



LUND UNIVERSITY

Meaning making from life to language

The Semiotic Hierarchy and phenomenology

Zlatev, Jordan

Published in:
Cognitive Semiotics

DOI:
[10.1515/cogsem-2018-0001](https://doi.org/10.1515/cogsem-2018-0001)

2018

Document Version:
Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):

Zlatev, J. (2018). Meaning making from life to language: The Semiotic Hierarchy and phenomenology. *Cognitive Semiotics*, 11(1), Article 20180001. <https://doi.org/10.1515/cogsem-2018-0001>

Total number of authors:
1

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Jordan Zlatev¹

Meaning making from life to language: The Semiotic Hierarchy and phenomenology

¹ Lund University, Lund, Sweden, E-mail: jordan.zlatev@semiotik.lu.se**Abstract:**

The paper rethinks a proposal for a unified cognitive semiotic framework, *The Semiotic Hierarchy*, in explicitly phenomenological terms, following above all the work of Merleau-Ponty. The main changes to the earlier formulation of the theory are the following. First, the claim that a general concept of meaning can be understood as the value-based relationship between the subject and the world is shown to correspond to the most fundamental concept of phenomenology: *intentionality*, understood as “openness to the world.” Second, the rather strict nature of the original hierarchy of meaning levels made the model rather static and one-directional, thus resembling an old-fashioned *scala naturae*. Reformulating the relationship between the levels in terms of the dynamical notion of *Fundierung* avoids this pitfall. Third, the phenomenological analysis allows, somewhat paradoxically, both a greater number of levels (*life, subjectivity, intersubjectivity, sign function, language*) and less discrete borders between these. Fourth, there is an intimate relation between (levels and kinds of) intentionality and normativity, making the normativity of language a special case. Fifth, to each level of meaning corresponds a dialectics of spontaneity and sedimentation, with corresponding normative structures (e.g., habits, emotions, conventions, signs and grammar) both emerging from and constraining, but not determining, subject-world interactions. Sixth and finally, the analysis follows the basic phenomenological principle to examine the phenomena without theoretical preconceptions, and without premature explanations. This implies a focus on human experience, even when dealing with the “biological” level of meaning, with the possibility of extending the analysis to non-human subjects through empathy. The intention is that this phenomenologically interpreted version of the Semiotic Hierarchy may serve as a useful tool against any kind of meaning reductionism, whether biological, mental, social or linguistic.

Keywords: body schema, intentionality, *Fundierung*, habits, intersubjectivity, language, Merleau-Ponty, normativity, sedimentation, subjectivity, sign function

DOI: 10.1515/cogsem-2018-0001

1 Introduction

In this special issue devoted to different kinds of meaning making and the relations between them, I would like to return to a theoretical proposal that aimed both to differentiate and to connect different kinds of meaning in a unified cognitive-semiotic framework: *The Semiotic Hierarchy* (Zlatev 2009a, 2009b). The goal of the present article is to elaborate, and in part rethink, the theory in explicitly phenomenological terms and, above all, in terms of the *existential phenomenology* of Merleau-Ponty (1962, 1963).¹ While there were inspirations from phenomenology in earlier formulations of the theory, my treatment of key notions like consciousness, intentionality, and normativity were not fully systematic. My intention is to address the following issues with the original proposal with the help of a more sensitive phenomenological analysis.

The first issue concerns the claim that the multifaceted concept of *meaning* can be understood as the value-based relationship between a subject and the world of experience. In Section 2, I propose that this corresponds closely, if not completely, to one of the central concepts of phenomenology: *intentionality*, the “directional shape of experience” (Ihde 2012: 24) or “the necessary interconnectedness of experience and the world,” (Carman 2005: 68) to quote two sufficiently general characterizations. Further, following Merleau-Ponty and other phenomenologists, including the later Husserl (Moran 2005), it is important to emphasise that the subject is not a pre-given transcendental ego, rising above the world, but an embodied self that is constituted through this interconnectedness with the world. This, in effect, turns the “arrow” of meaning/intentionality into a *bidirectional* relation, albeit an asymmetric one (Zahavi 2003a).

