet? Does she throw it, not before, but soon after the actual ceremony to her favorite potential bride? Etcetera. It might be argued that the performative verbal utterance is particularly important, even critical. Yes of course, when they may be held accountable later, it is important that primary participants show signs of their, precisely, participation. This emphasis is often made by separate signs of identification.

On VOLOSHINOV's concept of theme I agree that (p 100)

[t]heme is a complex, dynamic system of signs that attempts to be adequate to a given instant of generative process. Theme is reaction by the consciousness in its generative process to the generative process of existence.

It is precisely with – the distinction between – [a] an engineer-based sign structure and [b] an observer-based sign structure that the apparent complexity is productively modeled and explained. Pertaining to a particular sign exchange, both the engineer and the observer *each* have an individual, subjective "theme."

Secondly, returning to my immediate commentary, with conditions Γ .1 and Γ .2, AUSTIN is confusing the procedure for its outcome. The procedure of getting married may run its course happily enough, but the state of the marriage may eventually turn to unhappy. When people get a divorce, this does not make their marriage ceremony any less happy. Or after a ceremony that was fumbled, two people could live happily together.

Thirdly, human relations are only regulated through procedures to a limited extent. The parallel with workflow is informative. It is especially efficient when the structure of work is quite stable. Change, however, must first of all be dealt with *effectively*. That is when following procedures (also read: conventions) may even be dangerous.

In general, my critique of AUSTIN's approach is that he holds a static, rather than dynamic, view of human relations. That is too simple, and he immediately encounters difficulties when he needs to adjust his theory beyond procedural 'classics.'

The only possibility to develop a theory with necessary and sufficient vari-

ety for explanation is to respect "real life" and its variety. That is exactly why *individual* psychology is underlying the anatomy of meaning in this treatise. So, what does it add to analyze "I do take this women to be my lawful wedded wife" as a request for compliance?

The first question is: Who is saying it? Well, it is a man. For example, the situation is that he is at home, standing in front of a mirror. He is practicing what to say during the marriage ceremony. Actually, he is making a request to himself – why not? – to perform adequately when his performance really matters.

Another situation is that of the wedding room in the local town hall. The man is standing at the side of the woman he wants to marry. An official is present. Witnesses are, too. He gets his cue from the official. Once again he says "I do take this women to be my lawful wedded wife." At face value, as AUSTIN consistently does in his approach, it seems a straightforward statement about himself. Sure enough, there is what I call a *surface symmetry* in the procedure because the woman, as spoken to and about, will likely make a similar statement about herself later. My proposal is that it especially pays to look for *hidden symmetry*. Rather than saying something about his own future conduct, the man is making a request to the woman besides him to comply to his interests *by her future conduct*. As it is not really very effective at such a moment to openly place his own interests first, he is not required by the procedure to mention them. The woman may likewise refrain from pointing out her very own interests.

The *official* ceremony serves the purposes of involving a third party in the transaction that getting married is. Though the marriage partners are often not completely aware of it, each of them is also making a request at the *personalization of society* to comply (see for this concept also § 8.4). This is, for example, because their marriage may turn unhappy *in spite of* the happiness of the ceremony. They may need help to solve their problems, or may need to be forced to accept a solution. In all likelihood it is not the marriage official who will then be helping out. Any authorized representative — with his authorization secured through other ceremonies, of course — may intervene on behalf of the *fiction* of society. It is a fiction because a community is essentially an aggregate of individual persons. What carries *authority* as society is nothing else — actually, nobody else — than someone who is believed to hold *power* in that particular group.

Actually, the whole marriage ceremony is a request for compliance addressed to many persons, present and not present. Better, still, it must be considered an intricate collection of such requests. And different persons will comply differently, in any degree imaginable. It is not 'just' that a man and a woman can now officially compound their interests, which already sounds slightly more romantic, but now with the unromantic aspect of finance intro-

duced. Also, several persons will comply by giving a wedding present. Etcetera.

Though analysis as inspired by taking every sign as a request for compliance may appear cynical at first, it effectively throws increased light on the rich fabric of human relations. The fourth of AUSTIN's initial examples reads "I bet you sixpence it will rain tomorrow." Again, it is useless to judge that sentence true or false. Now, what is the situation? Suppose the sign engineer seriously wants to engage an observer into a bet. It is indeed in this sense that AUSTIN's 'workflow' is still – somewhat – relevant. But taking every sign as a request for compliance adds a more penetrating analysis. The engineer is not so much offering a bet, but soliciting it. He wants the observer to take it. And for efficiency's sake the engineer includes a description of what he judges the relevant part of his objectified reality. Of course, he could also have said "I bet you sixpence." That is what a compulsive better might do, expecting somebody else to comply by suggesting what exactly to bet on.

Often, though, the sign engineer is not at all interested in a bet. Perhaps he looks for affirmation. Through a display of insight in weather conditions he may expect the sign observer to comply by responding with admiration. It could also be that there is not a hope in heaven that it will rain. His sign might break the ice, and start the desired conversation going. As VOLOSHINOV argues (1929, p 99):

The theme of an utterance itself is individual and unreproducible, just as the utterance itself is individual and unreproducible. The theme is an expression of the concrete, historical situation that engendered the utterance.

Regarding his own example, AUSTIN only offers some commentary from his perspective of, first, performative and, later, illocution. Apart from lack of criteria on what should be considered a performative or illocution, his analysis is correspondingly limited. The anatomy of meaning, with sign as a request for compliance as its explanatory principle, encompasses all signs.

The start of AUSTIN's last lecture in *How to Do Things with Words* betrays, once again, that he actually has already convinced himself of the merit of his theory. He admits to (p 148) "have left numerous loose ends." However, he continues, "we must plough ahead." That involves (p 150)

sorting out those verbs which make explicit, as we shall now say, the illocutionary force of an utterance, or what illocutionary act it is that we are performing in issuing that utterance.

An unambiguous interpretation of AUSTIN's concept of illocutionary force still evades me. It must have something to do with what he finds lacking in "the full normal sense" of an utterance (p 100):

[W]e have been realizing more clearly that the occasion of an utterance matters seriously, and that the words used are to some extent to be 'explained' by the 'context' in which they are designed to be or have actually been spoken in a linguistic interchange.

He is completely right, of course. But he confuses matters by *not* taking precisely that situational orientation as normal. Just as there is no distinction possible between constative and performative, also locution and illocution (and perlocution) are impossible to distinguish from a situationist perspective. His classification and corresponding terminology serve no purpose. The general term of sign serves requisite variety perfectly well.

But AUSTIN "plough[s] ahead" and suggests a provisionary classification of verbs (p 151) "according to their illocutionary force." The classes he distinguishes are [1] verdictives, [2] exercitives, [3] commissives, [4)] behabitives, and [5] expositives. He lists verbs for each class. Promise, for example, is a commissive of which (p 157) "[t]he whole point is [...] to commit the speaker to a certain course of action." I agree that the sign engineer will usually describe his own intended action when he makes a promise. A promise, however, is never made one-sidedly. I immediately suspect somebody who comes up to me and promises to give me a lot of money, or even a little money. Why? Perhaps I am wrong but I expect him to expect something in return, usually something that makes him better off after the deal (and myself actually off worse). The – often – hidden symmetry therefore is that he is requesting me to comply to his interest. On the surface, he is 'only' explaining his potential commitment to speed up the transaction, to increase his credibility, or for whatever combination of his own interests.

Each of AUSTIN's classes of illocutionary force is easily reappraised from the perspective of a sign as a request for compliance. What do they add in explanation? And what does the concept of illocution add that prompts his additional classification it in the first place?

It makes more sense to start analysis from as general a concept of sign imaginable. The engineer-based and observer-based sign structures provide guidance for detailed interpretation.

prelude 10

Chapter 10 reviews SEARLE's first book. It is especially relevant for a historical perspective on information modeling. Even more than AUSTIN's book examined in Chapter 9, it exemplifies how mainstream schools of analytical philosophy, philosophy of language, linguistics, cognitive science and artificial intelligence have all merged over recent years.

Like AUSTIN, SEARLE derives his axiomatic system from *within* language. However, he is more explicit about it. In short, the structure and rules SEARLE attributes to language are concluded to represent reality through unproblematic, *complete* correspondence.

It is easy to see why such a view – not only promoted by SEARLE of course, but by a host of other theorists converging from disciplines such as mentioned above – gained popularity for conceptual information modeling, knowledge representation, artificial intelligence, etcetera. For the structure/rule configuration that SEARLE proposes for language, conveniently matches the information handling capacities of available digital technology. And with the language system positioned as the unbiased gateway to reality, applying the straightforward structure and rules indeed makes it seem that reality *itself* is programmable. It all neatly fits the scheme of traditional symbolic logic. Conceptually, only the minimal space for an intentional parameter needs to be included. The heart of representation remains of course propositional. The idea of truth is merely modified through addition of simple parameter values which are taken to reflect, just as objectively, speech actors' intentions. The orientation at *intentions* is why this approach to modeling is called the language *action* paradigm.

Chapter 10 concentrates on SEARLE's introductory chapter. Close reading of only a limited text already raises many questions. As far as consistency is concerned, contradictions are shown between SEARLE's own assumptions on the

one hand, and his derivations and conclusions on the other. With respect to his proposals being productive, comparisons are drawn with subjective situationism.

Does criticism of the language action paradigm discredit it? It does where it fails to supply the requisite variety. There are also *situations* where it is still adequate, especially when interests have a, say, mechanical nature. But even then it might be profitable to consider the language action paradigm as a subset of subjective situationism, i.e., with several variables bracketed. By thus framing it, a richer perspective is easier to muster when requirements demand.

Chapter 11 treats MEAD's seminal ideas on social psychology and symbolic interaction. Chapter 12 comments on the theory of communicative action in which HABERMAS joins concepts from AUSTIN's and SEARLE's speech act theory and MEAD's social psychology. Like Chapters 9 and 10, those two chapters do not supply additional ingredients for subjective situationism. The ontological design per se has already been completed with Chapter 6, and its anatomy of meaning is derived in Chapters 7 and 8. What remains in the last four chapters of Part ii is both a critical appraisal and a demonstration of subjective situationism's advantages.

chapter 10

WRITING ACTS ON SEARLE

The axiomatic system JOHN R. SEARLE applies to meaning is immediately recognizable in the second sentence of *Speech Acts, an essay in the philosophy of language* (1969, p 3):

[T]he speaker means something; the sounds he emits mean something; the hearer understands what is meant.

He draws on both traditional interpretations of meaning (see also § 7.3). The opening sentence of his book reads: "How do words relate to the world?" Words, he implies in that second sentence, relate to intentions of the speaker-in-the-world. It is one of meaning's traditional interpretations. The other is that words also stand for some state of the world without regard for the speaker's intentions. In this realist sense, words are then either true or false.

SEARLE excludes the hearer as an essentially structural element. For though not passive, the hearer only 'acts' as the outside receptor of the sounds from which he is believed to *reconstruct* what both the speaker's intentions and the relevant state of – the rest of – the world are. So, meaning is *given* to him. How he handles the sign as a 'gift,' that is how he takes reception of it, unwraps it, uses it, etcetera, does *not* contribute to meaning. The accuracy of – the result of – his instant reconstruction (also read: interpretation) marks the level of understanding, it follows from SEARLE's scheme. Understanding is all about *correspondence* between interpretations of speaker and hearer. The sounds and their meaning are supposed to be unambiguously instrumental for this purpose of agreement.

Of course I take grave liberties at starting to explain SEARLE's axioms from no more than two sentences. Actually, I have so far reported on what I expect from his book only after I stop to think about just his beginning. For that is my interest in studying *Speech Acts*. Does SEARLE keep the axiomatic system of AUSTIN, once his teacher at Oxford, basically intact? Again, it is what I expect

to find. But then again, he might be unfolding an entirely different set of axioms. If so, are they similar to those I have pieced together myself? Does his work perhaps predate my anatomy of meaning, with every sign as a request for compliance? Going by his two opening sentences, however, I think he stays well within the tradition of the language philosophy of his teacher. But I want to make certain, and so I read on. I decide not to be bothered by SEARLE's apparent restriction to speech. When necessary, I just substitute sign. As I read, I make notes. In this chapter, as a stylistic illustration of semiosis, I try to keep the flavor of my running commentary.

10.1 analytical authority of the speaker

The larger part of SEARLE's introductory chapter of *Speech Acts* contains his attempt to make his method of investigation acceptable. Yes, it is a good example of a request for compliance. Apparently, his immediate environment is that of analytic philosophy. His introduction can even be read as an attack on philosophers who, according to SEARLE, define the concept of analytical statement too ... analytically.² Instead, he offers a projective procedure (p 6):

If you want to know if a statement is analytic ask yourself whether it is true by definition or in virtue of its meaning.

He avoids any serious discussion because, he claims, especially the concept of analytic deserves axiomatic status (p 7):

We could not embark on our investigation if we did not understand the concept, for it is only in virtue of that understanding that we could assess the adequacy of proposed criteria. Now, I completely agree with SEARLE on the special status of what he calls assumptions. They are essentially without any ground themselves. Those

1. Lemma *Speech Acts* by A. BURKHARDT in: *Handbook of Metaphysics and Ontology*, (pp 854-856; H. BURKHARDT and B. SMITH, editors).

2. In a footnote on p 9, commenting on publications by W. QUINE and N. GOODMAN, SEARLE writes: "I am here concerned, however, not with the development of their thought as individual philosophers, but with a certain pattern of analysis in philosophy of which these two works are well-known and powerful examples." It is not a convincing display of diplomacy, I would say. For he

the pattern he rejects. What else can it mean than that SEARLE was, in fact, highly concerned about "the development of their thought." About AUSTIN and SEARLE I remark, in my turn, that I am concerned about the development of their thought as I know it from their works. I am especially concerned because, with their well-known and powerful publications, they have set a pattern of analysis in philosophy, and far beyond, that I find counterproductive for the purposes that persons apply it to.

boundary concepts are necessary as ground for the construction of systems of derived concepts. So, what SEARLE aims to get across is actually his metaphysics, with analytical philosophers annex logical positivists for his targeted audience.

I admire his brave attempt for it makes it at least possible to address fundamental issues in a discussion (though logical positivists would deny, as SEARLE accurately indicates about them, that such issues can be discussed). My major objection is, however, that his axiomatic system includes concepts, such as meaning and truth, he should not be explaining from but toward. It only leads to more circular reasoning when, for example, meaning ends up as a function of ... meaning. And truth of ... truth. To avoid pitfalls of premature contradiction thinkers like SCHOPENHAUER and PEIRCE carefully choose different axioms. They thereby give themselves room to derive an essentially psychological, relativistic concept of meaning. It also constitutes an escape from an absolute concept of truth value. SEARLE is still captured by his unhappy assumptions.

Or is he? Does he actually inquire after integration of both axiomatic systems? What an individual person means is often absolutely true, he argues, for (p 11)

one knows such facts about language independently of any ability to provide criteria of the preferred kinds for such knowledge.

He of course refers to *analytical* criteria in the logical positivist sense of analytical that he criticizes. I agree with such criticism. What I find mistaken is the connotation that "one knows such facts about language" to be absolutely true. But SEARLE continues, on the basis of what I 'analyze' as contradictory assumptions, to state that (p 15)

the method of this book must seem naively simple. I am a native speaker of a language. I wish to offer certain characteristics and explanations of my use of elements of that language. The hypothesis on which I am proceeding is that my use of linguistic elements is underlain by certain rules. I shall therefore offer linguistic characterizations and then explain the data in those characterizations by formulating the underlying rules.

Effectively, SEARLE states that the "certain rules" are a priori and general, i.e., they guide *all* speakers of *all* languages. I don't want to argue with it right now. Why not reason from that axiom, and see what it leads to? I object, however, when he offers this argument in support of his claim that absolute truth can be produced by an individual speaker. How does it follow?

10.2 rules: description versus prescription

I believe SEARLE misdirects himself even more, and in the process requires me to read like a detective, by his "naively simple" method when he proposes to derive underlying rules. My view is it is one or the other. He may of course assume a rule system, using it to derive – and thus explain – linguistic elements, whatever they are. Or he may assume a system of linguistic elements, using it to derive rules for producing them. He takes the latter approach. i.e., starting with classifying linguistic elements. But then it is a tautology to suggest that rules explain the linguistic elements they were derived from, in the first place. It is yet another zero-variable theory (WICKLUND, 1990). Apparently SEARLE himself is already worried for he makes a preemptive strike at criticism (p 16):

There is nothing circular in this procedure, for I am using the hypothesis of language as rule-governed intentional behavior to explain the possibility of, not to provide evidence for, linguistic characterizations.

My interpretation is that he not only fails to provide a reasonable argument against circularity. He even makes it worse by adding a second cycle. The authority of the speaker to give evidence, i.e., to state the truth, now gives way again in favor of the possibility "to explain the possibility." What is the difference?

Rather than establishing trust in his method, SEARLE succeeds in arousing my suspicion. He is stressing rules. But what precisely do those rules control? I suspect his vagueness covers a mistaken integration of concepts. At least I read from the last quotation that for his investigation he is "using the hypothesis of language as rule-governed intentional behavior." Ordering these words in a reverse sequence, SEARLE first of all implies a distinction between intentional and non-intentional behavior. As I am still only studying his introductory chapter I appreciate his difficulty that he probably cannot make their difference completely clear, yet. But it is evidently important to him, so with special interest I am watching how he applies the terminology of intentionality. Next comes the term "rule-governed." SEARLE not only assumes that behavioral regularities, or patterns, exist. He also indicates that behavior is *generated* by rules.

Yet another word forward informs he is not concerned with all regular behavior, but only with language. But does language equal behavior? He probably means language use. Or particular utterances, or specific speech acts, etcetera. If only he had written *use*, I could reason with more certainty about the nature of the rules that SEARLE assumes are governing the behavior *that is* language use. In some respects, an utterance may be taken as ruled by the language *as system*. But in what respects, more precisely? I am happy to concede

language is partly characterized by application of particular sounds on a regular basis. Also their sequential configuration into strings are highly patterned. But that is all just *statistics*. I don't believe at all those regularities are caused by rules that are mandatory for speakers. Rather, every speaker essentially applies his *own* methods. Those are methods that he has once learned (also read: constructed), continues to experiment with, keeps operational because he experiences most success with them, and changes for want of success. Again, they are essentially an individual person's very own methods. For learning is not so much imitating, as it is individual integration or construction. As methods, he can change them. Or he can divert from them as he sees fit to enhance his success. The measure of success is of course how well his interests are served through requests for compliance (also read: conduct through – the causal mode of – sign engineering).

Making sense of SEARLE's framework I suppose he simply forgets to distinguish language *use* from language *system*. I reach this conclusion on the authority of an earlier quotation where it says (p 15): "I wish to offer certain characteristics and explanations of my use of elements of that language." But does this really help? What are those "elements"? Are the utterances the elements? Most likely not. Because with already completed utterances, the language is extensionally defined. There would be no need for rules to generate utterances, only for rules to choose among them.³ Or, by elements, does he mean the rules? It is difficult to imagine as his idea, too. For that makes his statement (p 15) "my use of linguistic elements is underlain by certain rules" empty. Or does he mean rules at different levels? But then, what are such levels? It makes me all the more curious about those "linguistic elements" that must necessarily lie somewhere between completed utterances and rules for their generation.

Though I disagree with the assumption of — formally linguistic — rule-based generation of utterances, above I have indicated I don't want to argue over it too soon. This brings me back to the nature of the rules assumed by SEARLE. Is he really saying the language system provides all the rules? Is a rule ever violated? Probably, he is also applying a restriction. It would be much like I have done, i.e., by limiting the influence of the speaker's methods of expression to some respects. From a Schopenhauerean perspective it is in fact simply the will of the speaker that ultimately controls his behavior. As a human being he

3. An example of what feeds insecurity when reading *Speech Acts* is also that SEARLE mentions (p 10) "a given extensional criterion." I understand extension as the absence of *any* criterion to define a set. When criteria apply for membership, that is intension. With

extension, a set is determined by the very individual elements that are its members. Perhaps SEARLE uses extension differently. The most I can make out is that he may have mistaken extension for intension.

has recourse to three modes of causation when attempting an exchange with another person (see also § 7.1): cause in the narrowest sense, stimulus, and motivational. With a sign an engineer characteristically aims at the motivation of the (intended) observer(s). That kind of 'cause' is in its turn 'caused' by the engineer's interest(s), with surely a chain of intermediary 'causes' and 'effects' (in a mix of modes of causation, I presume; I speculate that most of its intrabody course, including the sign user's intellect, is run on the basis of stimuli and effects, rather than signs and – motivationally induced – effects).

When the – attempt at – exchange is seen as a whole, the engineer's sign is instrumental to his interests. And his sign production faculties – methods, rules, or whatever – are 'only' instrumental for the sign-as-instrument.

I fully realize that interests, at least what the sign user – consciously or unconsciously – knows about them as interpretants in his intellect, are intimately related to the sign user's faculties, including those for sign engineering. I even speculate, after PEIRCE, that especially his faculties of sign engineering are crucial for interpretant development.

10.3 the overrated power of language

Suppose a particular intention results purely from, say, internal speech acts. With the engineering and observation of signs strictly rule-governed, it indeed results in intentions that are only and completely determined by the sign user's language as system. In fact, the language system and intention *production* system would coincide.

It is obvious that especially speakers of the same language display some highly correlated intentions. I don't believe, however, that their – experience of a – common language system is the causal factor. Fundamental in my opinion is that every person has interests. With SCHOPENHAUER I believe interests are largely, say, embodied. That is nature. From nurture combined with nature every person also develops his interests. He does so while conducting his life in situations. Where different persons share situations, the effect is that (some) interests can converge. Another effect is that their methods for sign engineering converge in some respects. It is tempting to conclude identity from convergence. However identity, especially at the axiomatic level of conceptualization, almost instantaneously leads to contradictions. Axioms must therefore be designed to accommodate necessary and sufficient differences. Persons do engineer different signs, even when many are indeed similar. One and the same person may engineer one sign differently from another. In general, a rule system is only viable as a theory when it practically constitutes the requisite variety for explanation.⁴

Regardless of my own – strong and explicit – axiomatic preferences, my concern as a reviewer of *Speech Acts* is whether or not SEARLE expresses himself with requisite precision when he writes about "language as rule-governed intentional behavior." My close reading so far and intermediary analysis lead me to the expectation of discovering, later on in his book, that he finds the rules governing intentional behavior somehow *contained in* language. Then my conclusion would be that SEARLE solidifies AUSTIN's misconceptions. For the relatively harmless formulas of AUSTIN would have been systematized into rules for generating intentions and subsequent behavior. SEARLE claims an awesome power for language. According to my preliminary interpretation, he holds language, whatever it is, to cause all intentional behavior. Or is it not so awesome, after all? Does he later add severe constraints on what should be considered intentional, and what not?

10.4 beyond the speech actor

An important issue is how SEARLE relates the concepts of language and intention. He doesn't mention intention when he states that (p 16)

speaking a language is performing speech acts[....T]hese acts are in general made possible by and are performed in accordance with certain rules for the use of linguistic elements.

Where the "certain rules" originate from he still leaves open. His concept of intention soon returns, though, because the scope must be widened from – and here I substitute the more general term – the sign proper to include its production (p 17):

[N]ot only must I assume the noise or mark to have been produced as a result of intentional behavior, but I must also assume that the intentions are of a special kind peculiar to speech acts.

Now, that is interesting, indeed. Are speech acts 'acted' for expressing some intentions, and others not? SEARLE announces that (p 17)

a theory of language is part of a theory of action, simply because speaking is a rule-governed form of behavior.

I agree that sign engineering is behavior. It is action applying the mode of causation aimed at motivationally induced effects. An encompassing theory of behavior must include all three modes of causation. But is SEARLE saying that speaking is rule-governed, and other behavior is not? Or does he say that certain rules govern speech acts, and other rules govern other kinds of action?

I believe SEARLE is actually trying to differentiate between what I call the sign on the one hand, and the sign exchange on the other hand. For him it

seems speaking is only about signs. Now SEARLE states that speaking (p 17), "being rule-governed, [...] has formal features which admit of independent study." In the next sentence he makes the distinction between "a study purely of those formal features" and "a study of their role in speech acts." I suppose he considers speaking not yet a speech act. If so, his use of words is confusing. At face value I read "speaking" as the act of speaking, or being engaged in speech acts. It already becomes clearer with the terminology of sign and sign exchange. How he earlier defines (p 16) "the unit of linguistic communication" is then easily recognizable as another tautology. Of course, a communication unit is not a sign but a sign exchange. Still, SEARLE only extends the scope from sign to sign engineer. It explains his insistence on intentions. But the sign observer has so far not been included. Now that may be an unhappy result of the terminology of speech act. It emphasizes the actor, not the audience. And when an audience is considered, it behaves relatively passively. The terminology of sign exchange, however, immediately suggests active involvement by all participants, both sign engineer(s) and sign observer(s).

10.5 what's in a game?

SEARLE's actual scope is already wider than he indicates by including (p 16) "the production or issuance of the symbol or word or sentence in the performance of the speech act." My impression is, rather, that formal rules are thought by SEARLE to govern speaking as the act of producing the speech. But those rules do not govern the acting-by-the-speech. Does he specify rules for such acting, too (p 17)?

A great deal can be said in the study of language without studying speech acts, but any such purely formal theory is necessarily incomplete.

This raises my expectation that SEARLE will complement the "purely formal theory" of language to arrive at a complete theory for speech acts. He also suggests that such a complement will *not* be purely formal. Isn't every theory formal? Or does he use formal in the limited sense of rule-governed behavior? He draws the analogy with baseball to explain what the "formal" approach misses (p 17):

It would be as if baseball were studied only as a formal system of rules and not as a game. It sounds as a neat argument but, instead, causes more confusion. It should only convince when speech act is sufficiently equivalent to "game." I don't believe this is clear to SEARLE. Is he talking about a particular game of baseball? That is, a match? Or about game at the type level, i.e., indicating the possibility of game instances? Or does he mean something like the baseball industry, including television rights, and all? What, precisely, contains his anal-

ogy?

Suppose actually playing baseball constitutes a configuration of discrete, say, moves. Exploring the analogy, then every such move would qualify as the equivalent of a speech act. And indeed there are baseball rules at the level of separate moves. The analogy should however have immediately alerted SEAR-LE to the practice of many players that they especially seek their advantage in attempting to transgress rules. It is too naive to assume that moves are rule-governed in the sense that moves are always in perfect accordance with rules. As I said, a player may intentionally subvert rules, or his execution of the intended correct move may be so clumsy as to result in a foul move.

Still actually playing, other rules of baseball apply to relationships between separate moves. Move a is all right when it occurs simultaneously with move b, but not with move c. Again, the game rules only provide a framework for behavior while playing the game.

SEARLE is, I agree, perfectly right if he were he to argue that the – instance of a – game is different from the rule specified at the level of game type. But then, game as type is by definition abstracted from game instances. The concept of rule is 'typical' for such abstractions. It is a convenient short-hand for *describing* regularities between instances. It is quite a different matter to have rules *prescribing* instances. The essence of a baseball game is determined by the players in action, not by the rules of baseball. Rules, and the referees for that matter, should support the essence to be expressed. From this perspective there are good rules and bad rules. But the development of a particular game that is, in fact, largely controlled by rules is immediately recognized as deterministic and, therefore, boring. Where players cannot make the essential difference, there is no real game in whatever the word's 'meaning.'

Another mistake is that SEARLE even overrates the importance of "purely formal" language rules for the production of speech. My idea is that those rules – when they exist at all in a prescriptive sense – have very little to do with the language game. What a language game is should be understood in the Wittgensteinean sense. Referring to subjective situationism I can make it more specific that the 'rules' for a particular language game reflect relevant persons, how they interpret their situations and corresponding interests. In order for it to be an optimally efficient tool it is even a necessity that the language every person uses bears testimony of his interpretations. And thus education of language as a system has a strong influence on interpretations of learners. They internalize, and perpetuate, the language game of their educators. Once internalized, the rules of language may seem to govern their behavior in the language game in question. Or even govern the language game in general. Of course, it does not help to avoid confusion to call a dynamical situation a language game. It directs attention to language rather than to the

players of the game. But the nature of language is that of an instrument. It serves to engineer requests for compliance. Language is 'only' used to formulate, to sign-ify. A sign is engineered from the interests of the engineer, and observed from the interests of the observer.

10.6 a need for radical reorganization

After he points at the incompleteness of the "purely formal theory" of language for studying speech acts, SEARLE demonstrates another display of conceptual circularity. He first remarks (p 17):

It still might seem that my approach is simply, in Saussurian terms, a study of "parole" rather than "langue".

Well, yes, that is exactly what I now expect him to pursue. I believe he is developing the complement of the "purely formal theory" by concentrating on 'something' outside language. Isn't that the purpose of introducing the concept of speech act? Why then does SEARLE continue as follows?

I am arguing, however, that an adequate study of speech acts is a study of langue.

From my perspective, this would require the concept of langue⁵ to be considerably stretched. Even overstretched, I say. Is SEARLE implying langue is the rule system for parole as "a rule-governed form of behavior"? Is language the term he reserves to stand for the system controlling the speech part, and langue the term to stand for the system controlling the act part of speech act?

Another question is: How can I continue with my review? By now I have only progressed as far as the bottom of page 17 of *Speech Acts*. I am getting more and more confused. I appreciate that, as SEARLE does, writing an opening chapter on *Methods and scope* is fraught with risks. For it is impossible to explain in summary what actually the whole book has been written for. Maybe it is all clear to me after reading the book from cover to cover. With less than four pages of it to go I continue with my running commentary until I have finished studying SEARLE's introductory chapter. Then I read the remainder of the book. Only after I have done so will I report any other comments.

So, how does SEARLE explain why speech acts can only be adequately studied as langue? The answer comes from a sentence that contains another axiom that is so very different from what I propose. SEARLE (p 17)

take[s] it to be an analytical truth about language that whatever can be meant can be said. Later (p 19) he labels this position the "principle of expressibility" and announces it as "important for the subsequent argument." He is actually

5. The distinction between langue and parole derives from DE SAUSSURE (1916). See the

beginning of § 5.1 for my introduction of these linguistic concepts.

declaring equivalent the two traditional uses of the term of meaning. His view has of course important conceptual consequences for consciousness of intentions, etcetera. However, I don't try to outguess yet again what must undoubtedly follow. A quotation from the manifesto of the Significs Movement in the Netherlands, founded in 1922, merely establishes here that SEARLE's assumption on expressibility is far from generally held (MANNOURY, 1948, p 144, my translation from the Dutch):

The meaning of a language act for a speaker and for a hearer can be only partly determined from the words or [other] symbols that are exchanged. It can also be only deficiently expressed in different words.

W. ESCH (1930) compares communication with stuttering, for "the ideal expression" is elusive. SEARLE seems to be comfortable with his assumption, however, and continues with his derivation of concepts (p 17):

There are, therefore, not two irreducibly distinct semantic studies, one a study of the meanings of sentences and one a study of the performances of speech acts.

As no two objects are irreducibly distinct, his statement may be taken as a tautology. However, I take the liberty of another interpretation. SEARLE is avoiding being too direct but he is actually stating that both studies are identical. Of course they are. But where I argue for upgrading semantics to pragmatics, he proposes to downgrade pragmatics to semantics. He doesn't say anything about the study of sentences for that is the already well-known "purely formal theory." Instead, he is not so much interested in what he sees as formal properties of sentences, but in what they mean. And meaning is next conceptualized as performance. With the meaning of a sentence thus equivalent to the performance of a speech act, SEARLE's statement amounts to a tautology, too. Another matter is that it doesn't need the preceding statement. For the equivalence of semantic studies — tautologically — holds whether or not "whatever can be meant can be said." So, why does SEARLE state the particular axiom?

The conceptual confusion SEARLE creates originates from his idea that - in my words - a sign can be studied from the perspective of meaning without taking the particular sign exchange in account it is engineered for. But the meaning lies *only* in the exchange.

In a world that is interpreted as one single situation it is quite understandable that the fundamentally *situational* nature of meaning – up to a particular exchange – remains unrecognized, or atrophies. Without – the experience of – diversity all of the authority of meaning is mistakenly invested in the sen-

6. From the wider perspective of the anatomy of meaning presented in this treatise, the tautology is immediately recognizable.

Meaning of a sign is the process of sign exchange.

tence, rather than in the sentence use. SEARLE is an example of a thinker who, like AUSTIN before him, does not realize a radical shift is required to avoid contradictions. They conceptually juxtapose sentence and speech act, with meaning now something to be divided between these two concepts. But, again and again, every division runs into premature contradictions.

Multiple meanings can only be sorted out at a conceptual level that is more finely grained than that of the sign. It appears that necessary and sufficient details of variety can all be adequately explained at the level of sign exchange. But as a concept, sign exchange can only serve its explanatory purpose without premature contradictions when the earlier focus, i.e., on the sign, is given an altogether *different* position in the conceptual system. A sign is instrumental for a sign exchange, and a sign exchange is instrumental for meaning. The misunderstandings AUSTIN and SEARLE generate are reducible to their inability to structurally reorganize their conceptual systems at their axiomatic levels. The concepts they introduce are, indeed, promising. But they cannot be just added onto an existing conceptual system. Especially AUSTIN clearly shows how he struggles to fit one concept in, fails, tries another concept, fails again, etcetera. SEARLE doesn't pause at his contradictions; he moves off in a particular direction, and continues.

10.7 theoretical convergence through reduction

Underlying the need for a concept such as speech act is, as I have pointed out above, the experience of more complexity. The transition from one situation, about whose singularity the sign user probably has no conscious knowledge, to many situations that are explicitly known is a paradigm shift. AUSTIN and SEARLE are as yet unaware of such ontological aspects of the shift of emphasis from sentence to speech act.

Such is my explanation of their continued attempts at 'fixing' concepts from the perspective of their existing paradigm, but without any chance of success. Their conceptual ground just doesn't permit the requisite variety. SEARLE's opening chapter presents a case of compromising rather than fundamentally rethinking a conceptual system. Without clear, unambiguous directions from his axiomatic system it is impossible to arrive at equally clear and unambiguous interpretations of his derived concepts. I have only made this show of my extended running commentary to emphasize this point.

That multiple situations of language use are not yet an issue for SEARLE is borne out by a statement such as (p 18):

The speech act or acts performed in the utterance of a sentence are in general a function of the meaning of the sentence.

I read this as SEARLE saying that the situationless sign is still carrying most of the burden of meaning. With this emphasis, the required paradigm shift is of course far off. In fact, SEARLE retraces his steps in favor of all meaning residing in the situationless sign. He starts, from my point of view, promising enough by stating that (p 18)

[t]he meaning of a sentence does not in all cases uniquely determine what speech act is performed in a given utterance of that sentence[.]

I find it promising because SEARLE takes a step toward further distinguishing between, in my terminology, sign and sign exchange. Instead he returns to his axiom of "whatever can be meant can be said." Not respecting the "real life" (AUSTIN, 1962, p 143) of signs, SEARLE wants them to conform to what he believes is a "logical theory." He negates the power of the concept of sign exchange, separate from the concept of sign, to accommodate multiple situations. The concept of speech act is in fact reduced again to that of sentence because (p 18)

it is in principle possible for every speech act one performs or could perform to be uniquely determined by a given sentence (or set of sentences), given the assumptions that the speaker is speaking literally and that the context is appropriate. And for these reasons a study of the meaning of sentences is not in principle distinct from a study of speech acts. Properly construed, they are the same study.

It seems an eminently rational approach. However, I believe the underlying assumptions about human nature to be extremely naive. What exactly SEARLE means by "speaking literally" remains unclear. Anyway, he can hardly have concluded from "real life" that every speaker always finds it in his interests to speak literally. Rather than building a theory on the assumption of what a speaker could literally do with language, SEARLE should first of all have build, or pointed at, a theory that explains why a speaker does *not*. In fact, a speaker even cannot speak literally when that restricts the determinants of the sign to what is rational, i.e., to what the sign engineer 'holds' within his faculty of reason. There are also preintellectual and perceptive determinants of sign engineering (see Figure 6.4.4). So, SEARLE is basing the convergence of (p 17) "semantic studies" on an idealization that contradicts what is already known about human behavior from SCHOPENHAUER on the will, PEIRCE on pragmatism, and what has later been confirmed and elaborated upon by cognitive and social psychology.

What I also find peculiar at this stage of SEARLE's text is why he supports the distinction between sentence and speech act in the first place when, after all, he reunites them. Is it the power of his present paradigm that forces him to retreat to the position where, as already quoted above, (p 18) "[t]he speech act or acts performed in the utterance of a sentence are in general a function of the meaning of the sentence." What remains are (p 18)

two different points of view[, ...] one which concentrates on the uses of expressions in speech situations and one which concentrates on the meaning of sentences.

I think that, at least in the light of his earlier reduction toward idealized literal sentences, again SEARLE is stating just one point of view, that is, of sign exchange. But, then again, he is not. A view different from sign exchange concerns the sign. Indeed, such views complement each other. That is the emphasis SEARLE places here. Those views are, however, qualitatively different. This point for example AUSTIN misses when he attempts (1962, p 91) "to make a fresh start on the problem." Such differences also don't come out unambiguously with SEARLE, as it would first of all require a fundamental reorganization of his conceptual system, including axioms. I believe he is aware of situational variety but does not realize the importance of situation as a *fundamental* variable to help sort out differences in the "real life" of sign exchange.

A hammer is an instrument for hammering. In its turn, hammering is instrumental for driving in a nail. But starting from a hammer, is it responsible to argue for nailing as the one-to-one equivalent of hammering? The same hammer can actually be used in many different situations, for many different purposes. Of course, the hammer is an object constituting situations. Once established, it is nonsense to define a situation as a function of the hammer. But it could very well be conceived of as a particular use of the hammer.

10.8 reason in control

SEARLE concludes his opening chapter with further comments on his "principle of expressibility." It becomes evident that important ground is missing. Does "whatever is meant can be said" imply that the sign engineer consciously knows what he means? And does he then also consciously control the engineering of the sign? And when he finds the sign lacking in literal content, does he know what is lacking? Does he know how to fix it? I understand very well how the "principle of expressibility" makes a subsequent theory of meaning much simpler. For it is then only required to deal with such idealizations. But what if that principle, as I believe it is, is totally unfounded? It casts serious doubt on derived concepts, too.

Running with his reductions, SEARLE even proposes a formal notation (p 20) with X for meaning, S for speaker, and E for expression. It looks like a mapping from a set of speaker's meanings onto a set of expressions. It reminds me of what I have already commented upon as the nature of the rules. What SEARLE writes on p 15 started me wondering about what he thinks linguistic elements are. I now repeat my puzzlement. Is an expression such an element? If so, are the rules SEARLE insists upon equivalent to the *relation* of

the set of X's onto the set of E's? I am aware my set theory is rusty, so I will have to be careful. But I still know enough not to be detracted by SEARLE's notation. The results of symbolic logic are never better than what the axiomatic system already contains. In fact, they are often worse through misapplication. It may look clever, but leads nowhere. So, I will ignore SEARLE's formalizations as long as his axioms confuse me.

But far from removing contradictions he surprises with another about-face. For suddenly SEARLE introduces it is necessary (p 20)

to distinguish what a speaker means from certain kinds of effects he intends to produce in his hearers.

Again, what is missing is a unifying concept such as the sign as a request for compliance. Does a speaker have two types of intentions, perhaps? Are intended effects not meanings? Or will they turn out to be of a different type? If so, what will the type look like that defines the 'original' meaning that is set apart from intended effect?

It is not at all inconsequential that SEARLE claims for his principle of expressibility (p 20)

to account for important features of Frege's theory of sense and reference.

GOTTLOB FREGE (1848-1925) paves the way for logical positivism and analytical philosophy. To philosophers such as SCHOPENHAUER and PEIRCE, the concept of logic relates to *all* of the human intellect. FREGE reduces logic to reason, and to specific operations on concepts, given symbolical expressions. The next step is the development of the belief that this 'new' concept of logic accurately describes the workings of human reason. Once again, the idea is that logic concerns all of the intellect but now with much reduced concepts of both logic and intellect. Together with the idea that the human intellect is nothing but reason, Fregean logic subsequently leads to the belief that logic can be exercised external to intellect, that is, by manipulating symbols. Actually, with his ars combinatoria LEIBNIZ already advocates this view (H. ISHIGURO, 1972). It is but another small step to the idea of artificial intelligence, in the sense of imitating and perhaps even exceeding the human intellect.

From a Schopenhauerean perspective the privileged status of modern logic is utterly undeserved. It amounts to a gross oversimplification, resulting in a host of premature contradictions. One of them is that SEARLE invokes the supposed authority of FREGE. To "account for important features of Frege's theory," he argues, would have (p 20)

the consequence that cases where the speaker does not say exactly what he means [...] are not theoretically essential to linguistic communication.

Perhaps some readers are uneasy about my criticism of *Speech Acts*. They may feel that I am too harsh. But am I, really? Is it not, rather, that *only* respect for a person's interests can lead to a realistic anatomy of meaning? SEARLE's theoretical foundation is seductively systematic. But I decline to comply. Unless sentence and speech act are equivalent, after all, it is nonsense (p 20)

to equate rules for performing speech acts with rules for uttering certain linguistic elements. Even though it might be that $(p\ 21)$

for every possible speech act there is a possible linguistic element the meaning of which (given the context of the utterance) is sufficient to determine that its literal utterance is a performance of precisely that speech act[,]

this misses the point about sign exchanges. Essential is *not* that is it theoretically possible to speak one's mind literally. It is essential that a person is *interest-driven*. A sign is not engineered to manifest oneself literally to some degree. The engineer produces a sign, and offers it for exchange, to promote his own interests. And he only initializes a particular sign exchange when he feels it in his interests to involve one or more sign observers to comply with them.

Another criticism is that SEARLE views the context as given, i.e., existing outside the speech act. I would say situation, of course, but that is conceptually irrelevant. Extremely relevant is that, in my view, situations are also subjectively interpreted. It is a personal variable, too. It must therefore be addressed within the scope of the anatomy of meaning. But then, SCHOPENHAUER teaches that the rationality of the sign is limited (see Chapter 6, above). Or, as GENDLIN puts it (1997, p 6)

situations are always wider than the existing language.

SEARLE will undoubtedly run into yet another, and especially far-reaching, contradiction when speaker and hearer have different interpretations of what they subsequently also act on as the relevant situation.

10.9 intentional literalism

I don't extend my practice of running commentary beyond SEARLE's opening chapter. Why even dedicate all of eight paragraphs to a text more or less equal in length? I retain my original reading notes, almost unedited, in this finished treatise because they exemplify the limits of rational discussion. For axiomatic systems are involved that are 'fundamentally' different. A special problem with interpreting *Speech Acts* is that, after all, SEARLE doesn't make his ontology clear. So far I have done little else than guessing at his assumptions, trying to make sense out of them, and for the most part rejecting them in favor of interest-driven situationism.

It is no doubt a relief to the reader that I don't have equally detailed com-

ments on the remainder of SEARLE's book. In fact, I did not read the last third all that closely. About half-way I finally managed to construct a somewhat coherent axiomatic system, as a framework for – subsequent – interpretation. I believe that *intentional literalism* is an apt name for SEARLE's ontology.

What is literalism? I have combined *literal* and *realism*. SEARLE makes it clear he believes in objective reality. He is less dogmatic than hard-core logical positivists but still argues that (p 78)

we need to distinguish normal real world talk from parasitic forms of discourse such as fiction, play acting, etc.

MANNOURY holds a different idea on "speaking the truth" (1925, p 76, my translation from the Dutch):

"Normal" speech is ultimately always somewhat malevolent, or, let me say, expressive of a *different* will. It is a kind of wireless control of my fellow human beings in a direction which they would not have taken on their own accord.

It closely resembles some tenets of subjective situationism. Returning to SEARLE, his criterion for distinction is that (p 79)

in real world talk one can refer only to what exists.

SEARLE is actually stating that any person can unerringly tell reality from fiction. Not only that, every person is also able to be conscious about all real objects. He therefore assumes a mapping between real objects and, say, real meanings. Next, every person is capable of giving literal expression to his real meanings. So this involves another mapping, this time from a real meaning to an expression, that is, using a particular language. According to SEARLE's principle of expressibility, a literal expression is always possible. What he probably means is that such an expression is unambiguous, complete, etcetera. And it is an honest expression, too, for (p 112)

[a] man is committed to the truth of whatever he asserts.

That is, I believe, not how it really works. Anyway, so much for the literalism part of the label. SEARLE's variety is intentional in that he apparently considers intentions to exist objectively, too. I am not sure whether or not to accord special status to intentions. Is SEARLE saying that an intention, as a real object, immediately is a real meaning, too? Or is an intention also mapped onto a real meaning? At least, being a real object an intention can also be literally expressed.

Literalism implies that different persons can have identical meanings. In fact, as soon as a particular person 'knows' about a particular real object he holds the 'standardized' meaning about it. Literalism does not enable shared meaning. It does not explain how it might originate from differences. Instead, it even assumes that different persons hold identical real meanings once they have been 'told' about corresponding real objects.

Intentional literalism holds that intentions are a special kind of real objects.

They involve – other – real objects. In particular, an intention is the real object that encompasses the relationship between the person and one or more other objects. One and the same person may have different relationships with identical objects; that accounts for different intentions.

A neutral statement about real objects, other than intentions, is impossible according to intentional literalism. A person who makes such a statement is supposed to perform an act of assertion. Thus is *all* "normal real world talk" intention-based.

Actually, all such talk is now assumed to be about communicating intentions as relevant real meanings (p 43):

In speaking I attempt to communicate certain things to my hearer by getting him to recognize my intention to communicate just those things. I achieve the intended effect on the hearer by getting him to recognize my intention to achieve that effect, and as soon as the hearer recognizes what it is my intention to achieve, it is in general achieved. He understands what I am saying as soon as he recognizes my intention in uttering what I utter as an intention to say that thing.

I think the key to arriving at what SEARLE is after lies in his last sentence. His label of intention refers only to "an intention to say that thing." He limits the intention to the speaker *saying* it, for the implicitly underlying assumption appears that the *doing* of communication is about sharing meaning.

Why does the speaker really say something? I don't want to confuse matters even more, but what is the interest behind the intention? For some time I have understood SEARLE's terminology of intention as synonymous with my terminology of interest. Upon closer inspection there appears to be no serious psychological ground in *Speech Acts*, at all. The scope of its concept of meaning is extremely limited. An attempt at getting such an intention, including other real meanings, across is what SEARLE calls an illocutionary act (p 47):

In the case of illocutionary acts we succeed in doing what are trying to do by getting our audience to recognize what we are trying to do.

Again, I don't think I "recognize" in SEARLE's sense what he is "trying to do." His sentence nevertheless makes it a little clearer why he insists on the difference between illocutionary and perlocutionary acts. With an illocutionary act (p 47),

the 'effect' on the hearer [...] consists simply in the hearer understanding the utterance of the speaker. It is this effect that I have been calling the illocutionary effect. [...] The characteristic intended effect of meaning is understanding.

Is this really what all the trouble is about? Is illocution "simply" another word for communication? In fact, SEARLE restricts his research area from communication in general to "normal real world talk." He doesn't want to be bothered by "parasitic forms of discourse."

In "normal real world talk," a person may be "trying to do" different things

with respect to the other real objects that are, as it were, encapsulated by his attempts. Suppose that a copy of this treatise is the real object in question. A person may promise to give another person the particular copy. Or he may ask to borrow the copy. Or he may assert that it has been written. The nature of his relationship to the copy of this treatise, i.e., his intention, is expressed by promise, ask, assert, etcetera. Such an (p 30)

illocutionary force indicator shows how the proposition [about the other real objects] is to be taken, or to put it another way, what illocutionary force the utterance is to have; that is, what illocutionary act the speaker is performing in the utterance of the sentence.

I have not, however, finished my (re)construction of intentional literalism. The illocutionary force indicator seems to represent the most finely grained classification level on "how the proposition is to be taken." SEARLE is giving examples of (p 54)

conditions [that] are necessary and sufficient for the [corresponding] act $[\ldots]$ to have been successfully and non-defectively performed in the utterance of a given sentence.

In circular fashion SEARLE remarks that (p 54)

[i]f we get such a set of conditions we can extract from them a set of rules for the use of the illocutionary force indicating device.

And that is precisely the 'result' of his exercise! The rules thus 'derived' are merely restatements of conditions. And the conditions are so severe that, actually, any sentence would 'do.'

The dream of SEARLE is clearly recognizable from the following statement. It is about the perfect language, perfect because it literally – whatever that is – maps real objects onto expressions. His ideal is to make sentences computable but (p 64)

[p]art of the answer to this question would depend on whether we can reduce all illocutionary acts to some very small number of basic illocutionary types.

Well, he makes a start by only taking "normal real world talk" seriously. Next, SEARLE confines the real world to such normal talk. My conclusion about the ontology of intentional literalism is that its real world *is all illocution*. SEARLE's real world is fundamentally conventional. Though he gives the impression that language reflects the order of the real world, I believe he actually starts from his idealized picture of ordered language, called illocution, and structures his real world *after that image*. It is a fundamentalism in a narrow-minded sense.

Philosophy of language, as practiced by for example AUSTIN and SEARLE, is actually still grounded in the idea that a word contains the essence of an object. And that a natural language, 8 seen as rules governing configuration of

8. Natural language, and its analysis, have become popular paradigms for design of information systems. Much as I understand the seductive power the promise of simplici-

ty must hold, I regret this, especially when such methods are proposed as all-encompassing and guaranteeing success. That is nonsense. My criticism of AUSTIN and SEAR-LE should inform that such approaches are only valid under strict conditions. So strict, even, to render 'methods' of natural language analysis trivial.

A fundamental objection that I have is that so-called natural use of language more often than not hides interests. My hypothesis is that, in general, the engineer does not directly elucidate his interests because that would make the observer, in complying with those, feel denying interests he himself has. Nor will the engineer invoke too openly the interests of the observer for that would make the observer come under obligation when complying with this particular request. Therefore, in "normal real world talk," interests are not directly referred to in the sign. Instead, the engineer will invoke, say, an authority that is higher than both the observer and himself. When the observer recognizes that 'objective power,' the engineer secures compliance without losing any credits, on the contrary, for his future requests. What is suggested to hold such objective power may be different according to the situation. A religious person may think he obeys his god(s) for certain activities, and laws of physics for others, etcetera. Now my point is something like linguistic darwinism. The language a person uses is an instrument for engineering optimally effective and efficient signs, i.e., requests for compliance. When my idea about trying to place the observer, not under the engineer's, but under their common outside and supposedly higher authority is relevant, it only follows that language develops as an instrument to suggest objectivity. Therefore, the nature of whatever language

is a consequence of how one person attempts to organize compliance with his interest by others. It surely is not the origin of meaning. There is no higher authority than the will, as SCHOPENHAUER says. This makes every person, as *individual* (also read: unique) objectification of the will, first and last his own authority. I do not believe that SCHOPENHAUER has already been acknowledged as an early existentionalist but that is precisely what he is, too.

A more practical objection I hold against overemphasizing the use of natural language for analysis of information requirements is that such analysis does not address the essentially systemic character of the tool to be designed. A system is not merely an aggregate. From an inventory of requirements – and why not apply, among other methods, analysis of the use of natural language by stakeholders? - conceptual derivation, often involving abstraction, is necessary for creative synthesis. Analysis may be a science, but design is an art. Designing is not mechanical, at all. Suppose that it is my role to act as modeler. Rather than assuming that personal interests do not play an important part in business problems, my consistent experience is that it pays to honor them. But this means that I have to interpret beyond appearances. I have treated that theme in my book Informatiekundige ontwerpleer (1999). It clearly shows the dilemma of the professional modeler. He is mediating interests of others, but in the process he becomes involved with his own interests.

I find my design of an information system for financial accounting, documented in *Aspecten en Fasen* (1991) an excellent example of how superior results will probably even be obstructed by taking too seriously what

words, contains the essence of the world of objects. It is enlightening to contrast this with DE SAUSSURE's perspective on language (1916, p 68):

No one disputes the fact that linguistic signs are arbitrary. But it is easier to discover a truth than to assign it to its correct place.

In my opinion, the correct place is not to start from a language system. Nor is it to subsequently stay within the limits of language, when trying to explain human behavior. For it leads to an extremely limited scope for meaning, i.e., to "normal real world talk," only. To declare illocution the norm – and everything else in sign exchange "parasitic forms of discourse" – only leads to an impoverished anatomy of meaning. The ontology of intentional literalism is barren. It takes language more seriously than language users. Moreover, the concept of illocution is a complex construct to explain something that is trivial when approached within a larger framework. And it does not even convince at explanation.

I don't see any reason to relinquish the general concept of sign. A sign is a cause produced by a sign engineer *for effect*. The intended effect is not necessarily the understanding by the observer of the engineers intention. The effect essentially aimed at is a response by the sign observer, in whatever mode of causality. The engineer measures the success of the exchange of his sign after the extent to which the observer's (re)actions comply with his interests. More often than not, the sign is more effective when it does not reveal the engineer's interests 'behind' it. It may be considered morally regrettable, or even objectionable, but this is obvious from a psychological point of view. Ignoring it, language philosophers manage to take the ideal of intentional literalness seriously.

stakeholders literally say. Nobody ever told me about phase and dimension. Yet, those are concepts central to my design. I invented them for that particular type of situation. I arrived at a synthesis that accounts for whatever stakeholders could articulate on financial accounting, precisely because I choose not to get distracted by what they might say. It was evident that a synthesis was needed for their interests. How could they be respected

at an individual level, and yet be integrated? Their highly varied statements, and only a limited number, I considered as samples providing inspiration to design beyond them. Favorite sources of inspiration are also textbooks. A good textbook, too, is not an aggregation of what persons actually do, but a creative abstraction allowing/explaining generation of a wide variety of behavioral instances.

It is of course an appealingly nice idea. When speaking and acting are considered as different, shouldn't there also be some overlap? AUSTIN comes close to admitting that speaking is acting. Maybe he feels their relationship should be symmetrical. But not all acting is speaking. Speech is limited to just one of the three modes of causation.

Indeed, this obstacle is easily taken *after* different modes of causation are recognized. Speaking then, is acting in a particular causal mode. It is the mode of aiming at motivationally induced effects.

Language philosophers probably find it impossible to apply the conceptualization of cause and effect. Are they afraid the terminology associates with Newtonian billiard balls colliding? However, mechanics pertains to only one out of three causal modes, i.e., to "cause in its narrowest sense," or physical phenomena.

Whatever reasons they have, 9 such thinkers fail to acknowledge the opportunities for efficiency of signs over other causal modes. Suppose John wants to have one of Bill's lower legs lifted again. How can he get Bill to comply with his interest, with himself *spending the least effort*? With three modes of causation

9. Typical is also H.P. GRICE (see note 20 in Chapter 7). Interestingly enough, SEARLE takes argument – mistakenly, I believe, but that is not the real point here – with GRICE. He attributes to GRICE the opinion that (p 44) "[p]ut crudely, Grice in effect defines meaning in terms of intending to perform a perlocutionary act." I do not read this from GRICE's article *Meaning* (1957). In general, SEARLE appears very polemical, but regretfully without much empathy. Apart from his theory being defective, his account of it is also not endearing.

What the quotation from SEARLE makes especially clear is the effort to keep what I consider normal reactions to actions out of the central theory of speech acts. A telling example is where he states that (p 46) "there is no associated perlocutionary effect of greeting." SEARLE continues that a greeting is only about installing "in my hearer [...] the

knowledge that he is being greeted." I can only find this an amazingly naive perspective. Especially greeting should have directed his attention beyond getting the hearer to understand the speaker's intention. Greetings are exchanged in order to establish, maintain relationships. Suppose that somebody declines to greet you, consciously you assume. Now that is a sign, too, of course. But the absence of the expected sign will make you think about your relationship with the non-greeter. Actually, you may even be fully complying to the interest behind the nongreeting. These underlying behavioral aspects are all neglected by SEARLE as he is concentrating on (p 16) "language as rulegoverned intentional behavior." I repeat that he does not succeed in making it clear to me what that is. Many variables that I consider relevant are missing from his theory.

to choose from, engineering a sign is often most efficient. But then, often enough it might not be. It depends on their relationship, and particular situation (both as understood subjectively, and thus separately, by each of them). Anyway, I want to make it clear that sign use can be perfectly logically integrated in an encompassing framework of action.

Because language philosophers such as SEARLE and AUSTIN don't allow themselves to theorize in terms of cause and effect, they are forced to struggle with other explanations (thereby invoking cause and effect, nonetheless). What AUSTIN doesn't grasp is that his initial problem statement already entails the conceptual scheme of cause and effect. Actually, somebody trained as an engineer will rightfully expect from the introduction of the concept of *action* that language use is going to be explained in terms of cause and effect. That is what I expected to find, anyway. On the contrary, AUSTIN attempts to explain action in terms of what he thinks is essential of language use, and that is meaning. There is no *integration*. He misses it, I guess because he lacks a background perspective on the individual language user. For it is precisely the sign user who may modulate from one 'mode' of causation to another.