The second issue is the rather strict implicational nature of the hierarchy of four levels of meaning defined by different kinds of *value systems* (biological, phenomenal, signitive, and linguistic), where higher levels imply

Jordan Zlatev is the corresponding author.

© 2018 Walter de Gruyter GmbH, Berlin/Boston.

the pre-existence of lower ones but not vice-versa. This made the model rather static and one-directional, resembling an old-fashioned *scala naturae*, a ladder of clearly distinct levels of meaning on which various creatures may be placed, with Man (or Language) on top. Reformulating the relationship between the levels in terms of the dynamical notion of *Fundierung*, “a kind of circular or reciprocal relation that can play itself on many levels” (Nordlander 2011: 134), helps to avoid this pitfall. The phenomenological concept of *sedimentation* is here essential, as proposed in Section 3.

The third issue concerns the specific definitions of the different levels of meaning and their interrelation. The phenomenological analysis offered here allows, somewhat paradoxically, both a greater number of levels or, perhaps more appropriately, *layers* (though I will use the terms interchangeably) and less discrete borders between these. For one thing, this allows the conflation of intersubjectivity and sign use to be untangled as there are social meanings such as joint actions, types/categories, and even conventions that are not *signs*, strictly speaking (Andr n, 2010; Sonesson, 2015). Another problem was the attempt to define the novelty of language in terms of normativity *per se*, while it is rather a particular kind of norms that are characteristic of language. Section 4 thus presents the reformulated Semiotic Hierarchy as five layers of meaning, with higher layers both emerging from and transcending (in line with the dialectics of *Fundierung*) lower ones.²

The fourth point, perhaps the most important one methodologically, is to follow the basic phenomenological principle to “look at” and examine the phenomena without theoretical preconceptions and without any premature explanations that go beyond experience itself. In other words, “evidence must be ‘intuitabile,’ which means, in its proper context, that what is given or accepted as evidence must be actually experienceable within the limits of, and related to, the human experienter” (Ihde 2012: 9).³ This implies that the investigation should depart from our *human* experience, even when dealing with the “biological” level of meaning, with the possibility of extending the analysis to non-human subjects through empathy. Unlike in the original proposal, “third-person” evidence deriving from evolutionary theory and neuroscience will therefore not be considered here, even though it may be integrated in more encompassing cognitive semiotic frameworks such as those of Sonesson (2007) and Thompson (2007).

Finally, Section 5 summarises the main conclusions and returns to the fundamental motivation behind the Semiotic Hierarchy and arguably behind cognitive semiotics in general; namely, to counter the tendency to fragment our lives and worlds into incommensurable parts: physical and mental, biological and cultural, the truths of science and those of direct experience, etc. The question to answer here is how the present, more phenomenologically informed version of the Semiotic Hierarchy contributes to the project of “defragmenting” our understanding of meaning making.

2 Meaning, intentionality, and normativity

The earlier formulation of the Semiotic Hierarchy included a general definition of meaning in relational, value-based terms. This was expressed as follows, and schematically illustrated in Figure 1.

The meaning of a given phenomenon, for a given subject, will be determined by the “type” of world [...] in which both are embedded AND the value of the phenomenon for the subject. If either *p* falls “outside” *W*, or its value for *S* is nil, *p* will be meaningless for *S*. (Zlatev 2009b: 180–181)

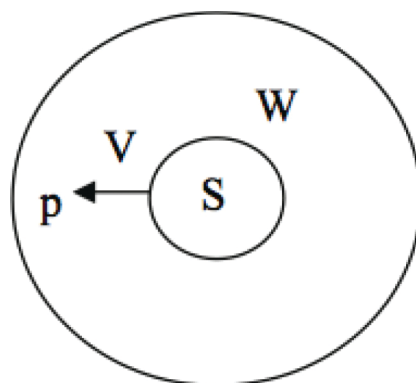


Figure 1: Meaning as value-based subject-phenomenon relation (from Zlatev 2009b: Figure 2).