The irony is that the type of act AUSTIN feels that does not really belong to his theory, is in fact the only relevant type seen from the wider perspective of different modes of causation. It is, of course, what he calls the perlocutionary act. He actually considers perlocution a nuisance for a consistent theory of meaning. My opinion is that he only could have arrived at a consistent theory by recognizing that the whole purpose of a specific sign is not something evasive such as shared meaning but getting the observer to comply with the interests of its engineer.

How to Do Things with Words is a great slogan, but it doesn't really correspond to AUSTIN's theory of illocution. His start is still consistent with a focus on action. Though not systematically articulated, he is actually – but not originally – stating that there is more about statements than objective truth or falsity. Without absolute truth value, a statement expresses an opinion. (What I here call an opinion is what AUSTIN calls an intention.) Then, what a speaker 'does' with words is communicating his opinion. Because a speaker can now communicate nothing but his intentions, actually every speech act is an illocutionary act. Please note that, at this stage of his book, the theme is almost reversed. His initial examples are not so much about individual opinions but concern the performance of rituals. The ritual, AUSTIN argues, is 'done' by making the statement.

The orientation at 'how to make intentions clear with words' is further pursued by SEARLE. In the process he denies the relativity arrived at by AUSTIN. Meaningful statements are true or false, once again. The illocutionary act consists of getting the speaker's intention-as-meaning across to the hearer.

However the hearer may act himself is considered perlocutionary, and therefore outside the scope of the speech act. As an engineer myself, ¹⁰ with a differentiated understanding of cause and effect, I find it confusing that SEARLE titles his book *Speech Acts*.

Why do theories such as formulated by AUSTIN and SEARLE find supportive audiences? My idea is that they allow a person to maintain a logical atomistic perspective on reality. Such axioms are even reinforced. For the objectively true statement has been preserved; a proposition informs about an object and its – relevant – properties. However, the speaker necessarily intends the hearer to interpret that proposition in a particular way, that is, according to the speaker's – relevant – intention. That is why the, say, intentionally neutral proposition is enhanced with, say, instructions for interpretation. Those added instructions give the originally neutral proposition a particular illocutionary force.

It is an attractive theory, especially when so-called illocutionary forces are classified, even exhaustingly and stable by a simple, short list of labels. Any complete statement then becomes a composition of, first of all, a neutral proposition and, secondly, an illocutionary force indicator. Neutral propositions, in their turn, are composed following the rules of subject/predicate logic. The subject represents the object, and the predicates describe the object's properties. And the illocutionary force indicator is simply selected from a list. It is easy to see why, for example, the artificial intelligence commu-

10. An example of lack of consideration of system complexity (see also note 8, above) is SEARLE's following explanation of his method of investigation (p 33): "Until we can get clear about the simple cases we are hardly to get clear about the more complicated ones." Elsewhere it reads that he is (p 56) "going to deal only with a simple and idealized case." I recognize it as a preferred method for teaching. But, then, students should be made aware of qualitative differences when more complexity is introduced. It will do for many purposes to assume that the earth is flat. When navigating large distances it is obviously necessary to acknowledge that the earth is a sphere. The rules of navigating flatness are quite different from dito rules for sphereness.

A theory must always consider the maximum relevant complexity. A good theory will also account for simples cases, often by 'just' fixing one or more variables. SEARLE is trying to reassure the reader that extrapolation from simple cases to complex cases will be unproblematic. It fits his principle of expressibility but "real life" needs a richer "logical theory" for proper explanation.

In \S 7.5, I have reconstructed my development of the engineer-based sign structure by starting from what I consider the most complex case. How is it possible that even a single, short sound can serve as an unambiguous request for compliance? With such a case explained for, simpler cases often immediately fall into place.

nity enthusiastically welcomes speech act theory. 11, 12

This combinatorial theory of meaning is elegant but, in the majority of situations, too simplistic. It breaks down because every sign that is engineered ultimately originates from the sign engineer's will. Manifestations of his will are aided by his intellect *as instrument*. It makes a sign not only irrational to whatever extent, but intrinsically subjective, too. There is no such thing as a neutral proposition. Actually, sign and proposition may as well be taken as equivalents when the latter's association with symbolic logic is dropped. Figures 7.5.6 and 8.1.1 outline aspects that are engineered into, and interpreted from, respectively, a sign/proposition. Again, concepts such as neutral proposition and illocution are just too simple for a *general* anatomy of meaning.

Authors like AUSTIN and SEARLE 'cause' confusion with their concepts of speech act and illocution. Especially SEARLE reasons from a depersonalized, mechanistic worldview. Whatever theories of information modeling uncritically build from speech act theory and language action paradigm therefore lack conceptual grounds designed for requisite variety. But please, don't just take my speech for it. Act on it yourself. My discussion hopefully inspires detailed study of their popular publications before applying their concepts.

11. The more conventional field of management information systems has also been afflicted. Illocutionary force indicator sounds impressive but, when modeling a management information system, I cannot think of any difference with a good-old status indicator. Different states allow an object to be tracked through a process. Of course, a particular actor attributes a particular state. The actor should therefore be referred to when such intentions need to be tracked, too.

12. While starting out from traditional artificial intelligence, H. HENDRIKS-JANSEN has departed from it and developed a rich, general approach to understanding (human) behavior in *Catching Ourselves in the Act:*Situated Activity, Interactive Emergence, Evolution, and Human Thought (1996).

prelude 11

Especially after AUSTIN and SEARLE, MEAD offers reading more in touch with reality. At least he has his priorities right. MEAD does not commit the error of mistaking the structure and rules of a language system for reality. As Chapter 11 shows, it is for different reasons that his assumptions fail to confer relevant variety.

What characterizes a community, MEAD argues, is that individuals *share* a behavioral repository. Each member therefore knows what every other member is capable of qua behavior. Then, through a sign one member calls up a specific behavior by another member. This places meaning squarely *in* the relationship between members who are equipped, however, with identical behavioral repositories.

Recognizing the *relational* nature of meaning is a significant advance. However, MEAD's assumptions are one-sidedly social. And they even fail to explain *dynamics* at the social level. Initially, he presumes that participants in exchange relate a particular sign to identical behavior. Psychology and recognition of individual uniqueness do not enter his grounds. Neither does a change of repository. As a result, MEAD's concept of community is sterile.

Of course he acknowledges idiosyncrasy of individual behavior. But it occurs to him almost as an afterthought and it does not lead him to redesign his grounds. He adds repairs later on, only resulting in contradictions even when questioned against his own assumptions.

The example of MEAD demonstrates by default the requirement for reconciling social and psychological perspectives. Participants who meet in (sign) exchange are by definition engaged in a relationship. This reflects the social aspect. But participants are *also* by definition different (psychological aspect), rather than similar. The most obvious difference is already that one is sign engineer and the other sign observer. Chapter 8 shows the correspondingly

different representational structures of the sign.

A community, or society, as MEAD has it acquires a strong utopian flavor. Neighborly behavior is the rule. It is especially this ideological flavor that returns in HABERMAS. They both sketch their perfect society, rather than supplying an explanatory framework for analyzing *actual* societies. MEAD seems unaware of his bias. HABERMAS at some point openly acknowledges the ideological nature of his theory. Subjective situationism helps to recognize that a paradox is thereby dissolved. The theory of HABERMAS has subsequently more explanatory relevance than MEAD's. For subjective situationism holds that the bias of individual interests is not only inevitable but predominant.

Chapter 12 comments on HABERMAS's theory of communicative action. The review is aimed at gaining a fundamental understanding of why communicative action appears as a concept in some theories of conceptual information modeling. A case is made that HABERMAS himself would probably find his concepts inappropriately applied, i.e., without regard for his overall scheme.

A reader who is not interested in criticism can skip to Chapter 13, likely after having already skipped Chapters 9, 10 and 11.

chapter 11

MEAD IN THE NEIGHBORHOOD OF MFANING

A remarkable characteristic of the concept of meaning is that theories abound. What is more, many theories can *not* even be aligned because (too) different assumptions underlie them. As a result they often mutually contradict fundamentally. I have already shown such irresolvable differences by discussing publications by AUSTIN and SEARLE in the light of both their internal logic and the anatomy of meaning of this treatise. How is it possible that such theories *all* enjoy scientific recognition?

According to subjective situationism there doesn't have to be unity in science. A particular scientific discipline may apply to particular situations, only. So, why not have different concepts of meaning in – and for the benefit of explaining – different situations, too?

I find this a valid argument. For theorists it means that they should emphasize the situational nature of their theories. In which situations does a specific theory hold, and in which not? And, of course, for relevant situations premature contradictions must always be avoided.

Let me therefore, first of all, succinctly state the situations for which I hold my anatomy of meaning applicable. It is where a sign user may be recognized who can engineer a sign and thereby offer it for exchange. He does so in the expectation of interpretation by an observer, and of that observer's subsequent (re)action in compliance with the interests that evoked the sign.

A problem is that most theorists are not aware of ontological issues, let alone that they acknowledge situational constraints for their theoretical constructs. Or they openly sidestep such issues, as GEORGE H. MEAD (1863-1931) does in *Mind, Self, & Society* (1934, p 332):¹

When [the psychologist] deals with the world about him, he just accepts it as it is. Of course, this attitude is shot through and through with metaphysical problems, but the approach is scientifically legitimate.

I don't agree. In this chapter I demonstrate that MEAD indeed develops an interesting theory of meaning. However, and despite his own proclamation, it is not grounded on how he just accepts the world about him as it is, but on a partial idealization of his world. Now I find it even logical that especially axioms are ideas (also read: concepts), too. How could I think otherwise from the perspective of transcendental idealism? Where I believe MEAD is metaphysically mistaken is in explaining the whole from that specific, and idealized, part.

11.1 lost opportunities for inspiration

I realize this treatise doesn't at all provide an exhaustive inventory of theories of meaning. Some particular theory, or other, is certainly found lacking. It depends on the interests of the reader. From my interests I argue that, anyway, such an inventory is a practical impossibility. Therefore, I don't exclude the possibility of a theory largely equal to, and predating, the anatomy of meaning I have outlined here. Or the possibility of one or more theories I actually *should* have considered because they *would* have made me develop a different, better² theory. Fully aware of the potential of justified criticism, I remark on what nonetheless strikes me as scientific negligence in some of the works under discussion.

AUSTIN, and SEARLE after him, theorize about speech acts. Is it not odd, then, that they don't look for inspiration elsewhere, not even minimally? How can they have missed the earlier work of, for example, MEAD? For the concept of the *act* is central to MEAD's theory of meaning. Or don't they miss it but, rather, choose not to bother?

I gather most persons, academics included, guard their hard-won – often situationally differentiated – axiomatic systems. When firmly established, they decline to comply with requests for even slight modification. And a most effective act of non-compliance is – the pretense of – non-exchange. That is, a sign is simply ignored. Whether or not a different theory has actually come to the attention of the theorist aiming to establish himself or, especially, to

1. That book is published posthumously. C.W. MORRIS edits lecture notes, mainly taken during MEAD's 1927 course in social psychology. As with the books 'by' PEIRCE, DE SAUSSURE, and AUSTIN, I acknowledge the editing process. However, I assume – again falsely, in some way, no doubt – MEAD to be the single author of *Mind, Self, & Society*.

2. What is good? Better? Best? A theory is better than another theory when it covers more situations and/or leads to fewer premature contradictions. It is even better when fewer contradictions occur as it is applied to fewer situations.

maintain an already established position, the result of *not* venturing beyond his own discipline is especially that of consolidating its axiomatic system. Such grounds, however, don't serve a purpose for themselves. D.H. WRONG points to the danger of forgetting about the relevance of theory (1970, p 29):

If the initiating questions are forgotten, we readily misconstrue the task of theory[J] and the answers previous thinkers have given become narrowlingly confining conceptual prisons, degenerating into little more than a special, professional vocabulary applied to situations and events that can be described with equal or greater precision in ordinary language. Forgetfulness of the questions that are the starting points of inquiry leads us to ignore the substantive assumptions "buried" in our concepts and commits us to a one-sided view of reality.

Speech act theory, too, could benefit greatly from an orientation outside traditional language philosophy. By the time AUSTIN and SEARLE develop their theories, especially social psychology has surely advanced enough to supply valuable inspiration. But there is no trace of cross-fertilization, let alone of synthesis. The bias of W.P. ALSTON (1964) confirms how analytically oriented theorists shape the establishment of language philosophy.

MEAD is credited as a pioneer of the discipline of social psychology. Around 1890,³ he studies for three years in Germany. There he is influenced by WILHELM WUNDT (1832-1920) who is acknowledged as the founder of experimental psychology.⁴ This physiological basis⁵ is clearly recognizable in MEAD's

3. BALDWIN, 1986.

4. HOTHERSALL, 1984. Note 11 in Chapter 3 points out that WUNDT does take explicit metaphysics seriously. What is especially relevant at this stage is that, using the concept of community (Gemeinschaft, Gesammtheit), WUNDT's System der Philosophie (1889) ends on a distinctively social note (p 621): "Darum ist von Anfang an der Einzelne in weit höherem Maße durch die Gemeinschaft, als diese durch den Einzelnen bestimmt." (My translation: "Fundamentally, the determining influence of the community on the individual is far greater than the other way around.") MEAD even removes the duality, as I will demonstrate later in this chapter. Actually, there are several passages in WUNDT's book that seem to reappear in the neighborly doc-

trine of MEAD, who adds radical emphasis on the social determinants. WUNDT still writes, for example (p 635): "So erweist sich [...] die organische Verbindung der Menschheit zu einer einzigen sittlichten Gesammtpersönlichkeit als ein letztes, viellicht nie wirklich erreichbares, aber doch immerfort zu erstrebendes Ideal." (My translation: "Thus the organic association of humanity presents itself as a single, communal moral personality. It is an ultimate ideal that, although it may remain forever beyond reach, should always be pursued.") With MEAD, such community is no longer a lofty goal, but the assumption on which his social theory rests. The communal moral personality of WUNDT becomes MEAD's generalized other (my introduction of this concept of MEAD follows later in this chapter). A detailed comparison between

writings. They are, indeed, a pleasure to read for an engineer like myself because, in spite of his exaggerated idealization, he largely remains in touch with questions about reality. At the time, his answers surely are an important theoretical advance. I believe the anatomy of meaning, proposing that every sign is a request for compliance, is now an improved theory.

11.2 opposing quadrants

As the title justly indicates, *Mind, Self, & Society* is a work of great depth and breadth. The subtitle reads: *from the Standpoint of a Social Behaviorist*. Its major theme is (p 336) "the relation of the conduct of the individual to the environment." The emphasis on conduct makes MEAD a *behaviorist*. Placing individual behavior within a particular environment completes the label of *social* behaviorist. Because he acknowledges different environments or, as he also calls them, situations, MEAD can already be considered a situationist in the sense of Chapter 3 of this treatise.

For his conceptual system MEAD feels forced to make a choice of priority. What comes first, the chicken or the egg? Transposing this proverbial question to his own theme, he argues for (p 82)

the necessity, in social psychology, of starting off with the initial assumption of an ongoing social process of experience and behavior in which any given group of human individuals is involved.

However, his use of "social" may be interpreted in different ways. At its most general, social stands for any interaction between the individual organism and his environment. Actually, social action is almost a pleonasm. For all environmentally oriented action is, by such definition, social.

Within social action in its most general sense MEAD distinguishes four subclasses. To aid my discussion of *Mind, Self, & Society*, I call them here by separate names of my own invention (except of course when directly quoting MEAD). In addition I project MEAD's subclasses of social action on a two-dimensional plane. Its horizontal axis has at its opposing extremes the orientations at *community* and *individuality*, respectively. The opposites at the vertical axis are occupied by *identity* and *difference*, respectively. To start with, Figure 11.2.1 shows this bare coordination scheme. Actually, it does not really classify (sub)classes of social acts but rather classes of *attitudes* of the individual organism who is initiating (social) acts.

System der Philosophie and Mind, Self, & Society would indeed be very interesting, but lies outside the scope of this treatise.

5. As it already is, in fact, with SCHOPEN-HAUER who studies medicine for some time (SAFRANSKI, 1987).

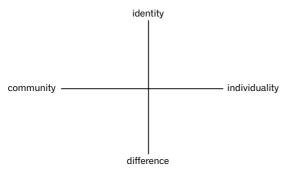


Figure 11.2.1.

Organization of MEAD's attitudes for social action.

As I have already commented, MEAD himself doesn't apply such a scheme, at least not explicitly. But it is highly instructive to interpret his statements against this background. In the development of his theory, movements may be detected from quadrant to quadrant in the matrix of attitudes.

Directly following WUNDT, MEAD introduces language use by referring to gestures (p 14):

Dogs approaching each other in hostile attitude carry on such a language of gestures. They walk around each other, growling and snapping, and waiting for the opportunity to attack.

Already at this early stage of his exposition, I disagree with MEAD. Let me, as a thought experiment, take the perspective of one of the dogs. When he growls at the other dog, this does not at all mean he *wants* to fight. On the contrary. If he really wants that, he would just ... fight. Action itself can only *be* immediate. Why alert the other dog, why give him a chance to prepare? I am inclined to say that the dog wants something *else*. In fact, he probably even wants to *avoid* a fight by behaving aggressively. A more balanced view is already expressed by H.C. SHANDS who argues (1977, p 13):

If we observe a threatening posture in one of a pair of animals and predict that the animal will soon be involved in a fight, we may find ourselves very badly mistaken. In many such situations, a threatening posture on the part of the protagonist is followed by the assumption of a submissive posture on the part of the antagonist.

Suppose, instead, one dog wants the other dog to disappear. He can right away fight him with that objective. But he might lose. And of course, then he would have to leave himself. Add to this possible outcome that fighting takes a lot of energy. He may get injured, etcetera. His particular gesture might therefore just be the optimal choice to request compliance from the other dog. So, he doesn't really show that he wants to fight. All he is showing is that he is prepared to fight to get what he really wants. Or the dog may even be bluffing. Then, he may be just pretending he is prepared to fight. He might in fact be too scared to fight but see no other option that to appear intimidating.

Anyway, his gesture is action, too. And as action it is also always immediate about what he wants. When he acts, say, non-fightingly, at least at that particular moment he doesn't want to fight. He will be bodily known to want something *when* he actually does it. As SCHOPENHAUER remarks (1813, 1847; p 101):

zwischen dem Willensakt und der Leibesaktion ist gar kein Kausalzusammenhang; sondern Beide sind unmittelbar Eins und das Selbe, welches doppelt wahrgenommen wird: ein Mal im Selbstbewußtseyn, oder innern Sinn, als Willensakt und zugleich in der äußern, räumlichen Gehirnanschauung, als Leibesaktion.

— between the act of will and the bodily action there is no causal connexion whatever; on the contrary, the two are directly one and the same thing perceived in a double way, namely in self-consciousness or the inner sense as an act of will, and simultaneously in external spatial brain-perception, as bodily action.

A simple feedback loop is sufficient for acquiring the behavior of growling at other dogs as a means to make them take their distance. When successful, the dog will do it again in a similar-enough situation. And when not, next time around he must try another gesture. He has simply *learned* behavior.

I am in complete agreement with MEAD, however, that language as such, that is, isolated from an act, does not carry meaning. What does create, so to speak, meaning is the language use in a particular situational relationship. Taking the liberty of extending VOLOSHINOV's philosophy beyond its original realm of human communication, I consider his idea of integrating sign with existence generally valid (1929, p 21):

[T]he process of the causal shaping of the sign by existence stand[s] out as a process of genuine existence-to-sign transit, of genuine dialectical refraction of existence in the sign.

From this perspective, language as such does not even exist. Nor does meaning as such. It is always (p 13) "a part of social behavior," of the act.

This, say, act speech is of course a perspective that is the opposite of that of speech act. The behaviorist perspective is definitely more fruitful (MEAD, 1934, pp 75-76):

Meaning arises and lies within the field of the relation between the gesture of a given human organism and the subsequent behavior of this organism as indicated to another human organism by that gesture. If that gesture does so indicate to another organism the subsequent (or resultant) behavior of the given organism, then it has meaning.

Indeed, the similarities between VOLOSHINOV and MEAD are striking. It is therefore only right that current proponents of dialogical theory almost without exception refer to both authors (WOLD, editor, 1993).

MEAD's approach still takes gestures too literally when compared to the anatomy of meaning developed in this treatise. He misses the point that an organism will often show *both* what he wants, *and* how he proposes to act when the other organism does *not* comply. It is the proven concept for any solid contract; both positive and negative consummation of a proposed trans-

action are treated. MEAD mistakes the threat, or promise, or whatever, for the organism's 'real' interest that leads the sign user to engineer and exchange a particular sign. He is actually also a victim of the deceit underlying the sign he comments upon.

The aggressive behavior falls within the attitudinal quadrant as determined by the poles of individuality and difference. In Figure 11.2.1 it occupies the lower right-hand corner. In fact, later in his book MEAD does write explicitly about what he calls antisocial behavior. Here I call it hostile, or antagonistic.

For the moment MEAD elaborates on the concept of gesture, as introduced through his example of the growling dogs. Quite rightly, he says that (p 14)

[w]e are too prone [...] to approach language as the philologist does, from the standpoint of the symbol that is used.

His own approach is that (p 17)

[l]anguage has to be studied from the point of view of the gestural type of conduct within which it existed without being as such a definitive language. And we have to see how the communicative function could have arisen out of that prior sort of conduct.

And MEAD accords to WUNDT the (p 42)

very valuable conception of the gesture as that which becomes later a symbol, but which is to be found in its earlier stages as part of the social act. It is that part of the social act which serves as a stimulus to other forms involved in the same social act.

So (p 43),

[t]he term "gesture" may be identified with these beginnings of social acts which are stimuli for the response of other forms.

For WUNDT, as MEAD reports with compliance, gestures (p 44) "became the tools through which the other forms responded." MEAD continues that

[w]hen [gestures] did give rise to a certain response, they were themselves changed in response to the change which took place in the other form.

It sounds difficult, but MEAD is essentially describing the dynamics of gesture exchange:

[W]e have a set of adjustments of the two forms carrying out a common social act.

I can only make sense out of MEAD's subsequent exposition, though, when I assume he shifts his perspective to another quadrant as suggested by Figure 11.2.1. It sounds like any social act has built-in adjustment right from the start. For he states that (p 47)

[g]estures become significant symbols when they implicitly arouse in an individual making them the same responses which they explicitly arouse, or are supposed to arouse, in other individuals, the individuals to whom they are addressed.

I believe MEAD is now theorizing exclusively from – please note: what I have introduced as – the quadrant determined by the poles of identity and community, i.e, from what lies exactly *opposed* to the quadrant reflecting antagonistic behavior. It is the area of neighborly, cooperative behavior. There, the indi-

vidual identifies himself completely with the community he is a member of. For

the individual's consciousness of the content and flow of meaning involved depends on his thus taking the attitude of the other toward his own gestures. In this way every gesture comes within a given social group or community to stand for a particular act or response, namely the act or response which it calls forth explicitly in the individual to whom it is addressed, and implicitly in the individual who makes it; and this particular act or response is its meaning as a significant symbol.

I agree with MEAD where he means that a sign engineer empathizes with potential sign observers. But I strongly disagree that, in general, the sign engineer fully sympathizes with them. Such identity is impossible. He cannot take "the attitude of the other toward his own gestures" because he is always promoting his own interests. Every individual is a unique objectification of the will and therefore shows uniquely different interests (SCHOPENHAUER). And when – mistaken or not – a particular sign user believes it fits his interests to fully identify himself with a particular community, he will attempt do so, too. But that will never completely explain his behavior for, again, uniqueness precludes identification *between* individuals. Figure 11.2.2 shows, in my terminology that is, the two classes of behavioral attitudes so far discussed.

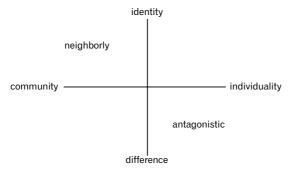


Figure 11.2.2. Opposition of behavioral attitudes.

11.3 empathy, not absolute solidarity

One specific organism taking "the attitude of the other" is a social concept that is clearly limited to neighborly behavior. In spite of its limitation, MEAD applies it as the ground for deriving concepts such as meaning, consciousness, mind, and self. Throughout *Mind*, *Self*, & Society he repeats it as a principle, or axiom. At the same time, he shows awareness of the conditional nature of that very principle (p 56):

What is essential is co-operative activity, so that the gesture of one form calls out the proper response to others.

I am afraid what MEAD considers "proper" conduct guides him toward his theory, rather than being explained by it. For he commits himself firmly to giving priority to social process over participating organisms. His conceptual system expresses his utopian view of society, i.e., as a collection of individuals sharing their attitudes, and therefore sharing (identical) meaning, too. And though he clearly recognizes other behavior, MEAD still tries to explain it from that praiseworthy, but limited, perspective of neighborly action. He doesn't succeed, of course. His failure undermines his theory in so far as he claims wider application for it. From a Schopenhauerean perspective I just don't believe that (p 62)

the vocal gesture [...] is one of those social stimuli which affect the form that makes it in the same fashion that it affects the form when made by another. That is, we can hear ourselves talking, and the import of what we say is the same to ourselves that it is to others.

This does not *explain*, at all, what meaning is. It is, rather, a utopian idea of meaning.

I believe it is realistic to start reasoning, not from an evident subclass of attitudes, but from the most general behavioral concept possible. That is SCHOPENHAUER's will. At least I have not discovered, or thought up myself, a superior alternative. So, an interest-driven organism promotes his ... own interests. An enlightened organism *also* promotes the interests of others toward fulfillment of his own interests. Being interest-driven doesn't at all prevent an individual to empathize with – one or more other individuals in – one or more communities. Indeed, in practical life, every individual person *must* participate to some extent in social action. But the pervasiveness of social involvement does not yet qualify it as the single ground for a theory of meaning, etcetera.

What makes MEAD's Mind, Self, & Society so interesting to read, despite his theoretical bias toward neighborly behavior, is that he nevertheless packs it with detailed insight into what I have reconstructed here as different attitudinal quadrants of a comprehensive interpretation matrix (see Figure 11.2.1). Actually, a society that is only 'lived' by persons identifying with it through fully shared attitudes would be utterly boring. I therefore agree with his emphasis on differences later in his book (p 310):

Ultimately and fundamentally societies develop in complexity of organization only by

6. BALDWIN writes (1986, p 7): "A brief review of Mead's life provides useful background information for understanding his intellectual work." What seems relevant is

that his father was a church minister. MEAD comes to deny concepts of the supernatural but apparently retains the earthly philosophy of christianity.

means of the progressive achievement of greater and greater degrees of functional, behavioristic differentiation among the individuals who constitute them.

I also believe that, at this point of his argument, MEAD is right to attribute constitutional character to the individual. It makes his insistence on his biased assumptions all the more peculiar. Another example of a statement of his more limited principle is that (p 67)

[t]he meaning of what we are saying is the tendency to respond to it. You ask somebody to bring a visitor a chair. You arouse the tendency to get the chair in the other, but if he is slow to act you get the chair yourself. You are always replying to yourself, just as other people reply.

First of all, and perhaps regretfully, I know a good many persons who would not even dream of following up themselves on an order they have issued but that somebody else subsequently refuses to carry out. When the request is made from an antagonistic attitude, the sign engineer will certainly not comply himself. And MEAD's assumption of a priori shared attitudes also does not make strictly logical sense. For it could equally be possible that the tendency of refusal is aroused in the other person. Now that would mean that the person who issues the order refuses to get it, too.

I could fill page after page with quotations from MEAD, all amounting to his assumption that (p 69)

[w]e are, especially through the use of vocal gestures, continually arousing in ourselves those responses which we call out in other persons.

Again and again, I don't think so. Though equally assuming the priority of social process, VOLOSHINOV doesn't refer to the identity of response. What he maintains, more neutrally, is that (1929, p 102)

[a]ny genuine kind of understanding will be active and will constitute the germ of a response. [...] To understand another person's utterance means to orient oneself with respect to it, to find the proper place for it in the corresponding context. [...] In essence, meaning belongs to a word in its position between speakers; that is, meaning is realized only in the process of active, responsive understanding. [...] Meaning is the effect of interaction between speaker and [p 103] listener produced via the material of a particular sound complex.

Applying the Schopenhauerean perspective outlined in Chapter 6, more radically I hypothesize that a sign engineer seeks to promote his interests. He may feel the need, or the opportunity, to seek help. His particular interest defines one or more observers for him. He empathizes with them *only* to the extent of enhancing the success of compliance that the sign he will offer for exchange is attempted to elicit. Depending on the boundaries for time and space the sign engineer applies, through his empathy he takes more or less of his relationship with the observer(s) into consideration. In his turn, every observer is equally active in promoting his interests with characteristic (also read: situa-

tional) empathy.

On p 70 of *Mind, Self, & Society* MEAD also uses the terminology of request but he still advocates complete solidarity between participants in the act of neighborliness:

Your request stirred up in you that same response which you stirred up in the other individual.

An encompassing theory of meaning must not start from identity but from difference. The rare event of identity, should it ever occur, is then easily explained as the absence of difference. Now, relevant differences are *not* traced by putting social acts committed from a neighborly attitude highest in the conceptual order. Many premature contradictions are eliminated, simply by applying the conceptual scheme of SCHOPENHAUER. But MEAD is of course right that meaning occurs *in* the act. And precisely because it occurs right there, that *very* social act does not provide the necessary background perspective for serious explanation. It needs other 'variables,' and this is exactly the theoretical role of the – make-up of the – participants in sign exchange. Apart from materialistic determinism, there is nothing beyond some general force of life to conceptualize. That is all, and everything, that the fiction of the will is.

11.4 triadic convergence

In his book MEAD doesn't mention PEIRCE at all. But he does introduce a triad (p 76):

A gesture by one organism, the resultant of a social act in which the gesture is an early phase, and the response of another organism to the gesture, are the relata in a triple or threefold relationship of gesture to first organism, of gesture to second organism, and of gesture to subsequent phases of the given social act; and this threefold relationship constitutes the matrix within which meaning arises, or which develops into the field of meaning. The gesture stands for a certain resultant of the social act, a resultant to which there is a definite response on the part of the individuals involved therein; so that meaning is given or stated in terms of response. Meaning is implicit—if not always explicit—in the relationship among the various phases of the social act to which it refers, and out of which it develops. And its development takes place in terms of symbolization at the human evolutionary level.

This contrasts with PEIRCE whose concept is one of triadic dynamics occurring inside the intellect of the sign user. PEIRCE also views the process of sign use as essentially *open-ended*. One interpretant leads to the next, and so on. I have included some feedback mechanism so that each process instance may come, even temporarily, to an end (see § 2.3). MEAD, on the other hand, reasons from a closed set of neighborly acts, only (p 80):

This threefold or triadic relation between gesture, adjustive response, and resultant of the social act which the gesture initiates is the basis of meaning; for the existence of meaning depends on the fact that the adjustive response of the second organism is directed toward the resultant of the given social act as initiated and indicated by the gesture of the first organism. The basis of meaning is thus objectively there in social conduct.

MEAD overlooks that "[t]he basis of meaning is thus objectively there in social conduct" because he assumes it to be, in the first place. It makes his concept of meaning, though different in many ways, just as literal as AUSTIN's and SEARLE'S (p 89):

The significant gesture or symbol always presupposes for its significance the social process or experience and behavior in which it arises.

Indeed, such an explanation might do for a stable society, stable in the sense that the set of social acts is both fixed, and known *and agreed upon* by all members. Of course, MEAD recognizes social dynamics. But he doesn't reckon with them for his concept of meaning.

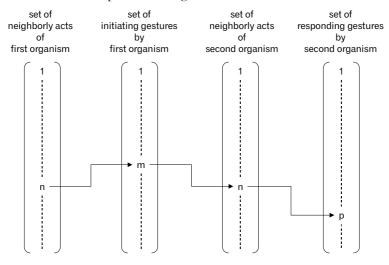


Figure 11.4.1. How a gesture stands for a social act in MEAD's theory of meaning.

Contrasting him with PEIRCE, I interpret MEAD as suggesting that inside an organism's intellect there are no complex, generative dynamics of semiosis. Instead, dynamics of symbolic interaction only rest in a fairly straightforward manner on a stable, a priori existing, relationship between organisms. Meaning according to MEAD appears to be a matter of, first of all, setting the desired resultant as the agenda. Next, the appropriate gesture is selected, and subsequently executed. Finally, this gesture by the first organism is trusted upon to evoke the necessary cooperative response by the second organism in

achieving the originally desired resultant. For the arousal of like attitudes and corresponding resultants is MEAD's *precondition* of meaning. It is a tautological report.

Figure 11.4.1 captures the sequence of moves derived from MEAD's account. It enables MEAD's triad to be easily traced. The first angle [1] he mentions is the "relationship of gesture to first organism." It corresponds to selecting gesture m, given – the acting of – neighborly act n. The second angle [2], relationship "of gesture to second organism," may be conceived of, on the basis of gesture m, as the invocation of joining the neighborly act n. And then, the third angle [3] relates act n to initial gesture m [3a], and to response p [3b], respectively. The relationships [1] and [3a] are identical. That is the relationship, according to MEAD existing in all participants, "of gesture to subsequent phases of the given social act." Thus is the triangle closed, he suggests. The neighborly act n is now performed *jointly* by the first and the second organism. I find it characteristic that MEAD writes of a *given* act. In his scheme, the meaning of a gesture is the conventional neighborly cooperation it activates.

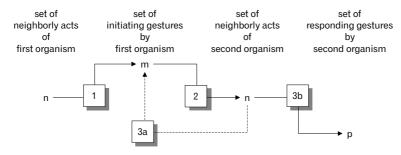


Figure 11.4.2. Preparing the triad of MEAD's social act.

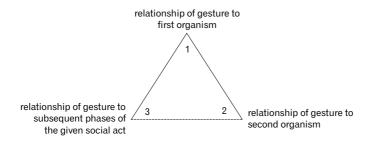


Figure 11.4.3.
The triad of MEAD's social act.

Figure 11.4.2 prepares the construction of a triangle from – of course, my interpretation of – MEAD's statements. The actual triangle is shown in Figure 11.4.3.

Interestingly enough, this triad as constructed from MEAD's instructions largely resembles the triad of PEIRCE. The "subsequent phases of the given social act" are an object. The sign user at time t_n is the first organism, while that very same sign user at time t_{n+1} is the second organism. Through subsequent 'gestures,' the sign user *develops* his objectified reality, rather than starts from what is given as social reality.⁷

11.5 social instrumentality

MEAD also doesn't mention SCHOPENHAUER in *Mind, Self, & Society.* There are nevertheless remarkable correspondences. They become easy to recognize when instrumental is substituted for social. A typical passage from MEAD reads (p 133):

The subjective experience of the individual must be brought into relation with the natural, sociobiological activities of the brain in order to render an acceptable account of mind possible at all; and this can be done only if the social nature of mind is recognized.

This statement is consistent with MEAD's first principle of the social act. But instead placing the will and its individual objectifications first, leads to a similar conclusion. It is just a matter of reversing themes. Starting from an individual person as an objectification of the will, that person's brain may be taken as an element – just one, for there is more to the body – of the physiological instrumentation of his intellect. Next, his intellect (also read: mind) is a, say, functional instrument – and, again, 'only' one element of it – for necessarily willfull⁸ behavior. And much of an individual's behavior is outwardly directed, i.e., it concerns exchanges with his environment. It is therefore equally valid to state that "an acceptable account of mind [...] can be [rendered] only if the" instrumental "nature of mind is recognized." MEAD can be brought in line with SCHOPENHAUER by saying that the intellect/mind is socially instrumental for the individual 'owning' it.

Why insist, as MEAD does, that an individual is *only* socially active? Even when I would agree with MEAD on the all-pervasiveness of the social act, I still favor explaining what happens between individuals from premises about indi-

^{7.} I have not included an enneadic elaboration of MEAD's triad. It would place acts in particular situations, etcetera.

^{8.} There is nothing *but* willful behavior, of course.

viduals, rather than the other way around.

MEAD feels forced to move in SCHOPENHAUER's direction – again, without ever mentioning him⁹ – when he admits that (p 147)

[t]here is, of course, a great deal in one's conversation with others that does not arouse in one's self the same response it arouses in others.

Precisely. But MEAD still tries to limit it to "the case of emotional attitudes." This of course implies the concept of the rational attitude. Then from MEAD it does not come as a surprise that (p 149)

[r]ationality means that the type of response which we call out in others should be so called out in ourselves[.... For w]hat is essential to communication is that the symbol should arouse in one's self what it arouses in the other individual. It must have that sort of universality to any person who finds himself in the same situation.

Concepts such as meaning, mind, and rational behavior, all originate implicitly from MEAD's concept of the neighborly act. In my scheme of Figure 11.2.1 it only occupies one quadrant. Is MEAD actually redefining meaning in its neighborly sense as rational meaning? For meaning clearly also occurs in the other three quadrants. But elsewhere it is even the purpose of the sign engineer *not* to arouse with his sign "in one's self what it arouses in the other individual."

I don't believe it helps to call irrational all behavior except neighborly acts. Actually, what is irrational from a Schopenhauerean perspective often is precisely such behavior between neighbors as they feel required to oblige with. MEAD defines (p 154):

The organized community or social group which gives to the individual his unity or self may be called "the generalized other."

This concept of the generalized other indeed shares many characteristics with what I have introduced, in § 8.4, as the group as a personalized abstraction. My emphasis, though, is quite different. I stress compliance with interests. A request may also be seen as preparation of compliance at a much later time and, possibly, a very different place. When the continued presence of a particular person is not guaranteed an abstraction may be invoked. And whenever the need for compliance arises, that abstraction is in turn 'represented' by

9. Having studied for three years in Germany just when SCHOPENHAUER enjoys a high reputation, it seems unlikely that MEAD escapes from being influenced by the former's publications, directly or indirectly. Some passages, especially about the self (Part III of *Mind, Self, & Society*), read as mere repetitions of SCHOPENHAUER's views. Yet, SCHOPENHAUER is not treated, nor is WUNDT for that

matter, in MEAD's Movements of Thought in the Nineteenth Century (1936).

10. This is a usual precaution against noncompliance by the immediate participants in the exchange. Any mature contract, for example, also specifies what needs to happen when the parties to it fail to comply to its primarily intended purpose. actual persons who are available at the required time and place. MEAD, however, narrows his attention again to shared attitudes. It limits the applicability of his concepts.

A wider scope results from assuming *different* attitudes, making the occurrence of an identical attitude a special case of difference. Though he starts from very different assumptions, MEAD essentially arrives at a similar notion of a priori meaning as AUSTIN, SEARLE and ECO do, that is, as existing independently of – in fact, even as a precondition for – particular sign exchanges and related process instances of individual sign use (p 155):

It is in the form of the generalized other that the social process influences the behavior of the individuals involved in it and carrying it on, i.e., that the community exercises control over the conduct of its individual members; for it is in this form that the social process or community enters as a determining factor into the individual's thinking.

Here it is clearly recognizable where SCHOPENHAUER and MEAD, in spite of the latter's agreement on important points, harbor fundamentally different concepts. The former doesn't place "control over the conduct of its individual members" in the hands of "the social process or community." Individual behavior is ultimately controlled by the individual's will. The social process, then, should be explained from exchanges in all modes of causation between individuals. It might of course be convenient to abstract a particular social process onto a social object, that is, to conceptualize an institution. But it must always be clear that such institutions are 'just' concepts.¹¹

VOLOSHINOV and MEAD both contrast SCHOPENHAUER with their priority of the social over the psychological. Several quotations taken from VOLOSHINOV (1929) make his position clear:

[p 12] The individual consciousness not only cannot be used to explain everything, but, on the contrary, is itself in need of explanation from the vantage point of the social, ideological medium. *The individual consciousness is a social-ideological fact.*

11. I would like to offer a metaphor, derived from PLATO's cave. In the original metaphor, what the case dweller observes are appearances, only. The shadow on the wall is not 'the real thing' or, as PLATO suggests, the idea. Now suppose the projection on the wall shows individuals engaged in exchanges.

Does it make sense to call that appearance a(n) (social) institution? Yes, why not? But it must be clear that it is determined by it being a projection in the first place, by the angle of projection, by the point of view of the

observer, etcetera. Perhaps MEAD has something similar in mind (p 242): "The institutions of society, such as libraries, systems of transportation, the complex interrelationship of individuals reached in political organizations, are nothing but ways of throwing on the social screen, so to speak, in enlarged fashion the complexities existing in the central nervous system, and they must, of course, express functionally the operation of this system."

[p 13] Consciousness takes shape and being in the material of signs created by an organized group in the process of its social intercourse.

[O] bjective psychology must be grounded in the study of ideologies. The reality of ideological phenomena is the objective reality of social signs. The laws of this reality are the laws of semiotic communication and are directly determined by the total aggregate of social and economic laws.

[p 22] Of course, all the social accents of ideological themes make their way also into the individual consciousness (which, as we know, is ideological through and through) and there take on the semblance of individual accents, since the individual consciousness assimilates them as its own. However, the source of these accents is not the individual consciousness. Accent, as such, is interindividual.

[p 25 T]he conscious psyche is a socioideological fact[....] The processes that basically define the content of the psyche occur not inside but outside the individual organism, although they involve its participation.

[p 26] The reality of the inner psyche is the same reality as that of the sign. [...] By its very existential nature, the subjective psyche is to be localized somewhere between the organism and the outside world, on the borderline separating these two spheres of reality. [... T] he organism and the outside world meet here in the sign.

[p 90] Thus the personality of the speaker, taken from within, so to speak, turns out to be wholly a product of social interrelations. Not only its outward expression but also its inner experience are social territory. Consequently, the whole route between inner experience (the "experience") and its outward objectification (the "utterance") lies entirely across social territory. When an experience reaches the stage of actualization in a full-fledged utterance, its social orientation acquires added complexity by focusing on the immediate social circumstances of discourse and, above all, upon actual addressees.

When premature contradictions arise during ongoing conceptual derivation, their origin often lies with such institutional concepts. A new start is mandatory. The institution must be deconstructed into 'constituting social processes' which, in turn, require deconstruction into participating individuals. And there is nothing left to deconstruct beyond the interests of an individual, i.e., beyond his will that manifests itself through behavior.¹²

It is interesting to see how MEAD tries to reason himself out of the difficulties his limited axiomatic system is causing him. He does acknowledge there are (p 166) "experiences which we may at all times identify with selves" but

I do not now want to discuss metaphysical problems, but I do want to insist that the self has a sort of structure that arises in social conduct that is entirely distinguishable from this so-called subjective experience of these particular sets of objects to which the organism alone has access.

12. SCHOPENHAUER is a behaviorist, too. I am inclined to say that he is a pure behavior-

ist, even, and not as MEAD proclaims himself, a social behaviorist.

Well, he may "want to insist" but that doesn't make it any more credible. He admits, anyway, that what "arises in social conduct" is not all there is to the self. Because he states that "the two sets of phenomena stand on entirely different levels," MEAD retains his primacy of the social act. I agree that subjective and social phenomena occur at different levels of conceptualization. In fact, it is precisely why the subjective world provides the background perspective for — explaining — the social world. My conceptual priority, following SCHOPENHAUER, therefore lies with the individual and his interests.

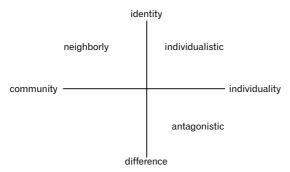


Figure 11.5.1. Finally acknowledging individualistic behavior.

Recognizing that not all behavior is neighborly, MEAD after all draws up a structural theory of the self, too. He calls its elements the "I" and the "me." Roughly speaking, what he has earlier defined as "the generalized other" becomes the "me." An organism does not immediately behave as its "me," though. Structurally, the "me" informs the "I" who actually decides on the action (p 175):

The "I" is the response of the organism to the attitudes of the others; the "me" is the organized set of attitudes of others which one himself assumes.

Instead of being committed to a fixed repertoire of social acts, an individual is suddenly allowed indeterminacy of his behavior (p 175):

The response [...] as it appears in his immediate experience is uncertain, and it is that which constitutes the "I."

I interpret this as the belated introduction of what SCHOPENHAUER proposes as the will. From the perspective of the matrix of Figure 11.2.1, MEAD is now ready to acknowledge as social behavior actions that an organism undertakes from his individual identity. My interpretation scheme is updated accordingly as Figure 11.5.1.

The limited – for strictly socially determined – scope of MEAD's concepts of meaning, mind and self is actually confirmed by his distinctively Schopenhauerean remarks. I select a few, indicating the extent to which MEAD

does after all recognize behavior deviating from control of the generalized other (for neighborly acts, see upper left-hand corner in Figure 11.5.1):

[p 175] The "I" is his action over against the social situation within his own conduct, and it gets into experience only after he has carried out the act.

[p 177] That movement into the future is the step, so to speak, of the ego, of the "I." It is something that is not given in the "me."

[p 177] Now, the attitudes [an individual] is taking toward [others] are present in his own experience, but his response to them will contain a novel element. The "I" gives the sense of freedom, of initiative.

[p 178] [T]he "I" is something that is never entirely calculable. The "me" does call for a certain sort of an "I" in so far as we meet the obligations that are given in conduct itself, but the "I" is always something different from what the situation itself calls for.

[p 204] The possibilities of the "I" belong to that which is actually going on, taking place, and it is in some sense the most fascinating part of our experience. It is there that novelty arises and it is there that our most important values are located. It is the realization in some sense of this self that we are continually seeking.

But then, MEAD apparently doesn't want to completely relinquish his earlier conceptual investments. Even *after* he so clearly acknowledges the essentially individual nature of the "I" he states that (p 178)

[t]he self is essentially a social process going on with these two distinguishable phases [of the "I" and the "me]. If it did not have these two phases there could not be conscious responsibility, and there would be nothing novel in experience.

My conclusion from his sketch of the "I" would be radically different. It effectively undermines the earlier assumptions on convention. Rather than a social ground for behavior, how MEAD presents the "I" clearly points at a psychological ground. It is possible to arrive at social explanations with requisite variety starting from adequate psychological assumptions. The other way around doesn't work as MEAD's theory confirms.

11.6 full spectrum of behavior

The distinction between the "I" and the "me" within the individual self does not give MEAD reason to restructure his theory of the social act. He remains committed to what I consider the special case of a priori agreement upon cooperative, neighborly action that only needs an initiating gesture to materialize. But near the end of *Mind*, *Self*, & Society he does reframe his theory somewhat. It is where he writes that (p 281)

[t]here is in human society a universality that expresses itself very early in two different ways—one on the religious side and the other on the economic side.

Again roughly speaking, his original class of social acts now becomes the sub-

class of religiously inspired acts. It is what I have presented right from the start as the subclass of neighborly acts. And MEAD adds the subclass for which the lower left-hand corner of my overall interpretation matrix is reserved. When an individual behaves with a sense of community but, at the same time, emphasizes the difference between himself and the other, he is involved in trading. It fits the quadrant of economic behavior. See Figure 11.6.1 for the completed matrix in support of my interpretation of MEAD's Mind, Self, & Society.

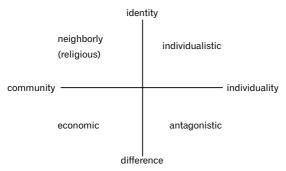


Figure 11.6.1. Completed interpretation matrix.

MEAD holds that religious and economic attitudes find expression in all societies. That is precisely why he calls them (p 297)

universal in their character, and so far as they get expression they tend to build up in some sense a common community which is as universal as the attitudes themselves.

So, only what he considers "common" deserves recognition *as action*. But from the perspective of the will, such community-oriented actions are not the rule. With behavior under the 'rule' of the will, acts are individuality-oriented. This makes the oppositions underlying my matrix irregular. The quadrants should not be taken as to signify disjunct behaviors. Instead, they reflect aspects that are incorporated to some extent *in every act*, that is, when act is taken as a sign.

An act is primarily individualistic. It is simply dictated by the unique organism executing it being interest-driven. The act is antagonistic to the extent that

- 13. With the minimal extent, of course, being the complete absence of a particular aspect.
- 14. Philosophers like SCHOPENHAUER and NIETZSCHE even explicitly profess themselves as essentially psychologists. In *Arthur*

Schopenhauer als Psychologe R. HOHENEMSER summarizes (1924, p 428, my translation from the German): "Schopenhauer as psychologist has made his greatest contribution through his theories of the will and knowledge. On the will his contribution is quite

the other organism must one-sidedly suffer its consequences. The act can also be partly economic; the other is then expected to profit from the act, too, and to make a contribution in return. When the other benefits but is not expected to make an offer in exchange, the neighborly aspect is also present in the act. This aspectual account is summarized in Figure 11.6.2.

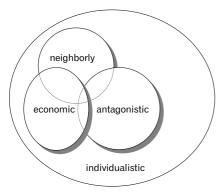


Figure 11.6.2. (Some) different relational aspects that, in varying proportions and degrees of overlap, may be simultaneously present in a sign.

Concluding my discussion of *Mind, Self, & Society* I remark that MEAD overemphasizes social determinants of behavior. His both biased and narrow axiomatic system is not realistic enough to account for the full spectrum of behavior. The title of an essay by D.H. WRONG sums up the problem: *The Oversocialized Conception of Man in Modern Sociology*. He states that (1961, p 35)

[t]he insistence of sociologists on the importance of "social factors" easily leads them to stress the priority of such socialized or socializing motives in human behavior.

In *Skeptical Sociology* (1976), offering a postscript to his earlier article, WRONG draws additional attention to (p 49) "psychological underpinnings." Though MEAD clearly recognizes individual determinants, and irrational at that, he apparently feels they fall outside a framework for *social* psychology. MEAD might have argued for that as a sociologist, I find, but not as a social *psychologist*. I hasten to add that a scientific discipline of institutions must always be alert, and prepared, to deconstruct its subject matter into ... individual subjects.

general. It includes both the original presentation and the original defense of so-called voluntarism, i.e., the doctrine which holds that knowledge is not what characterizes human beings most but, rather, the will does, or, more distinctly still, behavior.

Schopenhauer has therefore rightly concluded that consciousness does not account for all of mental activity. Instead, mind operates mostly unconsciously. However, he still treats the intellect as an independent faculty and attributes functions to it which in fact are

Actually, this holds for all disciplines dealing with motivated acts. Its practitioners must ultimately embrace psychological understanding¹⁴ to which subjective situationism aims to contribute conceptual grounds.

functions of the will." So, which is also of direct interest to the anatomy of meaning this treatise presents, HOHENEMSER declares himself even more a voluntarist than SCHOPENHAUER. He continues: "Concerning epistemology, Schopenhauer has improved upon, and has added much detail to, Kant's

theory of the intellectual nature of perception, i.e., that a priori, internal elements are involved in the processes of external perception. Despite a number of misconceptions, Schopenhauer has already come surprisingly close to the latest results in psychology."

prelude 12

Chapter 12 demonstrates where derivations of HABERMAS's theory of communicative action onto information modeling approaches often fail to reflect its original complexity. It also claims that he himself has contributed to confusion and misappropriation.

What HABERMAS cannot help of course, is that his theory is often studied from secondary sources that lack a necessary critical quality. At least this would explain why his own outspoken reservations do not survive, for example in modeling theories that flaunt communicative action.

However, his own work already has a low threshold for biased interpretation. For HABERMAS does not clearly maintain a distinction that would otherwise prevent much confusion. He starts out by developing his theory of communicative action as a sort of *measuring standard*. So, for him it does not have absolute and general validity. It serves to chart phenomena. Their description, he argues, is made relative to his standard.

Such a bootstrap mechanism is extremely common. Take for example a meter. After it has been declared a standard, measurements are uniformly possible. It is essential to understand, however, that measuring results are always *relative*, that is, relative to the – assumption of the – relevant standard. And results involve a reduction; only what falls within the range of the standard's dimension(s) gets included.

So far, so good. But next, the impression is inescapable that HABERMAS nevertheless actively *promotes* his standard as the behavioral norm. Now that is really something of a different order. A meter can be applied as a standard, but so can a yard, etcetera.

By making it difficult for his readers to distinguish between communicative action as standard versus norm, description flows over into prescription, vice versa. And it is as a (meta)theory of prescription – regardless of how different

that might be from the originally more balanced view of HABERMAS – that communicative action holds attraction for construction-oriented information modelers. For they consider an information model a *prescription* of reality, i.e., a reality to be constructed. Given the nature of the digital technology, an *unambiguous* prescription is required. Then, a *normative* approach is ideally suited, especially when the norm is subsequently inflated to cover all of reality. It comes down to mistaking a measuring standard for the reality reflected by measurements.

Communicative-action-as-norm is especially attractive for information systems blueprint-thinking because of the emphasis that HABERMAS places on rationality. A concomitant analytical closure is easily welcomed. Conceptual information modeling, however, is *not* aimed at producing a tool blueprint. That comes later in every iteration. At the conceptual stage of design, what is at stake is an interpretation of reality with all its variety relevant to – interests of – stakeholders. A priori reduction to a particular norm excludes requisite variety.

Chapter 12 ends the series of four critical chapters in Part ii. In Part i, Chapter 5 offers criticism. All other chapters are constructively oriented toward designing the ontology of subjective situationism (Part i) and erecting an anatomy of meaning of those grounds (Part ii).

What remains in this treatise is the final chapter. Chapter 13 indicates some directions for application of subjective situationism and its anatomy of meaning.

chapter 12

HABERMAS ON REASON AGAINST REASON

It is an essentially modernist view that concepts are often taken, at least initially, as absolute opposites. The scientific disciplines of psychology and sociology provide a clear example. For one way of demonstrating what sociology is boils down to stressing it is *not* psychology. My view, which is more postmodernist, is that sociology is always psychology, too.

Not only sociologists often elect to avoid a consistent synthesis with psychology. It is my hypothesis that many theorists protect their paradigms from concepts such as subjectivity, skepticism, solipsism, idealism, etcetera. Instead, they assume an objective reality. Such ground is valid enough, admittedly even optimal, when just two out of three possible modes of causation are relevant. I of course refer to causes "in the narrowest sense" and to stimuli, respectively. An antipsychological paradigm breaks down, however, with motivationally induced effects. For how a *sign* leads to a(n) (re)action requires recognition of the intellect as one of the sign user's instruments.

When their original paradigms prove untenable, philosophers, linguists, sociologists, etcetera, attempt different theoretical designs. Full integration of individuality usually remains essentially missing, though. In fact, sociological concepts are actively used to stay within the boundaries of what still seems acceptable for so-called analytical philosophy. AUSTIN and SEARLE both reason from propositions about objective reality. That is, all signs are basically still modeled after the tenets of symbolic logic with truth value at the center. MEAD proposes to recognize individual psychology by assuming the capacity of complete identification of the self with the other. As this amounts to elimination of individuality, too, he later makes the distinction between "me" and "I." He underlines the importance of the "I" but leaves it otherwise unexplained.

Another thinker who attempts to revise the oversimplistic paradigm of

objective reality is JÜRGEN HABERMAS (1929-). However, as published in *Theorie des kommunikativen Handelns* (1981) the result is in my opinion yet another overly complex theory. It misses the elegant synthesis of SCHOPENHAUER's conceptual system. As I show in this chapter, HABERMAS's concept of communicative action is also aimed at keeping radical individuality out of social theory. It therefore fails to offer a compact, encompassing anatomy of meaning such as I have presented in Chapters 7 and 8 of this treatise.

12.1 empathy as a structural concept

Before I enter into a discussion with HABERMAS based on his monumental *Theorie des kommunikativen Handelns* (1981) I briefly compare the attempts SCHOPENHAUER and MEAD make at synthesis of psychological and sociological concepts. Please note that SCHOPENHAUER's work predates the establishment of both psychology and sociology as scientific disciplines in their own right.

As I have already indicated in the previous chapter, MEAD gives a predominantly sociological explanation of concepts such as mind, consciousness and self. For, as he remarks (1934, p 1),

[t]he point of approach which I wish to suggest is that of dealing with experience from the standpoint of society, at least from the standpoint of communication as essential to social order.

SCHOPENHAUER, on the other hand, is most likely anything but impressed with social order. The Germany he grows up in is not yet a strong political unity. At that particular time it suffers from the Napoleontic wars. He especially experiences disorder, and several times he changes his residence trying to escape from it (SAFRANSKI, 1987). It doesn't mean, of course, he is blind to social relationships. But he starts from the individual, arguing that an individual essentially experiences the duality of will and interpretant about himself. Hence *Die Welt als Wille und Vorstellung* as the title of his major work. At this point I stress that SCHOPENHAUER credits one particular individual with the capacity to assume about other 'objects' the same duality, thereby experiencing them as like subjects. It is the individual's capacity for empathy.

The Schopenhauerean concept of empathy concerns the *structure* of individual objectified reality. This limitation is precisely what makes it a powerful concept. For SCHOPENHAUER doesn't prescribe the subsequent nature and contents of the *individual application* of empathy. All he maintains is that an individual will recognize others as individuals, too. Thus social order, of *any* kind, including disorder, results from interaction between individuals.