For example, sound waves beyond a certain frequency level are not part of the experiential world of human beings and are hence meaningless, at least prior to the invention of technology that would allow us to “translate” them into something that is indeed perceivable. Further, something that may be perceivable *per se*

but without any influence on the life of the subject, such as one of the multiple spots of dust in my room, will also be without value and hence without meaning – at least until they accumulate and I need to clean up the room. Such a conception of meaning as a fundamentally relational property has multiple antecedents, such as the interaction of an organism with its *Umwelt* (von Uexkuell 1982) or the related notion of *autopoiesis*, the fundamental property of the living giving rise to “emergent, parallel, and distributed dynamics [...] inseparable from the constitution of a world, which is none other than the surplus of meaning and intentions carried by situated behavior” (Varela 1997).

However, this conception of meaning may even more appropriately be identified with the phenomenological concept of *intentionality*. The latter is to be understood neither as the notion of “purpose” from psychology nor with the notion of “aboutness” of representations in analytical philosophy (Searle 1983). More adequately, it may be understood as “the conscious relation we have to an object” (Sokolowski 2000: 8) or “the pointing-beyond itself proper of consciousness” (Thompson 2007: 22). When I perceive something (e.g., see a light in the distance, hear a dog barking), remember a conversation, dream of a Nobel prize, etc., my consciousness flies like an arrow through intentional acts (technically, *noesis*) directed at this particular object (technically, *noema*): the light, the barking dog, the conversation, the Nobel prize. But this understanding of intentionality is still not broad enough, as there are experiences such as bodily sensations (e.g., the pain in my back), moods (e.g., anxiety), and absorbed activities (e.g., love making), where we do not experience such object-directedness. Some would therefore call such experiences “non-intentional,” in both the psychological and phenomenological senses of the word. And yet, in a broader sense, such experiences also “point beyond” themselves to the world around us, as they affect how we perceive things and situations, how we react, and how we exist in the world more generally. Thus, crediting Husserl (and implicitly Heidegger), Merleau-Ponty writes of the crucial importance of “the discovery, beneath the intentionality of representations, of a deeper intentionality, which others have called *existence*” (1962: 140). This runs deeper than both the intentionality of representations (such as those of language), and the intentionality of perceptual acts that precedes it:

We found beneath the intentionality of acts, or thetic intentionality, another kind which is the condition of the former’s possibility: namely an *operative intentionality* already at work before any positing or any judgement. (*Ibid.*: 488)

Further, while intentionality (and phenomenology as such) typically deals with *conscious* experience, *operative intentionality*, often called “motor intentionality” (*intentionnalité motorice*) by Merleau-Ponty, is in several respects a pre-conscious access to the world, as will be discussed in Section 4.1. In sum, following the analyses of the role of the living/lived body by the late Husserl, Merleau-Ponty and other existential phenomenologists generalized the phenomenological notion of intentionality from object-directedness to a general “openness to the world” (*l’ouverture au monde*), which arguably serves as the source of all meaning making as well as the relative autonomy or freedom of the subject.⁴

What I propose here is that such a concept of intentionality is in fact identical with the subject-world, value-laden notion of meaning in the Semiotic Hierarchy, functioning on multiple levels: from the pre-conscious level of motor intentionality to that of linguistic and other socially constructed representations. However, this implies that the relationship between the subject and the world is in fact *bidirectional*, so that it is not only the subject (or even a plurality of subjects) who constitutes (in the sense of “bring to awareness, to present, or to disclose” [Thompson 2007: 15], rather than in the sense of “construct”) the objects and the world in which he or she lives, but that the subject is importantly *co-constituted* in the process. As formulated forcefully by Merleau-Ponty:

The world is inseparable from the subject, but from a subject which is nothing but a project of the world, and the subject is inseparable from the world, but from a world which the subject itself projects. The subject is a being-in-the-world [*être au monde*]. (Merleau-Ponty 1962: 499–500)

Leder (1990: 34) makes a somewhat analogous point in analysing the specifically bodily interaction between the embodied subject and the world: “incorporation is the result of a rich dialectic in which the world transforms my body, even as my body transforms the world.” Schematically, this calls for the revision of Figure 1 into Figure 2, where the converse world-to-subject relation is depicted.