Had MEAD considered it, empathy that is 'only' a structural concept is prob-

ably too weak for him. For he does not want to *explain* social order from human interaction. Instead, he assumes something like a neighborly community as the paradigm case of social order. What does it take to work? What underlies its 'success'? This is how – I suppose – MEAD next arrives at his assumption of complete sympathy. Of course, it leaves him with the problem of explaining events where sympathy between participants is obviously lacking. In his turn, SCHOPENHAUER would have no trouble accounting for cases of social harmony. Such complete sympathy is a particular 'application' of the principle of empathy, that is, with wide horizons in time and space. However, any other individual empathic setting of time and space is feasible, too.

Against the bias of taking as absolute what is only a *specific* setting I maintain that a serious theory should avoid – premature – self-fulfilling prophesy. Actually, especially when a theory also forecasts what in the event might be considered undesirable, it becomes more realistic to *do* something about it. A utopian theory only obstructs awareness.

The restriction of empathy to the *structure* of an individual's objectified reality helps to clarify fears that many theorists obviously entertain about subjectivity, idealism, etcetera. If I may attempt to speak on behalf of SCHOPEN-HAUER, it is not that he denies the existence of reality. Not at all. What is individual (also read: subjective) about the one-and-only reality is the organization of knowledge. For knowledge is organized separately by individual intellect. Its general mechanism of developing interpretants from signs is indicated by PEIRCE. Though his triadic dynamics may be elaborated into enneadic dynamics (see Chapter 4), the underlying principle remains that interpretants of focus, background and foreground are essentially individualistic. Their theoretical advantage should be obvious. Behavioral differences are explained in a straightforward manner when the "background perspective" is equipped with the requisite variety. And a radical orientation on individuality also puts assumptions about community into question. I believe that too many problems remain unresolved because more fundamental questions are preempted by premature acceptance of sociological concepts.

12.2 two meanings of reason

Depending on both his previous knowledge and his assessment of the situation, a sign user arrives at a particular interpretation of a particular term. It is enlightening to see that many terms contested in philosophy actually have different meanings that can be situated in psychology and sociology, respectively.

A prime example is the term of meaning itself. At the start of § 7.3 I have distinguished between intra- and interpersonal applications of meaning.

Those correspond to psychology and (naive) sociology. Figure 12.2.1 sketches an overview at the inspection level of instances.

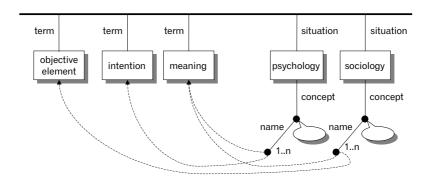


Figure 12.2.1.

The different concepts of meaning in the language games of psychology and sociology.

It is interesting to reconstruct how for example SEARLE attempts synthesis. An interpersonal meaning is expressed by a proposition. It can be included in the expression of an intrapersonal meaning – i.e., of an intention – by adding the so-called illocutionary force indicator. A classification of such forces, however, serves the purpose of turning them into interpersonal meanings, too. This procedure leaves the paradigmatic case of objective proposition intact. Undoubtedly, that is precisely what it is supposed to achieve. But it still leaves problems unaddressed that can only be resolved through recognition of essential differences between individual sign users.

The attempts of MEAD at synthesis are equally unsatisfying. It is one thing to shift the meaning of mind, self, etcetera, to the social field of experience. What is left – reentered, actually – as strict individuality is the concept of the "I." It is really not much different from SCHOPENHAUER's personal objectification of the will, but now devoid of much explanatory power. I certainly don't find it an improvement.

Traditionally, also the term of reason 'behaves' conceptually differently, dependent on whether it occurs in a psychological, or in a sociological situation. As a variation on Figure 12.2.1, this is shown in Figure 12.2.2. In psychology reason is an intellectual faculty. At the social level reason refers to moderation. A person who is reasonable in the company of others is thought to be open to what they might argue with their faculties of reason, too. In some aspects, this social meaning of reason is therefore even the opposite of its psychological meaning.

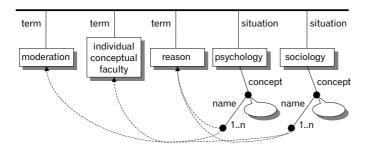


Figure 12.2.2.
Different concepts of reason.

Acknowledging that there are at least these two uses of reason greatly assists understanding of *Theorie des kommunikativen Handelns*, the book by HABERMAS of two volumes with altogether over 1,100 pages. He takes up the social meaning of reason, and of rationality. His further classification yields strategic and communicative as two types of *social* rationality. The dynamics, or dialectics, between – applications of – these social rationality types are fundamental to his social theory. I limit my discussion of HABERMAS's wide-ranging book to what is especially relevant for an additional appreciation of my anatomy of meaning and the encompassing ontology of subjective situationism.

12.3 communicative action as idealized construct

The objective HABERMAS states for his work is to provide (1981, volume 1, p 8)¹ eine Konzeptualisiering des gesellschaflichten Lebenszusammenhangs, die auf die Paradoxien der Moderne zugeschnitten sind.

——— a conceptualization of the social order of life that is oriented at the paradoxes of modernity.

Those paradoxes, HABERMAS argues, appear when society and social developments are studied from the perspective of rationality. I don't believe such paradoxes exist. They disappear through a proper synthesis of the sociological with the psychological concept of reason. I return to this synthesis several times, later in this chapter. HABERMAS, however, doesn't opt for synthesis but favors ongoing dialectics between the different types of reason. But there are more 'reasons' why his theory does not remove paradoxes.

Suppose somebody presents what he has named a theory of human flying. He first explains what flying is as normally performed by a human being. It is

been described as the uninhibited movement through air, with the person actually flying only using his 'natural' body. This kind of flying is next declared utopian. Actually, man cannot fly by himself, at all. A person often moves about on foot, or by riding a bicycle, driving a car, traveling by train, or boat, etcetera. All those modes of transportation interfere with – the possibility of – natural human flight. And when he does fly, he always uses a machine to do so.

My impression would be that I have been listening to a presentation, not of a theory of natural flying, but of, say, modes of personal transportation. I would understand that the idea of human flight is far from meant as an overall explanation. Rather, it is used as an imaginary construct, an ideal, for the purpose of explaining *actual* modes of human movement.

In a similar vein, HABERMAS doesn't offer his theory of communicative action for comprehensive coverage of social phenomena. How he applies his concept of communicative action should instead be considered a theoretical construct *for drawing out* practical distinctions. For (volume 1, p 22)

das Verständnis rationaler Handlungsorientierungen wird zum Bezugspunkt für das Verständnis aller Handlungsorientierungen.

It is confusing that HABERMAS writes of "rational approaches to action." He uses, after all, different concepts of reason. Regretfully, he doesn't make those sufficiently explicit. I therefore suggest that some of the difficulties in making sense of *Theorie des kommunikativen Handelns* disappear when his construct of communicative action is understood as an idealization of "the point of reference." It is an explanatory device that enables him to compare, to contrast, that is in general to expound his theory of modern society. In summary, according to HABERMAS the modern paradoxes occur through the *deviation* of actual society from the idealized construct of communicative action (vol 2, p 163):

Der utopische Entwurf einer idealen Kommunikationsgemeinschaft [ist eine] Konstruktion des unbegrenzten und unverzerrten Diskurses[. Diese] kann man den uns bekannten modernen Gesellschaften allenfalls als eine Folie mit der Absicht unterlegen, undeutliche Entwicklungstendenzen in grelleren Konturen hervortreten zu lassen.

———The utopian design of an idealized communication community entails a construction for boundless and undistorted discourse. As a model, it may be applied to modern societies as we know them in order to show blurred developmental tendencies in distinctive contours.

Indeed (vol 2, p 234),

 an idealized perspective.

Besides the possible confusion its title causes, an obstacle that a reader of *Theorie des kommunikativen Handelns* must overcome is that HABERMAS first and foremost engages in a discussion with earlier theorists and their theories of society and social development. He hardly touches directly on the paradoxes he claims to clarify. Only at the end of the second volume (of two) he specifies that traditionally three theoretical currents exist in sociology. The first is oriented at social development (vol 2, p 551). The second provides a system's theory of society. And the third concerns itself with the activities of daily social life (vol 2, p 552). Such previously disjunct theories are now integrated and surpassed, HABERMAS proclaims, through the application of the concept of communicative action.

Before I briefly report on his integrative attempt I first sketch HABERMAS's idealized theoretical construct itself. My emphasis, and therefore only partial discussion of *Theorie des kommunikativen Handelns*, corresponds to the requirement of comparing my anatomy of meaning with several academically established approaches to meaning and/or communication. It is beyond the scope of this treatise, nor is it ambition, to present a comprehensive alternative to HABERMAS's social theory.

12.4 three grounds of agreement

Communicative action is auxiliary. A person engages in communicative action, as the theory of HABERMAS goes, to coordinate some other actions with one or more other persons. It should be clear that communicative action is *limited* to sign exchange.² What the other actions, resulting from sign exchange(s), might be is not specified by HABERMAS. Anyway (vol 1, p 128),

[d]er Begriff des *kommunikativen* Handelns [...] bezieht sich auf die Interaktion von mindenstens zwei sprach- und handlungsfähigen Subjekten, die (sei es mit verbalen oder extraverbalen Mitteln) eine interpersonale beziehung eingehen. Die Aktoren suchen eine Verständigung über die Handlungssituation, um ihre Handlungspläne und damit ihre Handlungen einvernehmlich zu koordinieren.

2. I recall that PEIRCE describes semiosis as ir sign action. His emphasis is on intrapersonal,

intellectual processes.

What is missing in HABERMAS's analysis is consideration of motives. Why does a person make plans? He simply assumes that a particular "action plan" is already present. MEAD even holds that a precondition for entering upon a relationship is that one person arouses in himself the action plan of the other person. HABERMAS doesn't go to that extreme but he still believes different reasonable persons will entertain a priori essentially similar plans. And when they do not, their mutual understanding, or agreement, is achieved through communicative action (vol 1, p 114):

Der Begriff der Verständigung verweist auf ein unter Beteiligten erzieltes rational motiviertes Einverständnis, das sich an kritisierbaren Geltungsansprüchen bemißt.

——The concept of mutual understanding entails an agreement, rationally motivated and shared by participants, that is measured after criticizable validity claims.

Indeed, HABERMAS now refers to motivation. But it is not in a generally psychological sense, at all. He reduces socially acceptable action to what is coordinated by signs which can be supported by – what count as – convincing claims as to their validity (vol 1, p 29):

Für die Rationalität der Äußerung ist konstitutiv daß der Sprecher für die Aussage »px einen kritisierbaren Geltungsanspruch erhebt, der vom Hörer akzeptiert oder zurückgewiesen werden kann.

———— An expression counts as rational when the speaker raises a criticizable validity claim for the utterance >p<, a claim that can be either accepted or rejected by the hearer.

I completely agree that in mature communication signs must be open to criticism. Actually, the signs opens the sign engineer to it. However, though such behavior is often highly desirable, a *requirement* to that effect cannot count as a serious theory. For example, this line of reasoning leads to the need for criteria to establish the sincerity of the speaker. And what about the hearer? Is he sincere, at his turn as a speaker, in his acceptance or rejection? A radically individualistic approach, such as underlying the anatomy of meaning I propose, deals with interest-driven behavior right at the axiomatic level. And because the individual is capable of empathy, interest-driven behavior *includes* social behavior. This point HABERMAS misses, as I demonstrate later.

What I actually find alarming about the *reduction* to socially accepted behavior is the denial of radical individuality. It also doesn't fit the conceptual scheme of SCHOPENHAUER. That HABERMAS prefers a social concept of reason is evident from the following quotation (vol 1, p 37):

Wer sich in seinen Einstellungen und Bewertungen so privatistisch verhält, daß sie durch Appelle und Wertstandards nicht erklärt und plausibel gemacht werden können, der verhält sich nicht rational.

———A person is not behaving rationally when his attitudes and expressions are so idiosyncratic that appeals and value standards cannot explain them and make them credible. For example, is GALILEO (1564-1642) irrational with his *new* theory of astron-

omy? As an accepted member of society he apparently is. For his own will, though, he must have applied his reason with great success.

Now the theory of meaning HABERMAS implicitly applies can be reconstructed. He views the meaning of a sign as a function of the underlying claims at its validity. When different persons share both validity claims and function, of necessity they hold the same meaning (vol 1, p 32):

Die Gültigkeitsbedingungen symbolischer Äußerungen verweisen auf ein von der Kommunikationsgemeinschaft intersubjektiv geteiltes Hintergrundwissen.

——The validity conditions of symbolic utterances presuppose a background knowledge that is intersubjectively shared by the communication community.

It tastes much like Fregean symbolic logic. This should come as no surprise as HABERMAS leans heavily on the speech act theory especially of AUSTIN and to a lesser extent SEARLE. Likewise he develops (vol 1, p 34) den Begriff kommunikativer Rationalität am Leitfaden von konstativen Äußerungen.

——the concept of communicative rationality from the model of constative utterances

But not all communication, HABERMAS states, is about facts and about meansends relationships (vol 1, p 34):

[E]s gibt offensichtlich *andere* Typen von Äußerungen, für die gute Gründe bestehen können, obgleich sie nicht mit Wahrheits- oder Erfolgsansprüchen verbunden sind.

————Evidently, there are *different* types of utterance that can equally be well-founded. Their validity claims are not related to truth or success.

Please note that HABERMAS introduces the notion of success. Later he gives it a decidedly negative value. At this stage of my discussion it is important to recognize that HABERMAS devides validity claims in three classes (vol 1, p 35):

Auch normenregulierte Handlungen und expressive Selbstdarstellungen haben, ähnlich wie konstative Sprechhandlungen, den Charakter sinnvoller, in ihrem Kontext verständlicher Äußerungen, die mit einem kritisierbaren Geltungsanspruch verbunden sind.

———Just like constative speech acts, *norm-based actions* and *expressive self-presentations*, too, are meaningful utterances, understandable through theirs contexts, which refer to a criticizable validity claim.

The two additional classes of validity claims correspond to characteristic worldviews (Weltbezüge). Overall, three worldviews are typical of the individual living in modern society (vol 1, p 84):

Die objektive Welt wird gemeinsam als die Gesamtheit der Tatsachen understellt, wobei Tatsache bedeutet, daß die Aussage über die Existenz eines entsprechenden Sachverhalts pper als wahr gelten darf. Und eine soziale Welt wird gemeinsam als die Gesamtheit aller interpersonalen Beziehungen unterstellt, die von den Angehörigen als legitim anerkannt werden. Demgegenüber gilt die subjektive Welt als die Gesamtheit der Erlebnisse, zu denen jeweils nur ein Individuum einen priviligierten Zugang hat.

——— The objective world is usually taken as the totality of facts; a fact is constituted

when a proposition perabout the existence of a particular state of the world is considered true. And a social world is taken as the totality of interpersonal relationships which participants recognize as legitimate. Contrasted to these, the subjective world is the totality of experiences to which only an individual has a privileged access at any one time.

The objective, social, and subjective world, respectively, can all be 'talked about' in order to coordinate (other) actions. The validity claims with respect to the objective world refer to truth (Wahrheit). Communicative action in the social world is ruled by norms (Normen), and in the subjective world by authenticity (Wahrhaftigkeit). These are the three different grounds of agreement HABERMAS assumes.

Communicative action, as I have already reported at the beginning of this paragraph, is practiced to arrive at agreement on other actions. Characteristic of communicative action is (vol 1, p 37) "the intersubjective recognition of criticizable validity claims:"

criticizable validity claims.
Die dieser Praxis innewohnende Rationalität zeigt sich darin, daß sich ein kommunikativ
erzieltes Einverständnis letzlich auf Gründe stützen muß.
———For the inherent rationality of this praxis it is characteristic that an agreement
reached by communicative action is <i>ultimately</i> supported by ground, or fundamental reasons.
However, it may happen that (vol 1, p 38)
ein Dissens durch Alltagsroutinen nicht mehr aufgefangen werden kann.
the practice of daily life cannot control differences of opinion.
To avoid settlement of the dispute (vol 1, p 38)
durch den unvermittelten oder den strategischen Einsatz von Gewalt,
HABERMAS includes, in his construct of communicative action,
die Argumentationspraxis als die Berufungsinstanz.
——————————————————————————————————————
How HABERMAS puts forward (vol 1, p 47) "a logic of argument" makes it
increasingly clear he is not proposing a theory to explain what people really do
when they are communicating. In fact, he himself writes that he tries (vol 1, p
47)
die allgemeinen kommunikativen Voraussetzungen der Argumentation als Bestimmungen
einer idealen Sprechsituation anzugeben.
to indicate, in general, as requirements of an ideal speech situation, the commu-
nicative preconditions for – the praxis of – argument.
At the process level of communication, this means that (vol 1, p 48)
Argumentationsteilnehmer müssen allgemein voraussetzen, daß die Struktur ihrer
Kommunikation, aufgrund rein formal zu beschreibender Merkmale, jeden [] Zwang –
außer dem des besseren Argumentes – ausschließt.
participants in the debate should basically assume that the structure of their
communication, and this concluded from properties that can be formally described,
excludes force, except for the power of the better argument.

12.5 a psychological ground, after all

But what is the better argument? How is it decided? That an ultimate ground is lacking *within* semantics³ is perceived by HABERMAS who writes (vol 1, p 49):

Dafür ist die formalsemantische Beschreibung der in Argumenten verwendeten Sätze zwar notwendig, aber nicht hinreichend.

——— The formal description of the semantics of the sentences used as arguments, though necessary, is not sufficient.

Quite rightly he also refuses to turn to logical positivism in search of grounds. For (vol 1, p 502)

[d]er Positivismus weigert sich, die von ihm behauptete Identität von Wissenschaft und Wahrheit zu begründen.

———— positivism refuses to provide grounds for the identity it presupposes to exist between science and truth.

HABERMAS nevertheless remains well inside the tradition of analytical philosophy, especially its branch of language philosophy. What he offers as the ultimate ground of his concept of communicative action is characteristic. He writes (vol 1, p 386) that participants have "intuitive knowledge" informing them on the action type they are engaged in. This points at a contradiction in his conceptual system. As I make clear in the next paragraph, HABERMAS claims to have cleared his theory of radically psychological concepts. But, of course, with personal intuition – whatever that is – as ground, such concepts have reentered his foundation through the back door. Or is he saying that all individuals have identical intuition?

Elsewhere in *Theorie des kommunikativen Handelns* HABERMAS evokes the authority he invests in his language system for support of his classification of worldviews (vol 1, p 413):

Vielmehr wird ein solches Einverständnis gleichzeitig auf drei Ebenen [von Geltungsansprüche] erzielt. Diese lassen sich intuitiv leicht identifizieren, wenn man bedenkt, daß ein Sprecher im kommunikativen Handeln einen verständlichen sprachlichen Ausdruck nur wählt, um sich *mit* einem Hörer *über* etwas zu verständigen und dabei *sich selbst* verständlich zu machen.

— Rather, such agreement is simultaneously achieved at three levels [of validity claims]. Intuitively, these levels are easily identified. One only needs to realize that, in communicative action, a speaker chooses a particular utterance in order to reach an understanding <code>with</code> a hearer <code>about</code> something while making <code>himself</code> understood.

This is very similar to how AUSTIN argues for the establishment of, and differ-

3. In many parts of *Theorie des kommunikativen Handelns* HABERMAS wrestles with the evidently individual nature of behavior. As he

stigmatizes it as blind exploitation, radical psychological concepts don't enter his conceptual system.

ence between, illocution and perlocution (see § 9.5). However, it is not a serious procedure. It rests on privileged access to knowledge through language analysis. In this case, the distinction between society (mit), objectivity (über), and subjectivity (sich selbst) is highlighted. Just as easily I could compose a sentence that would 'prove' the 'intuition' of assuming that every sign is a request for compliance. As GENDLIN remarks (1997, p4):

People recognize that logical arguments can be devised for mutually exclusive positions on any question. Nothing seems capable of adjudicating between them, except just such arguments again. Arguments are not only various; each ends in contradictions if pursued. There is no longer any belief in the power of argument to criticize and found itself.

I add having no objection at all against categories such as objective, social and subjective. But they need to be positioned within the workings of an essentially subjective intellect. For an intellect is instrumental, including the capacity of empathy, to an individual as a unique objectification of the will.

12.6 strategic action

It is impossible to win the argument for HABERMAS *not* having consulted other sources (though, once again, I find SCHOPENHAUER sorely missing). For a large proportion of his book is even occupied with quotations. He enters into extended discussions, especially with the pioneers of sociology. With MAX WEBER (1864-1920) he argues, among other things, over the concept of strategic action.

WEBER – and I give this sketch from HABERMAS's account – draws up a theory of social development, attempting to explain what he considers to be the modern society of his own days. Like many theorists, WEBER contrasts modern with primitive society. Then a primitive society is characterized by the unified, and therefore mostly implicit, worldview of its occupants. The transition to modern society is marked by differentiation of the magic worldview. Every fragment of the overall life world becomes increasingly specialized. As HABERMAS recounts (vol 1, p 243):

Sobald ein Aktor von Traditionsbindungen oder affektiven Steuerungen soweit freigesetzt ist, daß er sich seiner Präferenzen bewußt werden und aufgrund geklärter Präferenzen (und Entscheidungsmaximen) seine Ziele wählen kann, läßt sich eine Handlung unter *beiden* Aspekten beurteilen: unter dem instrumentellen Aspekt der Wirksamkeit der Mittel und unter dem Aspekt der Richtigkeit der Ableitung von Zielen bei gegebenen Präferenzen, Mitteln und Randbedingungen.

——— As soon as an actor is liberated from tradition or affective control, that is, when he can become aware of his preferences and, based on such clarified preferences (and decision methods), can choose his goals, an action may be judged according to *both* aspects: the

instrumental aspect refers to the effectiveness of means, and the normative aspect refers to the deduction of goals when preferences, means and conditions are set.

The objection HABERMAS makes is that this kind of rationality supports strategic action. In his frame of reference it has a strongly negative value.

The basic action concept is thought to be that of teleological action. It occurs when the actor wants to achieve a specific objective (Zweck) (vol 1, p 127):

Der zentrale Begriff [des teleologischen Handelns] ist die auf die realisierung eines Zwecks gerichtete, von Maximen geleitete und auf eine Situationsdeutung gestützte *Entscheidung* zwischen Handlungsalternatieven.

———The important concept [of teleological action] is the *decision* between action alternatives, a decision that is oriented at achieving an objective, that is made applying methods, and that is tailor-made for a given situation interpretation.

From the subsequent definition of strategic action it becomes clear that teleological action only involves, as a person, the actor himself (vol 1, p 127):

Das teleologische wird zum *strategischen* Handlungsmodell erweitert, wenn in das Erfolgkalkül des Handelnden die Erwartung von Entscheidungen mindenstens eines weiteren zielgerichtet handelnden Aktors eingehen kann.

———The teleological is broadened into a *strategic* model of action when the actor enters into the calculation of success his expectation about decisions by at least one other goal-oriented actor.

At first glance, strategic action is the natural mode of action by an individual who is capable of empathy. But there is an important difference that can be reconstructed by applying the concept of interest.

The strategic actor of WEBER, that is as reported by HABERMAS, lacks empathy. He only takes himself seriously as an objectification of the will. So, he doesn't recognize others as persons, too. They are just so many more objects. In the calculation of strategic action, therefore, the *interests* of others do not appear. The other is not deserving of respect. He is only used for self-interests.

I admit that, when I started studying *Theorie des kommunikativen Handelns*, I was not prepared for this concept of strategic action. I would rather call it tactical action for it occurs *after* the objective is already set.

My own idea about strategic action is almost the opposite of how HABER-MAS applies his terminology. I find an individual is acting strategically when he does *not* stay within narrow, preset limits of time and space for empathy. Given his will, he may then also arrive at different particular interests, motives, and objectives.

But then, such is not the concept of strategic action underlying HABERMAS's critique of WEBER. It causes him to judge a theory of consciousness (Bewußtseinstheorie) unfit for explaining society and social development.

Later in his book, when discussing the Frankfurter Schule, he even proclaims that (vol 1, p 518)

das Programm der frühen Kritischen Theorie $[\dots]$ an der Erschöpfung des Paradigms des Bewußtseinsphilosophie gescheitert ist.

———— the program of the early critical theory has failed through its exhaustion of the paradigm of consciousness philosophy.

His continuation of critical theory is based on (vol 1, p 518)

ein Paradigmenwechsel zur Kommunikationstheorie.

a paradigm shift toward a theory of communication.

It amounts, and once more I don't agree, to the (vol 1, p 532)

Zäsur, die das Ende der Subjektphilosophie für die Gesellschaftstheorie bedeutet.

——break that marks the end of applying subject philosophy to social theory. I see it differently. When the social theory of HABERMAS is taken seriously, he would mark the end of a philosophy of the subject. But let me continue with his exposition. For this renovated theoretical program HABERMAS takes a point of departure very similar to MEAD. That is, he starts from – his own theoretical preference for – social relationships (vol 1, p 533):

Die kommunikative Vernunft läßt sich nicht, wie die instrumentelle, einer erblindeten Selbsterhaltung widerstandslos subsumieren. Sie erstreckt sich nicht auf ein selbsterhaltendes Subjekt, das sich vorstellend und handelnd auf Objekte bezieht oder auf ein bestanderhaltendes System, das sich gegen eine Umwelt abgrenzt, sondern auf eine symbolisch strukturierte Lebenswelt, die sich in den Interpretationsleistungen ihrer Angehörigen konstituiert und nur über kommunikatives Handeln reproduziert.

— The communicative reason does not yield without resistance, as the instrumental reason does, to blind survival. It does not apply to a surviving subject who orients himself at objects, representing and acting on them. Nor does it apply to the permanence of a system that closes itself from its environment. Communicative reason is instead concerned with a symbolically structured life world that is constituted by the interpretative performances of its occupants and that reproduces itself through communicative action, only.

Certainly, this eliminates the problem of extremely selfish behavior. As HABERMAS writes (vol 1, p 385):

It is (vol 2, p 15)

eine evolutionär neue Form der Kommunikation.

———an evolutionary new form of communication.

And (vol 2, p 23)

[e]s geht um die Emergenz einer höherstufigen Lebensform. Diese ist durch eine sprachlich konstituierte Form der Intersubjektivität gekennzeichnet, die kommunikatives Handeln ermöglicht.

— what is at stake is the emergence of a life form at a higher level of which a language-based form of intersubjectivity, made possible by communicative action, is characteristic.

In spite of the rhetoric, it hardly is an improvement. For it leaves all behavior that is purely individualistic but *not* exploitative, completely unaccounted for.⁴ The Schopenhauerean perspective,⁵ on the contrary, includes empathy and therefore covers *all* behavior. And the anatomy of meaning presented in Chapters 7 and 8 of this treatise covers *all* communication.

4. Prescriptions for rational conduct in discussion - with rationality as defined or implied by their respective proponents, of course - are legion, with written sources dating at least as far back as the ancient Greeks. Not surprisingly, several modern attempts have been labeled semantics. Of particular interest with respect to subjective situationism is Communication and Argument, elements of applied semantics (1966) by A. NAESS (1912-). His procedure to achieve an empirical hold involves a reduction of interpretation to the dimension of expressions. As expressions they may be compared, precizatized, etcetera. However, NAESS does include in his conceptual scheme – and that is where my approach shows some similarities - person, and situation or context. He (still) regards the latter two terms equivalent.

The most comprehensive formulation of his ideas on communication NAESS presents in Interpretation and Preciseness: A Contribution to the Theory of Communication (1953) from which the article-length Toward a theory of interpretation and preciseness (1952) is derived. His assumption for communication essentially differs from my conclusion about the anatomy of meaning. NAESS states that (1953, p 45) "[w]hatever goal [a person] expects to reach by means of the interpretive sentence, his expectation or assumption of means-end

relationships should not be taken as a part (or as the whole) of the cognitive meaning of the interpretive sentence. - We may have certain goals in every utterance we make, but if the utterances expressed these goals, communication would indeed be difficult and sometimes rather embarrassing." However, his inquiry into synonymy proves extremely productive. For NAESS uncovers conditions under which synonymy may be, or may not be, considered valid. Thus, he arrives at a (p 41) "conceptual structure" to which my anatomy of meaning bears some basic resemblance. Insisting on the importance of the unique sign instance (with NAESS: sentence occurrence), his work is as relevant as it ever was.

5. Is the mention by HABERMAS of a subject that is representing objects a hidden rebuttal of SCHOPENHAUER's *Die Welt als Wille und Vorstellung*? In general, even though any reference is absent, it is difficult to imagine that HABERMAS is unacquainted with SCHOPENHAUER's work. As far as this particular mention of representation (Vorstellung) is concerned, it would be a misrepresentation of SCHOPENHAUER's conceptual system. The inclusion of empathy precludes *only* blind survival. Realistically enough, it doesn't exclude it either.

The most important parts of his book are what HABERMAS calls intermediary expositions (Zwischenbetrachtungen). Following his example, I include one here myself.

A consequence of my anatomy of meaning is that meanings are not like social resources, existing independently from sign users and available in a repository waiting to be consummated. There is no such thing as identical meaning in different persons. Because every intellect is the private instrument of a particular person, his interpretants are completely subjective.

Of course, a person may very well believe, and usually does, that another person holds an identical 'meaning.' I don't however believe - and why not call it intersubjective? – that such perceived similarity sets the stage for coordinated action. Rather, my hypothesis is that the experience of like meanings is the result of joint activity. Again, education is a prime example. It is an action both the teacher and the student engage in. In simple cases the student learns from the teacher, i.e., the former develops interpretants to exhibit conduct as deemed desirable by the latter.

The removal of the concept of meaning from a fixed interpersonal arena opens the field for many interesting questions. Does coordination of action require identical meaning? No. Through sign exchanges, interest-driven organisms seek compliance with their interests by other organisms. It is the actual compliance that matters; what interpretants the sign observer develops at the impulse of the sign is, if not completely inconsequential, at the most secondary.

The absence of an interpersonal repository of stable meanings also makes room for succinct explanations of interpretation dynamics. PEIRCE draws attention to the possibility, to the opportunity even, that original interpretants may be developed in each and every process of individual sign use. So, change of language systems change is not at all surprising. For every intra- or interpersonal instance of sign exchange can bring innovation.

So, given the potential for instability, a more fruitful question is why languages (read: language systems) are often actually quite stable. Another succinct answer is that many persons stick to their interests. Such is their will. A stable pattern of interests yields a stable pattern of compliance. As a result, the sign system doesn't change. It always can, however. And it does whenever a sign engineer plays out a different interest and solicits compliance with sufficient force.

6. Reading HABERMAS's Theorie des kommunikativen Handelns from the perspective of my anatomy of meaning is a particularly contrary experience. I found myself often agree-

12.8 integrating speech act theory

HABERMAS is far removed from such a theoretical track.⁶ As I said in § 12.5, above, he uses a critique of the Weberean concept of strategic action to relinquish any psychological approach. Instead, he connects with the speech act theory of AUSTIN for he proclaims (vol 1, p 372):

Für eine Theorie des kommunikativen Handelns sind nur diejenigen analytischen Bedeutungstheorien, die an der Struktur des sprachlichen Ausdrucks statt an den Sprecherintentionen ansetzen, instruktiv.

— A theory of communicative action can only be fruitfully related to analytical theories of meaning such as oriented at the structure of the utterance, rather than at the intentions of the speaker.

It is now abundantly clear that HABERMAS faithfully theorizes according to the tenets of analytical philosophy (vol 1, p 373):

Endgültig wird die Bedeutingstheorie freilich erst mit dem Schritt von der Referenz- zur Wahrheitssemantik als eine formale Wissenschaft etabliert.

The theory of meaning is actually only firmly established as a formal science with the transition from referential semantics to truth semantics.

It is a view I don't hold. In fact, in the Chapters 9 through to the current one, and not forgetting Chapter 5, I am primarily occupied with deconstructing semantics as the social, stable repository of meaning. I believe a language system is more similar to a tool box. It certainly is not a collection of ready-foruse signs. A particular sign originates through the application, or use, of the language system. And signs, in their turn, can *also* change language *as a system*. Therefore, perspectives such as formulated by HABERMAS overestimate the language system, and underestimate the sign user. Another example is (vol 1, p 374):

Die Bedeutung von Sätzen, und das Verstehen der Satzbedeutung, läßt sich von dem der

ing with the positions that HABERMAS reports of theorists he considers his opponents.

At this point I also want to remark on the difficulty that is often attributed to – reading – the texts of HABERMAS. I think I avoided major problems by having first studied, especially, MEAD and AUSTIN. For their ideas reappear prominently in the ground of the concept of communicative action. In advance I also read the synopsis *Habermas' Theorie van het communicative handelen* (1983) by H.

KUNNEMAN. I found it an accessible introduction. However, it lacks the critical attitude that makes fruitful discussion possible. In order to make credible comments, I therefore find I have been proven right to consult and study the primary source, i.e., *Theorie des kommunikativen Handelns* itself. Another example among many secondary sources is *Habermas and the dialectic of reason* (1987) by D. INGRAM. With his title he tries to capture a similar essence of HABERMAS's publication as what I attempt with my title of this chapter.

Sprache innewohnenden Bezug zur Gültigkeit von Aussagen nicht trennen.

The meaning of sentences, and understanding of sentence meaning, is impossible to separate from the reference of the validity of utterances that is inherent to language.

It is evident the sign observer seeks grounds for his interpretation of the sign. And of course the language system he recognizes the sign engineer applying may lead him to some. But then again, it may just lead him away from the desired grounds. Essentially, the requirement of grounds rests *within* the sign observer himself.

With all interpretants being essentially subjective, my anatomy of meaning does not require differentiations such as locution, illocution and perlocution. HABERMAS integrates their distinction by referring to the different classes of validity claims he proposes for the objective, social, and subjective world, respectively. Even though I don't agree, I appreciate the elegance of his construction. With him (vol 1, p 375),

die *illokutionäre* Rolle [...] spezificiert, *welchen* Geltungsanspruch ein Sprecher mit seiner Äußerung erhebt, *wie* er ihn erhebt und *für was* er ihn erhebt.

And (vol 1, p 426)

[w]ichtig ist nur, daß der illokutionäre Anspruch, den der Sprecher für die Gültigkeit eines Satzes erhebt, grundsätzlich kritisiert werden kann.

— the importance lies therein that the illocutionary claims the speaker raises for the validity of a sentence may be fundamentally criticized.

In contrast to WEBER's approach which is limited to the rationality of strategic action, HABERMAS now claims for his speech act-empowered theory of communicative action that (vol 1, p 384)

As I have already indicated, this must be understood to the extent that his theory of communicative action does not encompass all social phenomena. It is an idealized construct allowing relevant phenomena to be articulated *in comparison to it*. At the same time, however, HABERMAS attributes a real existence to it. And in thus mixing idealization and reality, I find he really gets carried away when he suggests that (vol 1, p 533)

[d]ie utopische Perspektive von Versöhnung und Freiheit ist in der Bedingungen einer kommunikativen Vergesellschaftung der Individuen angelegt, sie ist in den sprachlichen Reproduktionsmechanismus der Gattung schon eingebaut.

— the utopian perspective of reconciliation and freedom is layed down in the conditions for communicative socialization of individuals. It is already preconstructed in the linguistic reproduction mechanism of the species.

Though such a perspective appears tempting, I believe it would turn into yet another totality. Anyway, I qualify it as ideology, i.e., as a *prescription* for behavior, rather than as a – scientific – theory for explaining and *describing* actual behavior of individuals across the whole range of situations, whether these are considered social or not. The prescriptive nature of HABERMAS's concept of communicative action can also be clearly deduced from the following statement (vol 1, p 386):

Mein Ziel is nicht die empirische Charakterisierung von Verhaltensdispositionen, sondern die Erfassung allgemeiner Strukturen von Verständigungsprozessen, aus denen sich formal zu charakterisierende Teilnahmebedingungen ableiten lassen.

— My goal is not the empirical characterization of behavioral inclinations. Instead, I aim to capture general structures of processes of understanding from which formal conditions of participation can be deduced.

12.9 life world against system world

For HABERMAS the "life world" is where such formally decided conditions for reaching agreement are adhered to. It is the subworld of communicative action that, in its turn, consists of three worlds of, say, the second suborder. Those are the worlds of objectivity, society, and subjectivity, respectively. This classification, of course, neatly corresponds to different kinds of grounds that must be invoked when expressions are criticized. Another correspondence HABERMAS postulates is that speakers are 'guided' to the relevant grounds by their language system. It provides the necessary clues through illocutionary markers. A cornerstone of this theory, as HABERMAS himself remarks, is that (vol 1, p 388)

And he recommends (vol 1, p 431)

expression of experiences and establishment of interpersonal relationships). Our intuitions throw light on this with a brightness that is missing for [... other classifications].

It is first of all remarkable to meet such recurrent, even exalted, reference to the concept of intuition (see also § 12.5, above). Secondly, I don't believe the speech functions HABERMAS indicates are elementary, at all. For my critique on such concepts as developed by AUSTIN and SEARLE I refer to Chapters 9 and 10. Different elementary concepts, and I call those axioms, ⁷ lead to very different conceptual derivations.

In my own conceptual scheme, *every* sign is a request for compliance. In order to promote compliance by the observer, the engineer can downplay displaying his own interests in favor of recognizing the observer's interests, or he may try to appear to be neutral. But ultimately, the engineer's interests are 'underlying' every sign he produces, just like the observer's interests 'rule' every process of sign interpretation. It therefore obstructs the proper explanation of social phenomena, too, when such an incomplete ideal, as the concept of communicative action is, is used as the unit of measure. Nevertheless, it is the course of action HABERMAS is set on in *Theorie des kommunikativen Handelns*, and I still have not finished my comments on it here. After he fully develops his concept he declares (vol 1, p 449):

Die Aspekte der Handlungsrationalität, die sich am kommunikativen Handeln ablesen lassen, sollen nun erlauben, die Prozesse der gesellschaftlichen Rationalisierung auf ganzer Breite [...] zu erfassen.

7. I don't find it helpful that HABERMAS does not present his concept of intuition explicitly as an ultimate ground. I fully recognize an ultimate ground is by definition irrational. Now, HABERMAS emphasizes communicative action entails that validity claims may be criticized. When a first-order claim is also contested, the participants in the debate must move on to second-order validity claims, etcetera. This progression necessarily stops at (ultimate) grounds, or axioms. Then, but always in their own interest, one or more participants may attempt to reorganize their respective axiomatic systems. They could subsequently undertake a next 'round' of claim validation, etcetera. Because most persons shy away from the prospect of investing time and energy, the most likely result will be,

under conditions of HABERMAS's communicative action, that they will agree to disagree. And that, counterintuitive though it may be to HABERMAS, is the normal state of how individual knowledges are maintained in interpersonal relationships.

A clear indication that HABERMAS and I apply quite different axiomatic systems, for our theories anyway, is that he is concerned about (vol 2, p 86) the relationships between individuals on the one hand, and society on the other. I simply deny that there is an ultimate ground for such a relationship (though it might often be practical to assume it as an intermediary concept). Relationships exist between persons, only. And that constitutes an aggregate level of conceptualization. Why not call it social?

———The aspects of action rationality which are grounded by communicative action should next enable us to capture processes of social rationalization along the whole range of their occurrence.

I repeat his procedure is *not* to apply his 'theory' to the full spectrum. At first he limits the practice of communicative action to – what he calls – the life world of persons. This way he creates room for another concept that, together with the life world, makes up for the totality of society (vol 2, p 180):

Ich möchte deshalb vorschlagen, Gesellschaften *gleichzeitig* als System und Lebenswelt zu konzipieren.

———— So, I would like to propose the conceptualization that societies are *simultaneously* system and life world.

What does HABERMAS mean by *system?* It looks he views it as what the life world is *not*. Anyway, with my training and outlook as an engineer, and being therefore familiar with developing system *views*, it takes some getting used to that an element of the overall system is (also) called "system" rather than element, or subsystem. From HABERMAS I get a taste of opposition between humanity and technology. Everything to do with technology, functionalism, etcetera, he delegates to the system world. This procedure saves the life world for humanity. Or? Just to assist getting acquainted with HABERMAS's terminology I write system world instead of, only, system.

As a next step HABERMAS acknowledges persons perform actions in both the life world and the system world. At the risk of giving too simple an account of his scheme I suggest strategic actions occur in the system world, and communicative actions in the life world. Based on the concept of strategic action described in § 12.6, what results is a society that may be modeled through a simplification of the matrix I developed earlier for my discussion of MEAD's Mind, Self, & Society (see Chapter 11). The attitude characteristic of the life world is neighborly. In the system world it is antagonistic. This overview is presented in Figure 12.9.1.



Figure 12.9.1.

The opposition of life world and system world.

Both (sub)worlds of society follow their own type of rationality. The rationality of the system world is applied by individual actors, behaving strategically to promote their very private success (Erfolg). "Have lunch, or be lunch," might be an appropriate slogan to summarize how HABERMAS pictures the system

world. The rationality characteristic of the life world serves understanding (Verständnis) and agreement (Einverständnis) between actors as members of society. It is where people offer each other arguments, and probably lunch too.

This distinction between rationality types allows HABERMAS to escape from what he suggests that existed before as three disjunct currents in sociology (see § 12.3, above). For once separate, the reason of success, and the reason of understanding/agreement, respectively, are subsequently theorized by him to work on each other. First of all, overall social development may be explained from their dialectics. Secondly, the system-only view of society is enhanced because the system world interacts with the life world. Thirdly, the social action-only view gains perspective as the result of recognizing that also the life world interacts with the system world.

I refrain from elaborating on his lengthy attempts at such theoretical integration for they don't shed additional light on his concept of communicative action. I do remark upon my frequent experience of contradictions. At his starting point, for example, HABERMAS proposes that participants engage in communicative action for the purpose of coordinating some *other types* of their action(s). However, where he finds it impossible to remain consistent he doesn't hesitate to declare the "original mode" of language use the exception to its coordination function (vol 1, p 438):

Ein Interaktionstypus, der in ähnlicher Weise konstativen Sprechhandlungen korrspondierte, findet sich auf den ersten Blick nicht. [...] In diesen Fällen löst sich der Prozeß der Verständigung aus der instrumentellen Rolle eines handlungskoordinierten Mechanismus; und die kommunikative Verhandlung von Themen verselbständigt sich zum Zweck der Kooperation.

— At first sight, there is no interaction type that similarly corresponds to constative speech acts. [...] Then, the process of mutual understanding is detached from the instrumental role belonging to a mechanism of action coordination; the communicative treatment of themes itself becomes the independent goal of cooperation.

HABERMAS undermines his own concept by introducing, at second thought, a subclass that actually does not fit the concept it is derived from. It therefore requires additional effort to discover consistency in his conceptual scheme. And it regularly dissolves under sufficiently close scrutiny.

The general approach of HABERMAS to enrich theory is valid. Faced with unexplainable variety, the overall system (please note: *my* idea of system) may be fitted with more elements (also read: variables). Indeed, more elements allow for a larger number of system states. That is, its explanatory power correspondingly grows. Another approach is to increase the number of values any single element (also: variable) may hold. This, too, widens the space of possible system states. Optimally, a theoretical model strikes a balance between the number of variables and their respective values.⁸ And of course,

only relevant states must be accounted for. A design that also generates irrelevant states is again less than optimal.

I disagree with HABERMAS about the usefulness of two types of rationality. Actually, rationality should not be considered a leading concept, at all. I also believe it misleads to aim social theory too much at developmental issues. I recall the distinction DE SAUSSURE makes between diachronic and synchronic analysis (see Chapter 5). He argues a particular result may occur randomly. It may then spread throughout the system, thereby actually changing it (1916, p 76):

A language is a system which is intrinsically defenseless against the factors which constantly tend to shift relationships between signal and signification. This is one of the consequences of the arbitrary nature of the linguistic sign.

This is – among many other aspects – what society has in common with language. Precisely because such an original result is not necessarily generated by the system as-a-whole, diachronicity should not be confused with synchronicity (1916, p 80):

For sciences which involve the study of values, this distinction becomes a practical necessity, and in certain cases is an absolute necessity. In this domain, it is impossible for scholars to organise their research in any rigorous fashion without taking account of these two axes. They are obliged to distinguish between the system of values considered in itself, and the same values considered over a period of time.

The notion of value holds, DE SAUSSURE writes, when "we have a system of equivalence between things belonging to different orders." His example from economy is the relationship between work and wages. In linguistics it is of course the relationship between signification and signal.

In sociology, an equivalence of action and membership might represent a characteristic value. Applied to society a synchronic analysis should concentrate on elements as they are believed to exist at the relevant point/period in time, and not on how they might have come about. This is how DE SAUSSURE puts it for linguistics (1916, p 81):

The first thing which strikes one on studying linguistic facts is that the language user is unaware of their succession in time: he is dealing with a state. Hence the linguist who wishes to understand this state must rule out of consideration everything which brought that state about, and pay no attention to diachrony. Only by surpressing the past can he enter into the state of mind of the language user. [...] (p 82) One cannot describe [language] or establish its norms of usage except by taking up a position in relation to a given state.

In fact, HABERMAS presents his concept of communicative action as a method

8. I give a simple, general example. A set of 1,000 states may be explained by a single variable with one thousand values. But then, a

system of three variables, with ten values for each variable, yields 1,000 states, too.

of precisely such investigative participation. It is how in his opinion modern sociology should be practiced. But it seems that, as social theory, he *also* aims at integrating diachrony into his originally synchronic approach. However (DE SAUSSURE, 1916, p.85),

[i]n the diachronic perspective one is dealing with phenomena which have no connexion with linguistic systems, even though the systems are affected by them.

I believe social systems are likewise influenced, constituted even, by individual members. Their contributions (also read: actions) are better understood from a psychological perspective. DE SAUSSURE adds a word of understanding when mixing approaches of study, for (1916, p 92)

[i]t is the rigorous organization of the system which creates the illusion that the diachronic fact is subject to the same conclusions as the synchronic.

How especially planned changes are really effected, and often fail, is clearly described by E.M. ROGERS (1962). His account supports the view that changes have small beginnings. In my account, every change even starts purely individually (and situationally).

Broadly-positioned developmental issues, on the other hand, overestimate the human control of development of the society system as-a-whole. As such it is a typically modern concern. Concentrating on synchronic analysis may therefore also save the theorist from a typically modern embarrassment, i.e., when the assumption of superiority of his own particular society becomes untenable. Starting from the contrast between primitive and modern, as the early sociologists do, is a prime example of mistaken assumptions. More is learned when undeniable differences are respected as much as possible *on their own merits*.

It is of course perfectly understandable that the theory DARWIN (1809-1882) develops about evolution invites application by all sorts of other disciplines. At the end of the nineteenth century it certainly heralds a scientific revolution. It also seems to have inspired the Weberean concept of strategic action where an individual blindly struggles to survive as the fittest in his society. HABERMAS is right to insist rationality is not only instrumental to such individual survival. It is also put at the service of social practice, he rightly argues. But why not assume different behaviors emerging from one and the same 'source'? With the individual actor as the source of behavior, for the purpose of explanation he must be modeled with the requisite variety. Taking fundamental concepts from SCHOPENHAUER and PEIRCE, I try to do so in this treatise. Then, no two types of rationality enter the picture, at all. Rather, the key concept is that of empathy. It explains why an individual may find it in his own interest to act in the interest of another individual. Because HABERMAS lacks a concept of individual empathy, he feels the need for a radical break with psychological theory. Thus he finds himself committed to apply concepts at the social level, only. It makes his theory unnecessarily elaborate. And he misses much that is relevant, while introducing much that is irrelevant, too.

12.10 against theoretical fragmentation

Earlier in this chapter I have already mentioned some difficulties a reader might experience with *Theorie des kommunikatives Handelns*. Another observation I offer is that HABERMAS often proceeds in a circular fashion. That way, he preempts criticism directed at his conclusions. His assumptions should be criticized instead. However, it is often not easy to discover how circularity enters his exposition. I give an example pertaining to the importance he ascribes to the language system. HABERMAS writes (vol 2, p 190) that the language system deserves to be called transcendental: it constitutes the life world. Actually, it is only a reformulation of his earlier statement arguing that (vol 2, p 182) the concept of the life world is complementary to that of communicative action. By his definition it holds that (vol 2, p 191)

[d]ie Kommunikationsteilnehmer finden den Zusammenhang zwischen objektiver, sozialer und subjektiver Welt [...] bereits inhaltlich interpretiert vor.

— the participants in communication already find the relationship between objective, social and subjective world preinterpreted.

Again, it is not a result of HABERMAS's analytical efforts that (vol 2, p 232) [d]ie Rationalisierung der Lebenswelt läßt sich als sukzessive Freisetzung des im kommunikativen Handeln angelegten Rationalitätspotential verstehen.

— the rationalization of the life world may be understood as the subsequent liberation of the potential for rationality that communicative action has been invested with.

In fact, he starts from the premise that communicative action requires criticism of precisely those three types of grounds that 'constitute' an equal number of subworlds, vice versa. So, it is directly from his concept of communicative action that (vol 2, p 192)

The success of their joint communicative action is, so to speak, preordained because of presuppositions (vol 1, p 444)

des verständigungsorientierten Sprachgebrauchs.

— of language use that is oriented at understanding.

Of course HABERMAS, too, requires an axiomatic system. No theory can do without. He designs his own brand of, say, social transcendentalism in order to avoid what seems to me the both perfectly simple and logical assumption that (vol 2, p 198)

[i]m Rahmen der Bewußtseinsphilosophie bleibt das »erlebende Subjekt« letzter Bezugspunkt der Analyse.

from the perspective of the philosophy of consciousness, the analysis remains ultimately oriented at the 'experiencing subject.'

I argue in this treatise that it pays more to revise such a classically Darwinean "philosophy of consciousness," including the pre-Darwinean concept of Schopenhauerean empathy, rather than rigorously abdicate it in favor of sociologically inspired explanation. From a combined Schopenhauerean-Peircean perspective on the intellect it is nonsense to declare that (vol 2, p 205)

On the contrary, my argument is that the concept of the life world obstructs fundamental respect for the individual person. Essentially human analysis starts and ends with the individual perspective. Of course I recognize that being essentially human means leading an essentially social life. Actually, especially the explanation of the system of human interaction requires its participants to be modeled with necessary and sufficient variety (E.F. GOFFMAN, 1967; see also note 4 in Chapter 9, above). The traditional philosophy of consciousness HABERMAS rejects is clearly inadequate, but so is his counterproposal based on communicative action.

I proceed, rounding of my discussion of *Theorie des kommunikativen Handelns*, to summarize how HABERMAS envisions the dialectics of his two types of reason. He admits (vol 2, p 224) that the life world is fictional. Members of society are confronted with the system world, too (vol 2, pp 225-226):

Tatsächlich werden [...] ihre zielgerichteten Handlungen nicht nur über Prozesse der Verständigung koordiniert, sondern über funktionale Zusammenhänge, die von ihnen nicht intendiert sind und innerhalb des Horizonts der Alltagspraxis meistens auch nicht wahrgenommen werden.

— In fact, their goal-oriented actions are not coordinated merely through processes of understanding. Members of society also find these actions ruled by functional structures which are unintended by them, and which usually remain unobserved within the horizon of their daily lives.

This is another example of a statement where I read a definition couched inside a conclusion. The system world is constituted by functional relationships. Then, what is functional? HABERMAS considers as functional everything that is *not* communicative. In communicative action a participant is taken as a free agent who, by acting communicatively, completely determines his own fate. For contrast, the system world with its functional influences makes him, say, unfree. The life world is encroached upon, compromised, by media supporting the propagation of the system world. In the capitalistic societies of

the modern western world money is the primary medium of the market place. And power, HABERMAS argues, is the primary medium of government (vol 2, p 275):¹⁰

Entsprachlichte Kommunikationsmedien wie Geld und Macht verknüpfen Interaktionen in Raum und Zeit zu immer komplexeren Netzen, ohne daß diese überschaut und verantwortet werden müßten.

——— Despeeched means of communication such as money and power result in increasingly complex structures of interactions in space and time without any requirement for their supervision and being accounted for.

First of all, by calling money and power "despeeched" HABERMAS confirms he views communicative action as the original mode of language use. Secondly, the *opposition* he proposes is far too simple. What matters is how a language system, an amount of money, relative power, etcetera, is *applied*. It is primarily not an opposition between media, but between *users* of media. Between sign users in their sign exchanges, actually. Regretfully, HABERMAS commits himself to conceptualization at the social rather than the psychological level. He continues to assert that the application of such control media, i.e., of all media other than the language system, results in (vol 2, p 271)

Entlastung von Kommunikationsaufwand und Dissensrisiken.

However, as HABERMAS states (vol 2, p 273),

[d]ie Umstellung der Handlungkoordinierung von Sprache auf Steuerungsmedien bedeutet eine Abkoppelung der Interaktion von lebensweltlichten Kontexten.

———— the transition from language to control media for coordinating action entails that interaction becomes disconnected from contexts of the life world.

9. I assume an unfamiliarity with technology underlies HABERMAS's concept of the system world. It is a characteristic shared by many philosophers who criticize technology as what they see as an independent force, or 'system.' They have probably only observed it, never engineered it. HABERMAS, for example, writes about (vol 2, p 273) "a technologizing of the life world." Such critics mistake effects for causes, for they overlook that actually everything having social impact may be considered as technology. So, the form and contents of this book are essentially functional, too. And so is HABERMAS's *Theorie des kommunikativen Handelns*, for that matter.

It, too, is designed, constructed, printed, distributed, etcetera.

To be socially useful criticism needs always to be directed at responsible persons. In fact, stating that functional influences are beyond the control of actors is irresponsible. Just blaming 'them' can hardly be considered 'our' right example of communicative action.

10. The larger part of the sentence quoted here reappears in volume 2, page 394. However, later on HABERMAS writes more generally of "media control of interactions" (mediengesteuerte Interaktionen).

Or, allowing system world and life world to act on each other, he formulates as his theoretical approach that (vol 2, p 452)

[f]ür die Analyse von Modernisierungsprozesse ergibt sich daraus die globale Annahme, daß eine fortschreitend rationalisierte Lebenswelt von immer komplexer werdenden formal organisierten Handlungsbereichen wie Ökonomie und Staatsverwaltung zugleich entkoppelt und in Abhängigkeit gebracht wird.

[f]ür die Theorie der Gesellschaft verändert sich im Laufe der sozialen Evolution der Gegenstand selber.

———— for the theory of society, in the course of society's evolution, its theme changes. It follows, he continues, the appropriate social theory must change accordingly. Precisely with this argument HABERMAS claims (vol 1, p22) a metatheoretical position for his theory of communicative action. As a preondition he elevates language systems to a socially transcendental level (see the beginning of this paragraph). ¹¹

I repeat as my belief that HABERMAS presents a one-sided view of the language system, overestimating its idealizing power. Even when his distinction between system world and life world is taken seriously, the language system surely is a control medium, too. When HABERMAS declares it has been invested with the potential for communicative action, I am afraid that it has been equally invested with the potential for control. For language is undeniably also used for so-called strategic action (in his own version of that concept). And by the way, is such potential not always functional? When an intersubjective identity

11. In Wahrheit und Rechtfertigung (1999)
HABERMAS presents several essays on his philosophical arguments for (p 7, my translation) "the language pragmatics that I have developed since the early 1970s." It is curious he hardly mentions Theorie des kommunikativen Handelns. Without pretending to offer an authorative analysis, I have the distinct impression he is trying to answer criticism of his Theorie without actually admitting that improvements are necessary. I confirm that the main drift of his approach remains intact (and so has my disagreement with it). His,

say, transcendental shift even becomes more obscure because he attempts to deny the axiomatic nature of ... his axioms (1999, p 41, my translation): "The detranscendentalized intersubjectivity of the life world has taken the place of the transcendental subjectivity of consciousness." Does such denial of the transcendental nature make his position scientifically more respectable? Anyway, from the perspective of HABERMAS's concept of communicative action I fail to recognize the grounds of his argument.

of meaning occurs, as it seems to be HABERMAS's ideal, isn't that very 'meaning' a control medium, too? It is precisely such confusion that also makes abuse of the idealized construct of communicative action *itself* possible. For its label 'sells.' Regretfully, it is therefore eminently suited for the kind of action that HABERMAS originally opposes it to, viz., for strategic action. I don't condone such practices at all. I am here just trying to explain the inescapable fate of such an idealized concept.

Returning to the nature of language systems, from my own theoretical perspective I clearly recognize the paradox HABERMAS engenders (vol 2, p 189):

[Wir können] uns die Lebenswelt durch einen kulturell überlieferten und sprachlich organisierten Vorrat an Deutingsmustern repräsentiert denken.

— We can think of the life world as a repository of interpretation models that is culturally transferred and linguistically organized.

Of course we can imagine such a repository. But primarily a theory should elegantly *explain* it. One of the contradictions underlying *Theorie des kommunikativen Handelns* is that, given the distinction between the life world and the system world, the medial or system nature of language systems is ignored. On the same count, the completely natural occurrence of, for example, power in daily life is bracketed. The most powerful control medium, of course, is the worldview. Or ontology. It is the system of ultimate grounds invoked to settle communicative action.

A consistently synchronic approach avoids all judgmental advance-labeling. Then it is also useless to distinguish between nature and culture. Relevant is *all* that is *one* world. So, for an individual living right now in a western society, money is just as 'natural,' or 'cultural' for that matter, as the storm on a mountain. The intellect – and the intellect is what especially makes human beings so adaptable – entails a homogeneous collection of interpretants. Practically speaking, it makes an infinite number of infinite patterns for behavior possible.