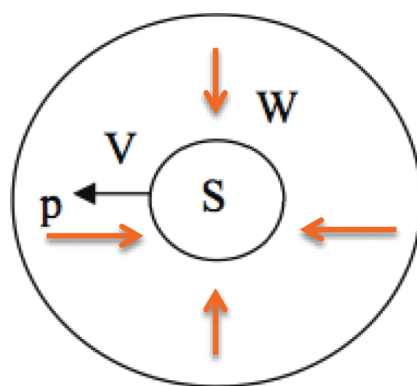


Figure 2: Meaning as intentionality, understood fundamentally as existence (being in the world), with subject and world coupled in co-constitution.

Yet a fundamental asymmetry between subject and world remains, as it is the *value systems* or, as I propose here using a general understanding of the notion, the *norms* incorporated by the subject that serve as standards according to which specific situations are assessed for risk and opportunity, with more or less appropriate actions chosen. As we will see in Section 4, normative structures range from body schema and habits that govern movement through emotions and social conventions to the norms that to a considerable extent (though not completely) determine the various kinds of meanings involved in linguistic communication. Again, it was Merleau-Ponty who was one of the first to argue for such an encompassing, and yet layered, concept of normativity in his early book *The Structure of Behaviour*: “Thus each organism, in the presence of a given milieu, has its optimal conditions of activity and its proper manner of realizing equilibrium,” (Merleau-Ponty 1963: 148) leading it to modify “its milieu according to *the internal norms* of its activity” (*ibid.*: 153, my emphasis). This means that there is an intimate relationship between the broad notion of intentionality, which as we saw above is the same as the relational concept of meaning endorsed by the Semiotic Hierarchy, and the concept of normativity, also generally construed. As Carman (2005: 70, my emphasis) writes with respect to one of the most fundamental kinds of intentionality, “what makes motor intentionality worthy of its name is precisely its normativity, that is, the *felt rightness and wrongness* of the different postures and positions we unthinkingly assume and adjust throughout our waking (and sleeping) lives.”

It is at this point likely to receive objections that by construing meaning/intentionality and normatively so broadly, we are glossing over important distinctions: between pre-conscious and conscious, between individual and social, between pre-linguistic and linguistic, etc. These are valid concerns, but it is possible to address them with the other main feature of the Semiotic Hierarchy: *a level-based stratification of meaning*, allowing for both continuity and (a degree of) discontinuity between the levels, a dialectics that we turn to in the following section.

3 The meaning levels and the *Fundierung* relation

In the original proposal of a hierarchical relationship between meaning (making) at the levels of life, consciousness, sign use, and language (Zlatev 2009a, 2009b), I emphasised first that life brings in ontologically new properties in comparison to inanimate nature – namely autopoiesis and value. Further, each higher level does likewise. With consciousness come subjectivity and “qualia;” with sign use emerges a qualitatively new kind of meaning making based on conscious differentiation between sign-expressions and intentional objects; and with language comes a qualitatively new kind of sign use based on normativity and systematicity. As such distinctions may be considered “important enough to be called ‘ontological’” in the words of Itkonen (2008: 290) and since to each level corresponds a particular “type of world” as I phrased it myself (even though with scare quotes), the hierarchy was also envisioned in *ontological* terms: as a ladder of worlds, along which macro-evolution climbs, not unlike the tripartite ontology of Popper (1979, 1992).⁵

There are, however, two difficulties with such an approach. First, emphasizing ontological differences makes the gaps between the levels unnecessarily large, and potentially unbridgeable – as in the proverbial “mind-body problem” inherited from Descartes. Second, as I admitted in the original paper: “from the standpoint of phenomenology [...] such a division of ‘worlds’ is unsatisfactory, since we live not in three worlds, but in a single human Lifeworld” (Zlatev 2009b: 173). Still, emphasizing the differences between the levels of subject-world meaning constitution attracts criticism that the model represents a throw-back to the medieval *scala naturae* (“ladder of being,” more popularly known as the “great chain of being”) with plants at the bottom, God at the

top, and Man in between, but naturally closer to the top (Lovejoy 1936), with a popular visual representation shown in Figure 3.

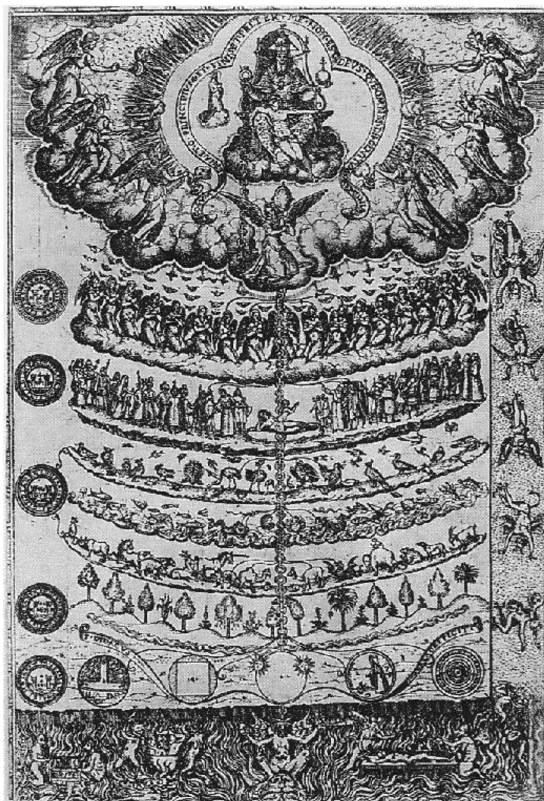


Figure 3: The *scala naturae* in *Retorica Christiana* of Didacus Valdes, 1579. (image from the public domain).

Given the stasis and cultural-historical idiosyncrasy of the *scala naturae*, it should rather be seen as an antithesis of the Semiotic Hierarchy. And yet it is possible to discern a certain affinity between the latter and the “ladder” of Aristotle (1986) in *De Anima*, with its gradual hierarchy between the “souls” of plants, animals, and human beings not in terms of different *substances* (which would imply vitalism and mind-body dualism), but in terms of different *forms*, i.e., the ways in which bodies are organized. Aristotle’s emphasis on different forms/organizations was arguably an influence on Merleau-Ponty, who in *The Structure of Behaviour* distinguishes schematically between the three “orders” of physical, living, and mental/cultural. More important than the particular divisions is the way he understood the nature of these levels: not as “three orders of reality or three sorts of beings, but as three *planes of signification*” (Merleau-Ponty 1963: 201, my emphasis). The forms, or structures, that characterise each plane/level are to be understood in terms of subject-world interaction: they are neither in the mind nor in a mind-independent environment. And crucially, the relations between levels are conceived of in terms of a dynamic, two-way relationship where the lower level both provides the ground for the higher and is “sublimated” by it. In *Phenomenology of Perception*, he describes the relation between levels as:

[...] the two-way relationship that phenomenology has called *Fundierung*: the founding term, or originator [...] is primary in the sense that the originated is presented as a determinate or explicit form of the originator, [...] and yet the originator is not primary in the empiricist sense and the originated is not simply derived from it, since it is through the originated that the originator is made manifest. (1962: 458)

Using a number of different metaphors, Merleau-Ponty describes a higher level as the “soul” compared to the “body” of the lower, as a wider concentric circle that extends but also incorporates the inner circle of the lower. It transcends it at the same time as retaining it as an underlying substrate. In short, “the *Fundierung* is intended to describe a state of affairs that is neither a dualism nor a reductive monism, but otherness in relation” (Simpson 2014: 16–17). As such, it is itself irreducible to other relations like causation and should be considered a fundamental “logical concept” (Rota 1989).⁶ Merleau-Ponty was not so much interested in specifying these planes of signification in a single framework, but rather applied this way of thinking to the resolution of different philosophical puzzles: reconciling materiality and ideality, intercorporeality and culture, perception and language. In the formulations of the levels of meaning in the following section, I take many of these insights aboard while at the same time I more or less retain the four levels of the original Semiotic Hierarchy – adding, however, a

crucial “missing link” in the middle: intersubjectivity, which also implies redefining the nature and borders of the adjacent levels: *consciousness* and *sign use* (see footnote 2).