Summing up, I hold a theoretical view quite opposite to that of HABERMAS. Whatever language systems are used to engineer signs is fundamentally irrelevant. What counts is that signs are *always* requests for compliance. So, a sign is *only* produced for the purpose of control. And every action can always be taken as a sign, too. The use of money, of power, of force, etcetera, usually results in motivationally induced effects (even apart from other modes of causation). When produced by the original sign observer, those effects may or they may not be compliant with the interests of the original sign engineer.

Every sign user needs to make sense of his world. I believe there exists only *one* world for *all* individuals. How the sign user structures what as a result of his subjective interpretation becomes *his* world should all be essentially accounted for by a model of his individuality. Such individuality is fundamen-

tally human, regardless of the – type of – society a particular person is a member of. Of course, the particular intellect engaged in sign use is at any time to a large extent the result of socialization. But the nature of – an admittedly large, and surely consequential, part of – influences should not be confused with the nature of their recipient. Society is constituted by its members. Though a social perspective on individual behavior is rewarding, too, the ultimate explanation of society must be from a member perspective. Subjective situationism including the anatomy of meaning presented in this treatise attempts to provide such a rigorous individualistic perspective on interaction.

prelude 13

There it is! The design of subjective situationism is complete. An integral part of the ontology is an anatomy of meaning. Now that is all very well, but what problem does it actually solve?

I believe such a question is too restrictive at this stage. As subjective situationism is an ontology annex epistemology annex semiotics, all conceptual knowledge may be touched by it. That is, it helps you to reconceptualize from a different set of grounds up. Of course there are problem statements for which it really does not matter. However, some problems dissolve as a result, and yet others emerge. But those are impossible to list individually because of the fundamental nature of subjective situationism.

Even whole classes of problems may be affected. I therefore prefer, more generally, to argue for *opportunities* that arise from fundamental reconceptualization. It has been my approach as a designer to cast subjective situationism as widely as I could imagine. Besides providing for additional design inspiration, wide boundaries promote variety in the outcome. Chances of creating opportunities around the original focus at conceptual information modeling are thereby (also) increased.

Partly, Chapter 13 is a limited, informal survey. It is informal in the sense that it is more or less appended to the combination of the research process description and the design result itself. I indicate some opportunities for subjective situationism *as I see them* when applied to conceptual information modeling. I certainly venture to argue for interesting opportunities elsewhere, but I am happy to let those rest outside the scope of this treatise.

Chapter 13 also informally addresses several directions for further research related to conceptual modeling. As with a building, laying a proper foundation requires much effort. But the building is only completely finished after much

more work. Likewise, subjective situationism is constructively essential, but a foundation nevertheless. I have confidence that it is a promising start for realizing significant improvements in the quality of information systems & services for a world full of variety.

chapter 13

SUGGESTIONS FOR THEORETICAL PRACTICES

Subjective situationism with its anatomy of meaning can serve as – part of – the axiomatic system of many separate scientific disciplines and professions. I believe it is even more important that this ontology invites tighter interdisciplinary integration. Let me call the pertinent sciences *motivational*, ¹ rather than social. For their decisive characteristic is that (re)actions are motivationally caused. And the *sign* is the characteristic cause. Motivational sciences and professions therefore emphasize that "information is a difference that makes a difference" (BATESON, 1972).

My own primary concern is with the discipline and profession of business information modeling. It is a design discipline focusing on conceptual models oriented at development and use of information systems for complex business processes. As an epilogue, in this final chapter I apply the conceptual grounds whose design occupies all the previous chapters to the theory and practice of information modeling.

I don't aim at comprehensiveness, at all. Informally and briefly I touch upon

1. The proper attribution of different modes of causation is useful for classification of sciences. I believe it also to be more fundamental than, for example, the distinction H.A. SIMON makes in *The Sciences of the Artificial* (1981). Underlying his concept of the artificial I recognize that of the sign, inducing motivational (re)actions. He seeks to explain how some sciences (p xi) "are concerned not with the necessary but with the contingent—not with how things are but with how they

might be—in short, with design. The possibility of creating a science or sciences of design is exactly as great as the possibility of creating any science of the artificial. The two possibilities stand or fall together." Actually, I don't support the distinction SIMON starts from, that is, between "understanding the natural and artificial worlds." All modes of causation, and subsequently their effects, are natural (or real).

a limited set of what I consider as important aspects of the process and results of modeling. First of all I merely indicate at the practical promise I believe subjective situationism holds. It is both a highly compact ontology and supports large variety through it characteristic organization of variables. Secondly, I suggest some lines for further research on modeling concepts.

13.1 arena of interests

Stating an information system is a tool for sign exchanges is hardly original. Sign users apply it to assist them in engineering and/or observing signs. What really makes a difference from the traditional perspective on information systems, though, is that every sign is a request for compliance. A user who engineers a sign does so to exchange it with a user whose observation and subsequent interpretation is expected, by the original engineer, to lead to compliance with the interest(s) he has invested in the sign. However, the observer has his own particular interests that control his observation, interpretation and, ultimately, (re)action. As the engineer is different from the observer,² the engineer always entertains – again, his subjective measure of – uncertainty about how the effect matches the compliance he produces the sign-as-cause for. The observer's actual reaction may range from being completely compliant from the point of view of the engineer to completely surprising. As a corollary, the observer is always equally subjectively uncertain about the actual compliance requested from him by the sign's engineer.

Because signs are *both* engineered *and* observed using it for a tool, the information system may be conceived of as an arena of interests. *All* sign users who act – voluntarily or not, in whatever capacity, directly or at a certain remove, etcetera – as engineer and/or observer of a particular information system are its stakeholders by definition. What counts as a sign may range from the whole tool itself to what it helps to process at the most detailed level possible of information.

A comparison with the built environment shows that sponsors are often highly sensitive to so-called image and can easily be sold by architects on the 'message' of their new building as-a-whole. Likewise, some information technology is hotter or, dependent on the language game, cooler than others. I don't want to compromise the generality of this treatise by naming some technologies that are *en vogue* at the time of its writing. The reader may, at any time, choose his own examples.

2. Of course, the engineer and the observer may be one and the same person. But the dis-

tinction between engineering and observation remains useful. An advantage of the conceptual or abstract approach is that a much larger set of phenomena may be treated as information systems. For a language system in the sense of a so-called natural language is an information system, too. This treatise published as a book is an information system, etcetera, etcetera. Some systems can adapt as far as their informational content is concerned. In flexible cases even their structure can, whereas others are unchangeable.

The inverse relationship also holds between information system and language system, actually. An information system is always a language system, but one not confined to natural languages, of course. It follows because, in its dynamic appearance, a particular information system allows for characteristic expressions of requests for compliance. A (more) stable information system, like this publication, simply is an already completely fixed characteristic expression.

A paradox I point at regards discipline. It seems fixed expressions invite a wider range of interpretations. Isn't that what makes classical art, precisely, classical? Or is it still a paradox because it has so far been considered too difficult to create dynamic systems that are open to sensible multiple interpretations just as – more – fixed expressions already are?

This last chapter with my final remarks should be taken as 'only' applying the conceptual grounds presented in this treatise to modeling information systems that are tools for complex business processes. And 'only' such tools are assumed as being both constructed and operationally used through application of digital information and communication technology. This fundamental convergence of digital technologies of information and communication should now be evident from portraying an information system as an arena, or marketplace, for stakeholders. Because an information system is essentially a tool for sign exchanges it is just as essentially a communication system.³ The consequences of conceptualizing communication at the level of dynamics of stakeholders' interests certainly deserves close attention.

13.2 essence of difference

Traditionally, the concept of an information model refers to the descriptive embodiment of the so-called *shared meaning* of stakeholders. Through their participation in the modeling process and/or based on the model delivered as the result, all persons involved directly or indirectly with the information sys-

3. What from a technological perspective are usually known as communications systems should more aptly be called transmission sys-

tems. For an early fundamental treatment from a semiotic perspective see *The Meaning of Information* (1972) by D. NAUTA.

tem are believed having arrived at *identical* understanding. That is, they have reached agreement on structure and contents of a particular part of their world. The agreed-upon model is a descriptive synthesis that is next considered a useful, even valid, prescription for the system's construction. Actually, that is the very purpose of the model-as-specification. In such cases the modeling process is undertaken for achieving of radical convergence, leading to identity, of stakeholders' meanings that might originally be different. What stakeholders are supposed to *learn* during the process is to mutually adjust their meanings. Ideally, again, at the end of modeling all stakeholders hold identical meanings, i.e., shared meaning, only. It is of course acknowledged that convergence is not required outside the scope of the information system.

The elimination of differences is experienced as progressively difficult as the number of stakeholders increases. This is easily explained from a Schopenhauerean perspective. For there are *principally* no two stakeholders, including their intellects, identical. And even when shared meaning would somehow be a theoretical possibility, it must be taken as practically elusive. Modeling should therefore *not* at all be oriented at achieving shared meaning.

4. K.E. WEICK already writes in Sensemaking in Organizations (1995, p 188): "Shared meaning is difficult to attain." So, he "points to a different glue that can be attained. Although people may not share meaning, they do share experience. [...] If people have similar experiences but label them differently, then the experience of shared meaning is more complicated than we suspect." I even relinquish any suspicion about shared meaning. I believe it is a false - in the sense of behaviorally counterproductive - assumption altogether. WEICK is not so consistently radical but he does stress the importance of equivocality, a concept he applies earlier in The Social Psychology of Organizing (1969, 1979). The same concept appears in Making Strategy (1998) by C. EDEN and F. ACKERMANN. They place its usefulness, however, during facilitating, only. And its danger lies in (p 67) "backing away from clarity as clarity begins to emerge." In Group Model Building (1996) J.A.M. VENNIX is also tolerant of individual differences. His orientation is nevertheless at overall consensus, too (p 4): "The purpose is to support a decision making group in structuring a messy problem and designing effective policies to deal with it. [... p 5] A[n] important goal of the intervention should be to foster consensus within the team which, by the way, should not be confused with compromise. Consensus refers to unanimous agreement about a decision while compromise alludes to a settlement reached by mutual concessions." My position is that relevant differences should be as unequivocally clear as possible. It is also that every individual always makes his own decisions. The concept of group should therefore be applied with care. And from the pervasiveness of politics in human relationships it follows that participants will settle for some degree of compliance with their individual interests. Then, consensus is merely a compromise where each participant does not feel any insurmountable loss of compliance.

Instead, emphasis must be on the *differences* between stakeholders. What does not change is that the model is a prescription for construction.

The relevant knowledge of a particular stakeholder may be, very simplistically, depicted by a circle. Suppose there are three stakeholders with completely disjunct knowledge, as shown in Figure 13.2.1.

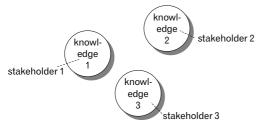


Figure 13.2.1. Stakeholders with disjunct knowledge.

Even this case, which is extreme when considering shared meaning, can be described within the boundaries of a single, overall model. The technique of the metapattern with its prominent visualization (see Chapter 4) suits the purpose. It only takes *every* stakeholder to be separately modeled as a *separate* highest-level situation. Next, the particular knowledge of every stakeholder is simply symbolized by the corresponding intext. Figure 13.2.2 gives an overview, first for the three stakeholder instances of the current example, next more generally for types.

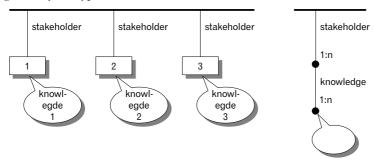


Figure 13.2.2. Information model of stakeholders with disjunct knowledge: instance and type version.

Without the overriding requirement of shared meaning, differences need no longer be synonymous with incompatibility. Actually, respected differences often point at opportunities, precisely *because* they are compatible. For several persons operating as a group usually are compatible precisely because they are different.⁵ It is only the incompatible differences that really need to be sorted out.

Taking appropriate inventory is assisted by broadening the scope from each stakeholder's knowledge to his overall individuality, i.e., to a unique objectification of the will. What are his relevant interests? How does he conceptualize the situation(s) where he believes such interests are relevant? What does he, pertaining to his interest-driven action, consider his – more detailed – objectified reality to be, that is, his subjective worlds, situation by situation?

Starting from differences, and mainly dependent on the (dis)similarity of their experiences, the individual models – representing the interpretants – of stakeholders more or less overlap. See Figure 13.2.3. From the perspective of the anatomy of meaning of this treatise I suggest it is useless to speculate whether or not such overlap indicates, after all, a proportion of shared meaning. Each stakeholder will only hold subjective interpretants, anyway. What is apparently similar are *only* exterior models, that is, the signs, of – some illusive subset of – their interpretants, *not* the interpretants themselves.

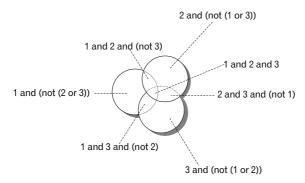


Figure 13.2.3. Overlapping models by stakeholder.

In this particular example, as can be read from Figure 13.1.3, there are seven different stakeholder groupings with corresponding submodels. The real number of stakeholders of any complex business process is of course prohibitive for such a theoretically encompassing approach.⁷ In professional

- 5. The importance of compatible interpersonal differences for improved group performance is convincingly analyzed by R.M. BELBIN in *Management Teams* (1981).
- 6. I don't find it necessary to take a detailed position on the issue of nurture and nature. What counts for my exposition is that stake-

holders have different biographies, for what-

7. It can be easily computed for any number of stakeholders. With n stakeholders overall, the number of stakeholders involved in a particular model overlap may be denoted by p. The value for p ranges from 1 to n. The

practice, modeling is mostly done incrementally. Whatever is already modeled at earlier steps is often not ascribed to yet another stakeholder (but, of course, it always can when need be). Usually deserving attention at every incremental step is what is still missing in the overall model as it is drawn from the previous step. Special attention deserve possible incompatibilities between differences. There are many options to resolve them, ranging from settlement by consensus, to settlement by power, to dismissal of one or more stakeholders, etcetera. Or perhaps the very idea of a combined information system needs reconsideration. Options are always contingent upon the situation of the change toward the new information system.

As information modeling is synonymous with classification, "one of [the] central arguments" offered by G.C. BOWKER and S.L. STAR in their book *Sorting Things Out: Classification and Its Consequences* (1999) clearly indicates its problematic nature. They write (p 196):

[C]lassification systems are often sites of political and social struggles, but [...] these sites are difficult to approach. Politically and socially charged agendas are often first presented as purely technical and they are difficult even to see. As layers of classification system become enfolded into a working infrastructure, the original political intervention becomes more and more firmly entrenched. In many cases, this leads to a naturalization of the political category, through a process of convergence. It becomes taken for granted. (We are using the word naturalization advisedly here, since it is only through our infrastructures that we can describe and manipulate nature.)

I cannot stress it enough that overlap naturally results from orientation at differences. It is simply the application of aggregation to partial models that, after all, are similar enough for the purpose of the information system. The reverse approach, however, doesn't have this guarantee of necessary and sufficient completeness. When shared meaning is presupposed as the result, differences are simply not allowed to enter the model. Whatever starts as an aggregate can never be properly disaggregated, i.e., differentiated into necessarily partial models. The false assumption of shared meaning explains many failures of information systems. When using 'his' tool a user often discovers that his particular interests and corresponding requirements for sign engineering and/or observation are not supported. Without the paradigm shift toward the sign as *individual* request for compliance, those problems remain

number of different combinations of p elements from a set of n is (n over p), or n!/(n-p)!p!. The exclamation mark refers to permutation. For example, 5! is the permutation of 5. It is the multiplication of the natural numbers from 1 up to 5:1x2x3x4x5=120. The

outcome of 0! is set by definition at 1. All different combinations from n, i.e., any subset, requires addition of the outcomes for every possible value of p. For n=3, the calculation is (3!/2!1!)+(3!/1!2!)+(3!/0!3!))=(3+3+1)=7.

endemic to information systems.

Except for information systems with special requirements for accountability, it is likely that in the overall model mention of specific stakeholders, and their particular interests, is avoided.⁸ However, what always must remain is the essential recognition of differences. And it is perfectly compatible with the interest-driven nature of every stakeholder that he will concede more overlap when he feels his very own interests acknowledged. Thus a traditional paradox quite naturally disappears. For the result of respecting more autonomy by the, say, coordinator *of* the participants often is greater appreciation of his coordination *by* participants.

13.3 enneadic dynamics

It might be raised as an objection against fundamental recognition of, and follow-up on, differences that their number is practically overwhelming. I argue that in such cases denial of real differences undoubtedly frustrates corresponding interests, and thereby stakeholders. When an information system supporting *relevant* requisite variety is thought impossible to develop and/or to maintain, it must be judged an inappropriate tool in the first place.

As I have already suggested in the previous paragraph, an incremental approach to modeling secures overview throughout. For every additional difference is structurally integrated into the overall model *before* undertaking the next modeling step. In practice, at the start of each step it is mainly a matter of convenience to consider the originating stakeholder as occupying a completely separate situation of interests, etcetera. The particular *sequence* of steps of course influences the modeling process *and* the resulting model. It follows from the irreplicability of semiosis (see also my argument in § 1.12).

Taking a difference really seriously may every time result in a partial, or even complete, reorganization of the model. Suppose the behavior of an additional – type of – object is largely similar to that of an object, or object type, identified earlier. The overall model is then kept compact by adding a level of classification, making for example bicycles and airplanes each a kind of vehicles. The metapattern allows, on the other hand, to apply such reorganization

8. This must not be confused with registration of users. For administrative systems it is standard practice for securing an audit trail. The auditor who has previously been involved in modeling an information system may not be explicitly shown in the model.

 For specific models I refer to my books Aspecten en Fasen (1991), Informatiekundige ontwerpleer (1999) and, especially, Metapattern (2001). locally, i.e., as pertaining to a particular situation. So, in one situation, for example bicycles and airplanes are taken as similar while in other situations they may be kept different as before.

In general, metapattern-based models support any focus imaginable. Then some particularly narrow foci might be combined. Or what has earlier been modeled as a high-level focus might be decomposed to make room for more differences at lower levels. What counts as situation, object, and behavior, is all relative. A model should support such flexible interpretation onto focus, background interpretant, and foreground interpretant because it allows for relative positions of signature, context, and intext. Especially the visualization with the metapattern technique supports those enneadic dynamics.

Focusing on a particular signature within the overall model, its intext may be discussed *relative* to its context. In other words, the *ground* of an intext consists of its unequivocal context, to which it is 'connected' through a unique signature. The model-as-sign thus refers to a particular situation as the ground of an particular object's particular behavior.

Any metapattern-based information model may be seen as a networked collection of signatures. Every signature is the starting point for enneadic dynamics based upon the configuration of nodes. Dependent on the process instance of sign use it figures in, a particular node can serve as signature, or as – part of a – context, or as – part of an – intext. Another advantage of a model as a compact collection of, say, multipurpose nodes is that different process instances of sign use (also read: interpretation) most likely don't run in parallel. They 'connect.' Such intellectual interference is beneficial for acquiring overview by any individual stakeholder.

The question is whether complete overview is necessary or even possible. Is it not sufficient when every stakeholder recognizes his own interests in the overall model? Is the rest of the model not essentially irrelevant to him?

Indeed, a stakeholder with little empathy may concentrate on the part, only, of the model which reflects his narrowly defined interests. But a stakeholder with wider interests (also read: a wider horizon for space and time) undoubtedly feels invited to learn, through the overall model, about other stakeholders. Any comments he might raise on contributions other than his own should preferably, at least initially, *not* be taken to convince another contributor to relinquish differences but rather to become even more aware of them. The grounds of argument are, ultimately, individual interests. For they always drive requests of compliance. Instead of the vain pursuit of joint grounds in arguments, participants should supportively challenge each other about their individually *different* grounds. It is only when such differences are clear enough that they can be judged compatible, or incompatible. Of course, those judgments are once more subjective. Power is therefore a key variable of the equa-

tion determining the choice when incompatibility is interpreted to occur.

Again a paradox dissolves. The chances of cooperation are enhanced when stakeholders are motivated to learn *about* each other, rather than from each other. Especially when differences are brought into play, and when they are compatible, the 'system' equals more than the sum of its parts. It is an evident principle practiced by every top coach in team sports.

A stakeholder attempting to learn about one or more other stakeholders will find it useful to abstain from an absolute conceptualization of objects but, rather, treat an object as a – what I call – boundary concept. For one and the same object may show different behaviors, depending on the situation it finds itself in as the subject's objectification. Now the stakeholder is familiar with the situations he himself contributes as engineered contexts to the overall model. How the particular object is known to him is depicted as signature, with its behavior subsequently modeled as intext. The signature may be connected to one or more other signatures, each referring to the *same* object in a *different* situation. He is thereby led to change his focus while starting from what is still familiar and, by definition, corresponding with his interests. From a secure background, ¹⁰ he more easily develops new interests. When less agreement is required among stakeholders, it all the more realistic to expect that they increase an understanding *about* each other.

Actually, the very terminology of stakeholder is well-suited for my anatomy of meaning. Their relationship is primarily characterized by the difference between their stakes, or interests.

13.4 trusted representatives, leadership, etcetera

Every stakeholder may contribute important differences to the overall business information model. However, in complex business processes it is practically impossible to consult all stakeholders. For example, changes in stakeholdership occur. And more and more, information systems cater to open communities. Earlier stakes may dissolve while new stakes are introduced. An example of the latter is government with new regulation. ¹¹ Or tomorrow's,

10. The Russian psychologist and educationalist LEV VYGOTSKY (1896-1934) proposes two areas of intellectual development: actual and near. Actual development is accomplished independently by the learning individual. With proper guidance, however, the individual can learn beyond its actual area,

that is, into his area of near, or future, development (J.F. VOS, 1977).

11. Government could equally well be an example of the former, that is, through deregulation.

say, customer could be still beyond the business horizon today. This raises the problem of selection. Who are the individuals actually consulted for modeling? What criteria apply for their selection?

The traditional approach is to elect representatives of so-called organizational functions. The underlying assumption is that all employees of for example the department of After-sales Support – even a priori – hold shared meaning. It narrows the problem of representation down to finding the person who best articulates their 'meaning.'

This assumption is not valid from the perspective of my anatomy of meaning. A particular stakeholder may not at all feel his interests are best represented by a direct colleague. Without direct influence on the modeling process, he especially needs to *trust* his representative. And it could very well be that an employee doesn't trust especially his colleagues. They often are, after all, also his competitors, prone to thwart his interests. ¹² As far as his interests in the work situation are concerned, more often than not the employee in question will have relationships with persons outside his functional domain that he trusts more. But does one of them qualify for the purpose of the particular modeling exercise?

The predominance of trust emphasizes the political nature of planned change toward getting a new information system operationally used. What politics also suggest, of course, is that the trusted person not always acts in the interests of whoever invested that trust. Again, it is hardly surprising. For every person behaves egoistically, that is, with sometimes regretfully narrow boundaries for empathy. Politicians, say everyone who is in the 'business' of representing other individuals, are no exception.

I don't offer clear-cut proposals for the problem of stakeholder representation. At the present stage I merely point at the risks of uncritically applying functional criteria.

On the concept of trust I remark it actually requires the assumption of differences between persons. Otherwise it doesn't make sense. For suppose persons completely share meaning, why would they also need trust in their relationship? It really doesn't serve any purpose under the assumption of identity.

Because shared meaning doesn't exist, trust helps persons instead to establish and maintain their relationship *despite* their different interests. One person trusts another person when he believes the other will include him through empathy. It is about respecting and taking into account his interests. The degree of trust reflects the horizon of empathy attributed to the other person in the relationship. Taking a simplistic one-dimensional view for an illustra-

tion, the spectrum runs from complete trust to complete distrust.

Trust is an essential ingredient of compliance. Many signs are therefore specifically engineered to, first of all, solicit trust as the compliant reaction to it. When subsequent signs request compliance by the observer that are clearly against his interests, with compliance only promoting the interests of the engineer, it amounts to an abuse of trust. For likewise, it is their mutual differences which participants – aim to – exploit when resorting to power.

Precisely because individuals are different, every individual first of all needs to invest relationships with trust and power to have relationships favoring his own interests, at all. As a consequence of individual differences it is practically inevitable that some of every individual's trusted relationships are abused through power. Such betrayal of confidence makes every person to some extent careful about necessary and sufficient investments in his relationships.

Many people raise their level of distrust when faced with – the situation of a particular – change to their lives. A majority of individuals usually accept change, not so much by the power of rational arguments, but by following – the power they attribute to – leadership. 13

Trust and power are a badly neglected concepts in design, development and use of information systems. Emphasis on shared meaning may have contributed to its neglect. The radical, Schopenhauerean concepts of individuality and subjectivity I have presented as underlying subjective situationism including its anatomy of meaning should draw attention to the importance of trust and power, and of dealing with it responsibly, that is, with integrity. Anyone who invests trust and/or holds power expects it to be respected. Through the mechanisms of trust and power an individual holds expectations about the compliance with his interests by another person. When a participant abuses trust to secure commitment from other participants (also read: stakeholders) he actually applies power.

13.5 respectful application of power

Any person involved in modeling thereby enters into a relationship with others who also hold a stake in the new information system. Most obviously, he entertains a relationship with the system's sponsor.¹⁴

When power – here again viewed simplistically for the sake of illustration – is only attributed a single dimension, the sponsor usually is the more powerful

13. I highly recommend E.M. ROGERS's *Diffusion of Innovations* (1962).

14. I refer to § 7.2 for an informal inventory of types of stakeholders involved in information systems.

participant in the relationship. This asymmetry should never be ignored or even denied. For example, an employee whose contributions to modeling are subsequently opposed or ignored will surely feel his interests are damaged. As a result he is (even) more frustrated than before. When the sponsor doesn't intend to grant whatever influence, it is more respectful to be clear about the reality of the relationship and its power distribution than it is to offer other stakeholders the pretense of control. When an employee can take-or-leave a new information system, without any of his own 'differences' being taken seriously, sooner or later he prefers honesty.

I don't believe a sponsor acting with disregard for the interests of other persons is ultimately serving his own *best* interests. His lack of empathy is certain to make him miss out on opportunities of enlightened team work. Power merges with trust when stakeholders not only mutually recognize constructive differences, but actively promote them.

I loosely conceptualize leadership as precisely such synthesis of power and trust. It regretfully follows that sponsor- or leadership in improving information systems is badly neglected, too. A leader might be characterized as a broker of interests, including of course his own. His diplomatic skills allow him to build relationships others find 'interesting' enough to invest them with their trust, too. A leader also has, say, psychotherapeutic skills. By respecting autonomy of every other individual he provides for their freedom to be self-responsible for the management of expectations about fulfillment of interests. It helps other persons to develop, and solicit compliance with, interests that are as realistic as they can possibly be. Importantly too, the leader facilitates actual interest fulfillment.

It may happen that other stakeholders are unnecessarily apprehensive about one-sided application of power. The sponsor may in fact be offering an invitation to a trustful relationship, but it may be declined. In such circumstances it could help to let one or more, or even all, stakeholders make their contributions anonymously. Especially with an expert facilitator they all do trust, enough stakeholders might be sufficiently challenged to participate safely in their own interest, only. Later, the sponsor can use opportunities for showing that expectations of abuse are misplaced. Eventually a minimum level of trust is required between especially the sponsor and all other stakeholders to successfully design, develop and use an information system in complex business processes.

With some practice, a modeling technique such as the metapattern is simple enough to apply to isolated problems. Often though, and even regardless of the technique used, a relative outsider is necessary to make the modeling process successful for complex problems. For it is usually characteristic of complexity that many stakeholders with a wide range of possibly conflicting interests are involved. An outsider more easily recognizes and respects differences. He thus helps to resolve incompatibilities in an overall model.

A business information model itself only shows the *result* of resolution. With characteristic contributions to the *process* leading up to -a particular version of - the model, the facilitator seeks to bridge especially incompatible differences between behaviors of (other) stakeholders. When he comes to believe they are impossible to bridge he redirects his efforts at undoing one or more stakes in the business process.

A professional facilitator may face some dilemmas. The first is his relationship to the sponsor. Many sponsors can hardly be called enlightened. They often stop at genuinely granting authority to other stakeholders. How far their immediate coordination and control extends usually counts as their measure of success. In fact, such a sponsor is *also* his own obstacle. Real, enduring improvements and subsequent creation of further opportunities normally require an adjustment of how power is considered and applied. Again, a sponsor incapable of reconsidering his authority is his own biggest obstacle for improving information systems. When the facilitator comes up against such resistance, and cannot overcome it as a professional, he probably has no choice but to leave. His attempts so far at changing the climate for relationships between the sponsor and other stakeholders have no doubt damaged his own relationship to the sponsor.

Is withdrawal really the only viable option? Suppose the facilitator recognizes the need for a climate change but also discovers he cannot possibly make constructive contributions. Rather than leaving, he may elect to stay on and conduct the modeling process much to the sponsor's traditional requirements. However, then the result may even lead away from improvements, making it all that much harder to achieve them at some later stage. At least the option of leaving at an early stage doesn't compromise his relationships with stakeholders whose interests are subsequently frustrated during modeling and all that the model leads to. At some time in the future these participants may build upon the trust established through behaving with integrity. Or, are the other stakeholders now even off worse without his assistance? The facilitator will never be certain but has to *act* one way or another.

Another dilemma is that anyone worthy of being called a professional mod-

eler, usually designs better models. But it is precisely *because* he acknowledges differences that he runs the danger of making those invisible in the resulting model. Non-professionals¹⁵ thus remain deprived of important opportunities for focus, and so on. The professional modeler may of course choose to present a less optimal model, relinquishing compactness, abstraction, flexibility, etcetera. The gain is in ready acceptance, the loss in quality.

Actually, I expect this particular dilemma to gradually disappear as business information modeling becomes accepted as a profession in its own right. It allows professionals to draw up their essential models which laymen don't require to comprehend, too. This is well accepted in for example building architecture. The 'model' the architect shows to the sponsor is very different from the 'model' he supplies the constructors with. Actually, the sponsor-oriented model of an information system is traditionally called its prototype. However, the only kind of 'prototype' that is convincing is the finished information system. This indicates the need for a different approach to prototyping. Information technology directly supporting the metapattern technique just might give every stakeholder the realistic-enough impression his interests are recognized in such a manner as to warrant his trust in the operational information system as the finished result. A metapattern-based display suggests enneadic dynamics which is a closer match for any stakeholder's experience with signs

I conclude this paragraph on the professional engaged in business information modeling with a few remarks on his essential characteristics. ¹⁶ When sponsors lack leadership qualities, the professional modeler should be able to compensate for at least some of the qualities necessary for coordination. But what he as professional obviously doesn't occupy is the position of formal organizational power. So he must use it to his advantage. His emphasis on personal autonomy and differences can now be authentic. At the same time, he must manage his relationship with the sponsor who is of course also his principal during the period of the professional modeler's involvement. And as a specialist, the modeler must invest special effort to make himself accountable to *all* stakeholders. ¹⁷

Some persons are different enough from others that, indeed, they qualify as

15. Here of course, I only refer to stakeholders who are not professional information modelers. They may very well be highly professional in other areas.

16. In *Informatiekundige ontwerpleer* (1999) I pay special attention to the professional model-

er's preferred personality traits, as I see them that is. The radical recognition of subjectivity provides the ground for individual accountability.

17. See the second sentence of note 12, above.

professional modelers. However, I believe qualifications for professional success have not yet received the systematically social-psychological attention they deserve. First of all, both aspiring and practicing professionals themselves have a responsibility to assess their suitability. Secondly, the discipline of business information modeling needs repositioning, away from its traditionally technocratic bias. As I argue with this treatise, it is primarily a motivational discipline. Institutions of research and education should design their programs accordingly.

13.7 modeling as scientific discipline

In this treatise I have deconstructed the concept of shared meaning in favor of establishing the concept of the sign that is universally aimed at motivational inducement of compliance. This perspective may also provide inspiration to reflect on, and subsequently reorganize where opportunities are seen, scientific research and education. I argue for recognition of the importance of a radically subjective psychology. The so-called linguistic turn essentially propagates the modernist values of analytical philosophy. The psychoanalytic annex motivational turn of postmodernism must now succeed it. Subjective situationism is my proposal for an adequate ontology.

I have remarked above that scientists and professionals should be less technologically oriented. But it would indeed be counterproductive when they do so at the expense of *understanding* technology. In fact, its *tool* nature can only be properly understood when relevant situations of application are firmly grasped, too. It is the primary challenge to develop information science as a characteristic synthesis of motivational and technical orientations. It requires an eclectic approach.¹⁸

The discipline of business information modeling is conceivable as a high-level situation, as are many other disciplines. Next, business information modeling can 'enlist' whatever other disciplines are deemed relevant for it. Any such other discipline, but now in a *different* situation, is attributed different behavior. It pertains to its application in the situation of business information modeling, only. Figure 13.7.1 sketches this eclectic principle. It includes some examples of 'related' disciplines. For the sake of simplicity I have omitted that the discipline of business information modeling in return influences disciplines from which it borrows and for which it establishes a particular extension. Of course, a healthy scientific climate supports such *continued* cross-fertilization.

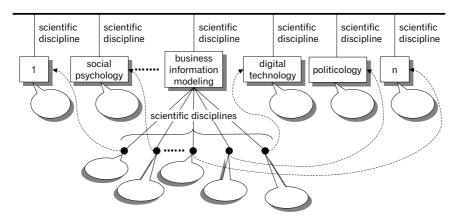


Figure 13.7.1. Eclectic extension of scientific disciplines.

For this treatise I have adopted such an eclectic approach. It involves recurrent choices about the extent of research into another discipline. I propose the practice of *due diligence*. It is a concept I borrow from auditing. The researcher must exert sufficient effort in order for his results to be presented, as a sign, as a sincere request to observers to comply their objectified realities with them.

There should be no constraint on other disciplines investigated to promote development of the particular discipline of business information modeling. ¹⁹ Removal of a priori constraints helps educational institutions to put an essentially interest-oriented curriculum into practice. It of course means taking the interests of students seriously. Can a student (still) be directed in developing the interests as the institution requires? Or should his (further) education be completely tailored to fit the interests he initially brings to the educational institution?

It is clear a particular student feels optimally motivated when his studies fully match his interests. But doesn't a student also need specific direction for *developing* his interests? One way to keep education efficient is promoting the entry of students with similar interests. An educational offering may then be considered suitable for a whole group of students. But at some time during the course of his development the student must be offered an individualized

19. An example of an especially relevant discipline, but one that I have not at all treated explicitly here, is hermeneutics. A synthesis with semiotics under the heading of subjective situationism certainly looks promising.

An overview presents K. MUELLER-VOLLMER (editor) with *The Hermeneutic Reader: Texts of the German Tradition from the Enlightenment to the Present* (1985).

program. Actually, he should optimally offer it to himself, with the educational institution acting mainly as coach.²⁰

Respecting differences and recognizing the essential individuality of students surely have a beneficial influence on research. Innovation and originality should be supported. A student pursuing even what at first looks an unpromising angle deserves benefit of the doubt. Given time, he may after all make a significant contribution. And when unsuccessful, he will also have learned from his efforts. It is in this respect equally necessary to maintain an individualized perspective on the institution. Its employees are individuals with particular interests, too.

As any situational object, business information modeling is only knowable as objectified reality. It is therefore interpreted differently by every individual. Its measure of success as a discipline and profession lies in the ultimately subjective illusion it supports of directed empathy and coordinated behavior. I believe subjective situationism – always fully respecting its essentially speculative nature – can promote different persons focusing on as behaviorally compatible illusions as possible of business information modeling.

appendix

KnitbITs®

An obvious question about the conceptual grounds presented in this treatise is: How practical are they?

It started with highly practical work on information systems. For an answer I first of all quote myself from *Multicontextual paradigm for object orientation*, an essay published as part of my book *Informatiekundige ontwerpleer* (1999, pp 261-262):

As I am a practicing designer, I feel the need for a better theory coming up when faced with a practical problem for which I do not seem to have an adequate conceptual framework (read also: paradigm) available. In this case, it was a problem that I encountered at a publishing house. One of its magazines had a single sport as its subject matter. To strengthen the position of this already dominating magazine, the publisher saw opportunities to bring, what he called, a comprehensive database to the marketplace.

Comprehensive? I asked what he meant. The answer was: "Well, everything."

My first task was to convince the publisher that such a specification is, to put it mildly, somewhat unrealistic. Computers, programs and databases do not work miracles. They never do. "Everything" does not exist with information technology.

But at the same time, I recognized a challenge. I thought I could show how to realize storage and retrieval of widely diversified information. The essential problem, in my view, was the impossibility of a unified structure for all pertinent information. I increased the challenge by broadening my attention from the one sport in question to all sports. By now, of course, I was indeed looking for an information model of "everything."

I decided the problem was so complex that it needed a practical prototype for further research. But, of course, even to develop a prototype, I needed a design. What model of the relevant information would I start with?

Fascinating about all the countless sports and games is that they manifest exemplary variety. And any relevant information system, a database for example, must reflect this variety. So, immediately, it was clear that it is impossible to design a detailed pattern where information

about all such divergent human activities properly fits.

Now, what is important about the previous sentence, is that I connected the adjective detailed to the noun pattern. Indeed, such a detailed a priori pattern is impossible to conceive in the face of overwhelming and ever changing variety.

So, what is the most promising direction to look for a solution to this formidable information problem? I did not find further refinement of the pattern at all attractive. The logical conclusion I made from the infinite variety was that I would end up with specialized information structures for almost every detail.

Where variety is beyond practical enumeration, the only reasonable patterning direction is to go, first of all, from concreteness to abstraction. A more general pattern will hold all relevant details. But holding is not enough. Because specialization has been lost through abstraction (generalization), secondly, the general pattern must allow for a description of its relevant specialization to be included along with the concrete information that is registered. Storage, retrieval and presentation of information should be based on such handling of specializations.

From there I went on to design the metapattern, an approach to conceptual modeling including context and time (WISSE, 2001). It became clear metapattern-based information models cannot be implemented in a straightforward fashion using a relational database management system or a database management system fo

r, say, traditional object orientation.

My company Information Dynamics started creating software to implement metapattern-based information models. The concept of fifth behavioral form (see *Multicontextual paradigm for object orientation*) indicated, surprisingly perhaps, that a relational database management system provides the preferred infrastructure to continue to build from. Additional software structurally supports differentiating a signature's (object's) intext (behavior) according to context (situation). First IVAR DE JONG and later MARTIJN HOUTMAN have worked with Information Dynamics and engineered such information management software. It is called KnitbITs.²

At the time of writing this appendix HOUTMAN continues to make fundamental contributions along the whole range of software engineering on behalf of Information Dynamics. KnitbITs has reached the stage where it can be used for realistically prototyping complex information systems, with distributed processing for multiple users. For an overview of conceptual possibilities I refer to *Metapattern: context and time in information models* (2001). Including more than 170 figures, it provides many modeling examples, covering a wide range of information management.

A general idea of what the actual KnitbITs software encompasses might be gathered from my playful attempt at writing advertising copy. This draft, developed to get an even tighter focus on relevant design issues, is presented

You simply gain time for success.

Simplicity wins you success. But how do you manage when information requirements are highly complex?

You succeed with KnitbITs® for it helps you tie all your information together. Infinitely, even, when you have to.

Pervasively adjustable. Always relevant and cohesive.

Your system development is as simple and speedy as possible with KnitbITs®.

Its flexibility is characteristic for, with due apologies for obscure terminology, semantic modeling.

KnitbIIs® offers practical knowledge technology for integrated, object-oriented information systems in organizations and processes.

Featuring scaled metavariables plus heterogeneous classification networks, including contextual identity for each node.

Simple? Fast? Yes!

KnitblTs[®] secures all relevant information relationships. It leaves you free to concentrate fully on opportunities for innovation.

The KnitblTs[®] application components library sees you off to a swift start.

Your success is complete because KnitbITs® even 'understands' that information is more and more a question of time.

Every aspect – from basic property to recursively configured object,

including processing rules – is modeled with time as a standardized variable.

Everything is ready for both continuity and change.

It has all been taken care of.

That is how you simply gain time for success.

KnitbITs[®]

the original knitware by Information Dynamics

knit $v \dots$, compact, connect, loop, join, tie, unite, weave, web, ...

n (abbr.) knowledge network with integrated time control

KnitbITs® n the original knitware, ... wizkit, K. are wizbits

knitbot n KnitbITs® software agent

knit-picker n KnitbITs® developer

knitty-gritty n KnitbITs® architecture

knitware n digital tool-kit for knits

knitwit n KnitbITs® consultant

KnitbITs® is a tool for development, maintenance and management of custom-made and packaged software.

The target programs run on servers with one or more relational database management systems, and on Windows® clients.

Processing is distributed based on standardized object brokerage. Internet technology is applied throughout.

The availability of variations through time establishes the operational information as a data warehouse, too.

KnitbITs® itself runs on Windows® workstations. It can be used in combination with other tools, with Delphi®, for example.

The KnitblTs® application components library contains associated software components for information systems where especially time is the critical variable.

Authorization, for example. And personnel, organization, and position management. Relationship management. Addresses & geography.

Copy & publication rights, workflow, currencies & exchange rates, financial accounting, travel management, management of technical infrastructure & configurations, work breakdown structures (products and services), etcetera.

Contact us when you want time, and much more that KnitbITs® offers, simply start running for you.

KnitbITs is a registered trademark of Information Dynamics by, Voorburg, The Netherlands.

at the opposite page.

The pseudo-advertising text also briefly illustrates the evolution of KnitblTs into much more than an extension to relational database management. It should be clear that the metapattern's characteristic requirements for structuring information continue to provide a unique focus. However, multiple time and especially multiple contexts have proven to affect the whole infrastructural chain from technical server to technical client, and back.

Recognizing additional opportunities, Information Dynamics has moved ahead to develop KnitbITs as a set of components ranging from data server to – control of – presentation clients. As a matter of policy the latest of Internet technologies are implemented as soon as they are available. It helps to achieve an extraordinary level of integration of *all* aspects. KnitbITs is designed and continually improved to give a preview of what may well become standard variety in information systems. In time, KnitbITs should also have the qualities to grow beyond experiments. It will then support fully operational information systems.

It has been primarily in anticipation of operational applications that I wrote *Metapattern* (2001). However, it was only after I had completed it, and because I had learned again so much from writing on it, that I started to really grasp several issues of an even more fundamentally theoretical nature. So, it has largely been with the aim to understand my own previous practice and, where possible, to improve upon it for the future, that I have developed the theory presented here in *Semiosis & Sign Exchange*. With *Metapattern* as a metahand-book for KnitbITs, this treatise is a metahandbook for applying the modeling approach of the metapattern. Having engineered powerful conceptual grounds, too, makes me confident about what can be practically build with KnitbITs.

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summary (in Dutch)¹

SEMIOSIS & TEKENVERKEER

opbouw van het onderzoek

Wat is communicatie? Als het om mensen gaat, luidt de dagelijkse opvatting dat de ene persoon een betekenis wil overdragen. Daarvoor ontwikkelt zij of hij een teken. De andere persoon neemt dat teken waar en verkrijgt zo dezelfde betekenis. Kortom, het resultaat van geslaagde communicatie is een gemeenschappelijke ofwel identieke betekenis. Maar wat is betekenis eigenlijk? En een teken? Enzovoort.

Het gewenste resultaat, dwz gemeenschappelijke betekenis, blijkt tegelijk de onuitgesproken vóóronderstelling van de naïeve opvatting over communicatie. Daarom tonen theoretische modellen doorgaans onmiddellijk grove abstracties van de tekenontwikkelaar, respectievelijk tekenwaarnemer als de deelnemers aan tekenverkeer.

Onderhavige theorievorming tracht het circulaire verband tussen uitgangspunt en conclusie te doorbreken, althans wat gemeenschappelijke betekenis betreft. Daarom krijgt allereerst *niet* het totale communicatiesysteem met een tekenontwikkelaar èn een tekenwaarnemer aandacht, maar wat hier de *individuele tekengebruiker* heet. Daaraan in deel I gewijd.

Elk individu is altijd al ... individueel actief met tekens. Zulke eigen, overwegend interne tekenactiviteit heet semiosis. Dat betreft dynamiek van het kenvermogen. Daaruit volgt dat zelfs een gedetailleerde semiotische analyse het individuele perspectief nog onvoldoende schetst. Want het kenvermogen is op zijn beurt 'slechts' een instrument van het individu. Waarop haar of zijn gedrag zich richt is in essentie vóórintellectueel bepaald. Voor dat begin van

1. For a doctoral thesis (dissertation) submitted to a Dutch university but written in a for-

eign language, the author is required to include a summary in the Dutch language.

gedragcausaliteit is hier de wil gepostuleerd. (Dit leidt uiteraard opnieuw tot een cirkelredenering. Waar het om gaat, is dat het een veel ruimere cirkel is waarbinnen nu vruchtbaardere verklaringen maakbaar zijn.)

Het uitgebreide model van de individuele tekengebruiker uit deel I vormt de achtergrond voor het model dat in deel II volgt. Daar is pas het *tekenverkeer* tussen gebruikers aan de orde. Dankzij het individuele accent blijkt het verkeer verrassend eenvoudig onder één noemer te vangen: met haar of zijn externe tekengedrag wil de ene persoon het gedrag van de andere persoon ten gunste van zichzelf beïnvloeden.

wat vooraf ging

Elders (zie literatuuropgave) ontwikkelde ik voor het conceptueel ontwerp van de informatievoorziening een benadering waarmee gedifferentieerde gedragpatronen van een object formeel eenduidig modelleerbaar zijn. Dan valt de identiteit van zo'n object uiteen in evenzovele deelidentiteiten als er variaties in zijn gedrag – herkend – zijn. Elke deelidentiteit past in een situatie waarin het object dat karakteristieke gedrag vertoont. De deelidentiteit schakelt voor een object als het ware tussen een bepaalde situatie en zijn – van het object, dus – bijbehorend gedrag. Zo is een conceptueel informatiemodel opgebouwd door toepassing van drie formele begrippen: 1. knooppunt (voor deelidentiteit van object), 2. context (voor relevante situatie) en 3. intext (voor bijbehorend objectgedrag).

De conceptuele modelleerbenadering, die ik *metapatroon* noem, is multicontextueel omdat één en hetzelfde object kan bestaan in diverse situaties. Een concreet model toont unieke knooppunten binnen evenzovele contexten. De formele modelbegrippen zijn voorts recursief. Het totale, concrete model is een netwerk van knooppunten. Naar keuze geldt één bepaald knooppunt als relevante deelidentiteit. Vervolgens vormt de ene verzameling gerelateerde knooppunten haar context, terwijl de andere gerelateerde knooppuntenverzameling haar corresponderende intext is.

van triade naar enneade

Aan dit perspectief van het metapatroon ontleende ik tijdens mijn studie van de tekenleer (semiotiek) van PEIRCE (1839-1914) de hypothese dat zijn triade – bestaande uit teken, object en interpretant – weliswaar uit enkele van de nodige begrippen opgebouwd is, maar niet uit voldoende daarvan. Zijn vage aanduiding van *grond* heb ik op elk hoekpunt van de oorspronkelijke triade van

toepassing verklaard. De grond van een object is dan een situatie, van een teken is dat een context, terwijl de grond van een voorgrondinterpretant een achtergrondinterpretant is. Zo ontstaat een hexade.

Met het metapatroon had ik voor het model (lees ook algemeen: teken) echter al drie nadere begrippen – teken, context en intext – ipv de twee – teken en context – die de verbijzondering van PEIRCE's grond opgeleverd had. Wanneer alledrie Peirceaanse hoekpunten consequent verdrievoudigd zijn, is het resultaat zelfs een enneade (zie figuur 4.5.2). Met aangepaste terminologie luiden de verhoudingen voor semiosis dan:

situatie: object: gedrag

=

context: signatuur: intext

=

achtergrondinterpretant: focus: voorgrondinterpretant.

postmoderne ontologie

Met klem suggereert PEIRCE dat zijn triade niet-ontleedbaar is. Ik beschouw de aanname van die persistente samenhang als de belangrijkste sleutel tot inzicht. Vervolgens maakt de uitbreiding van triade naar enneade zelfs duidelijker herkenbaar wat het radicale verbod op reductie inhoudt: een semiotiekals-ontologie danwel -als-metafysica die realistische (lees ook: empirische), communicatieve en idealistische (lees ook: cognitieve) werkelijkheidsbenaderingen *onlosmakelijk* verbindt.

Negen ipv drie verklarende termen bieden uiteraard navenant extra mogelijkheden om complexiteit te duiden. Wanneer gedragingen verschillen is het niet langer nodig om verschillende objecten te definiëren. Dankzij verschillende situaties is er verzoening mogelijk van het totale object met zijn gedragvariëteit. Het kernidee is om niet zozeer een object te decomponeren, maar zijn omringende wereld. Via uitsplitsing naar situaties blijft de objectdecompositie in eerste aanleg beperkt tot unieke deelidentiteiten, die vervolgens op hun beurt eenduidige gedragdifferentiatie toestaan.

Als karakteristiek voor de postmoderne samenleving geldt ondermeer haar als onoverzichtelijk ervaren pluriformiteit. Dankzij de semiotische enneade valt zulke variëteit adequaat samenhangend te modelleren. De oorspronkelijke triade is daarvoor inderdaad nog onvolledig.

tekens van irrationaliteit

Hoewel de enneade tevens het subjectieve kenvermogen tot het ontologisch kader rekent, sluit dat op zichzelf nog niet uit dat verschillende individuen toch een gemeenschappelijke, rationele betekenis hebben. De finale veronderstelling tegen gemeenschappelijke betekenis levert SCHOPENHAUER (1788-1860). In de eerste plaats ziet hij de rede, of ratio, slechts als gedeelte van het kenvermogen. Ten tweede functioneert het kenvermogen niet als onafhankelijk stuurmiddel van het organisme waarin het zetelt. De rede is allerminst zgn vrije wil. Integendeel, een individueel organisme is een unieke objectificatie van de wil als universeel, vóórintellectueel beginsel. Dat maakt een subjectief kenvermogen tot àfhankelijk gereedschap van zo'n geïndividualiseerde wil, waarbij het organisme met zijn gedrag nooit aan zijn wil als principiële irrationaliteit kan ontkomen. (De tegenstelling erfelijkheid/opvoeding duidt een vergelijkbaar uitgangspunt aan; er komt nogeens bij dat ook het grootste effect van opvoeding buiten bereik van de rede is danwel raakt.) Daar ook een teken door gedrag wordt voortgebracht, is het altijd in enige mate netzo principieel irrationeel.

verzoek tot inschikkelijkheid

Juist erkenning dat elk individu een unieke en onredelijke wil is, die ondermeer bepaalt wat zijn tekens zijn, leidt opmerkelijk genoeg tot een eenvoudig model van tekenverkeer. Het producerende individu tracht altijd via een concreet teken één of meer beoogde consumenten met hun gedrag naar zijn wil te richten. Elk teken is daarom een verzoek tot inschikkelijkheid. Deze aanduiding is overigens een mijns inziens gebrekkige vertaling uit het Engels. Dat een teken een request for compliance is vind ik mijn, precies, verzoek aan de lezer tot diens inschikkelijkheid scherper aangeven.

Tekens zijn een vorm van causaliteit, naast de vormen van prikkel en brute fysica. Die andere vormen kunnen eveneens ingezet worden om inschikkelijkheid te verwerven; vaak is een teken zowel doeltreffender als doelmatiger.

De hypothese van inschikkelijkheidsbevordering ontmaskert de poging om objectieve waarheid te benoemen en delen. Dus ook wat analytisch een propositie heet, drukt niets meer of minder uit dan wat de tekenproducent graag als waarheid aanvaard ziet. Waarom? Simpel omdat het zijn interesses dient, indien andere individuen hun gedrag naar zijn subjectieve, (groten)deels zelfs irrationele wereldbeeld schikken.

grondwerk

Rondom elk teken zijn individuele belangen in het spel. Het tekenverkeer is met politiek doordrenkt. Dat geldt netzogoed voor tekenverkeer gericht op conceptuele informatiemodellering. Dankzij de enneade zijn rijkere modellen haalbaar, vooral omdat objectgedrag principieel situationeel gedacht is. Maar daar hoort het besef bij dat ook zo'n model altijd een verzoek tot inschikkelijkheid is. Erkenning van dat politieke karakter van communicatie vergroot de kwaliteit van praktische informatievoorziening.

In het algemeen opent de semiotische enneade, die duurzaam wortelt in de Schopenhauereaanse wil als ultieme *grond*, voor wetenschappelijk onderzoek over een breed front van (inter)disciplines zicht op vruchtbare onderwerpen en synthese. Ik heb met *Semiosis & Sign Exchange* geprobeerd daarvoor diepgravend conceptueel grondwerk uit te voeren.

postscript

This treatise started as a dissertation. I owe it to Rik Maes, Professor of Information Management at the University of Amsterdam, that I completed it as a dissertation, too.

With an open mind, sense of humor and lightning (re)action speed Rik Maes genuinely welcomes conceptual innovation. I am grateful for his personal, scientific and procedural support. He has dealt gracefully with my work, offering thoughtful suggestions for improvement. He acknowledges the value of an increasingly general coverage of conceptual grounds. Then, a wider orientation naturally (also) benefits the special case of business information modeling. I greatly appreciate the opportunity for making contributions to the design and clarification of a system of fundamental concepts through the integrated research program PrimaVera under the directorship of Rik Maes.

At a crucial stage Professor J. van der Gaag, Dean of the Faculty of Economics and Econometrics (to which the Department of Information Management belongs) helped create the conditions favorable for me to continue my dissertation work with Rik Maes at the University of Amsterdam.

I also extend my special gratitude to all members of the dissertation committee. They have invested valuable attention and time in evaluating this treatise.

And friends have helped. I first of all mention Jan van Heijst. Over the years I have often been urged to take up a dissertation. But he actually did something. His first introduction got me started, his second kept me going.

My friend Hans Möller has been there, again. He has read drafts. He provided company when breaking conceptual ground made me all the more aware of the essential loneliness of thinking in a different 'metapattern.' He thought along, and really helped.

Bas Brussaard stimulated my philosophical interest when, mid 1970s, I studied his program in information management at the Delft University of Technology. Now a Professor Emeritus and also retired as the highest-ranked official for information management policy with the government of the Netherlands, he has scrutinized the finished manuscript of this treatise from his extraordinary range of theoretical annex practical knowledge and experience. During our subsequent discussions my arguments usually held up against his analytically strict but always honest and personally respectful analysis. I feel encouraged to continue working on, and from, subjective situationism as an axiomatic system. So, I am once again grateful to Bas Brussaard.

As with several of my earlier publications, Jan Erik Fokke undertook his enthusiastic, professional effort for the book's graphic appearance.

Renate understands my interest in fundamental design. There are many reasons I am happy this treatise is finished, though. One reflects an enduring interest which is sharing more situations of our lives.

about the author

This treatise emphatically puts forward the hypothesis that *every* sign is a request for compliance. Then, of course, it is odd that a separate section titled *About the author* is included. For does not that very hypothesis imply that *everything* I have 'sign'ed to constitute this text and figures is already very much about myself? When you agree, please read the section title, above, as *More about myself*.

I (1952) am the founder and president of Information Dynamics by (Voorburg, the Netherlands), an independent company involved in research & development of complex information systems. Professionally I act as a consultant to organizations in both the public and private sector.

Through prototypes developed with its proprietary tool KnitbITs[®], Information Dynamics assists principals to gain awareness of systemic changes – and strategic advantages – that might result from applying the so-called metapattern approach to conceptual information modeling. My book *Metapattern: context and time in information models* (Addison-Wesley, 2001) is mainly oriented at practitioners. This treatise digs beyond the metapattern's practical applications to explain its theoretical grounds. My earlier publications, in Dutch, range from books to articles and monthly columns.

I studied mathematics and information management at the Department of Mathematics of Delft University of Technology. Before starting Information Dynamics in 1986 I was an employee at a variety of organizations including Smit International Ocean Towage & Salvage, Asian Development Bank, Royal Philips Electronics, and Ministry of Foreign Affairs (the Netherlands).

See also www.wisse.cc.

With information services pervading society, individuals require productive grounds to deal responsibly with design problems of everincreasing complexity and variety. The conceptual grounds developed in this treatise are primarily intended for application at business information modeling. They may also be profitably applied along a wider range. For subjective situationism essentially is a general theory about how individual behaviors act in communicative relationships. The synthesis explaining variety is not a paradox. It offers a consistent perspective on multiplicity, necessarily resulting from a multidisciplinary approach. Elements from separate traditions are merged, especially the semiotic pragmatism of Charles S. Peirce and the world-as-will-and-interpretation of Arthur Schopenhauer.

"I don't have grandchildren yet. Suppose I do and they grow up. Then Semiosis & Sign Exchange is the one book from me I hope they and their friends will someday read. It just might help them understand, and empathically create, a world that surely is even far more complex than I can imagine today."

You can contact Pieter Wisse at pieter@wisse.cc. See page 467, inside, for more information about the author.



Pieter Wisse

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