One more conceptual point needs to be made before we turn to this. Alongside the hierarchy of meaning levels interlinked by the relation of *Fundierung*, we must also acknowledge a parallel dialectic relationship between relatively *stable* normative structures (as pointed out in Section 2) and more *dynamic* processes (meaning making acts), where the former result from the latter and at the same time constrain them without determination. This relationship, considered on a more individual level by Merleau-Ponty (1962) and on a more inter-generational, historical level by Husserl in *The Origin of Geometry*, is the celebrated dialectics of spontaneous activity and the *sedimentation* of structures that arise through such activity:

The world-structure, with its two stages of sedimentation and spontaneity is at the core of consciousness [...] we must recognize a sort of sedimentation of our life: an attitude towards the world, when it has received frequent confirmation, acquires a favoured status for us. Yet since freedom does not tolerate any motive in its path, my habitual being in the world is at each moment equally precarious. (*Ibid.*: 150, 513)

With respect to language, the dialectics of sedimentation and spontaneity corresponds to those between language as *langue* and as *parole* (Saussure 1960 [1916]) and between *semantics* and *pragmatics* (Itkonen 2008). But given the controversial and ambiguous nature of these dichotomies, I will attempt to explicate this dialectics in terms of the relatively unknown distinction between *le langage parlé* (“the spoken word”) and *le langage parlant* “the speaking word,” of Merleau-Ponty (1964b) in Section 4.5.

4 The Semiotic Hierarchy, rethought phenomenologically

In the present version of the Semiotic Hierarchy, I distinguish between five different “planes of signification” or levels of meaning: life, subjectivity, intersubjectivity, sign function, and language, ordered as shown in Figure 4. Following the reasoning of the previous two sections, the task is here to describe these as standing in a relationship of *Fundierung*, with lower levels prefiguring the higher ones and higher ones consolidating and sublimating the lower ones, but without breaking away from them. Each one of these five levels of meaning (making) have characteristic forms of intentionality and normativity. In addition, on each level, there is an “internal” dialectics between the stabilizing norms that govern the interactions with the world, and these interactions themselves. In order to highlight the point that the cycle of sedimentation and spontaneity runs in each level, it is placed alongside the five levels in Figure 4. Yet, it is not to be seen as independent from the hierarchy itself as it is at least in part through this dialectics that higher layers of meaning emerge.



Figure 4: The five levels of meaning standing in a *Fundierung* relation, with the dialectics of sedimentation and spontaneity operating within each level.

In the remainder in this section, the five levels of meaning will be described with focus on their typical forms of intentionality – which characteristically do not draw sharp borders between levels – and the way in which the normative structures of each level interact with specific acts of meaning making.

4.1 Life: operative intentionality

The basic level of meaning is that of life itself, which inherently aims at its own preservation and continuation, in opposition to otherness, as emphasized by Jonas (1968: 243): “Organic individuality is achieved in the face of otherness, as its ever challenged goal, and is thus teleological.” Given our nature as corporal beings, this is a level that we share with all living creatures and one that runs even deeper than conscious experience. At first glance, it may therefore seem inaccessible to a phenomenological analysis. Yet, given a sufficiently sensitive

attention to the *margins* of consciousness and to the way experiences are given to us, we can nevertheless discern its underwater currents.⁷

After having argued for the need to ground certain knowledge in the operations of transcendental consciousness and a bracketing of the world (especially in *Logical Investigations* and the first volume of *Ideas for a Pure Phenomenology*), Husserl acknowledged in his later work a level of experience that is fundamentally tied to the living body (Husserl 2001). Using notions such as *drive-intentionality* (*Triebintentionalität*) and *passive synthesis*, he analysed how we are constantly affected by our surroundings, in such a way that when we first notice something, it has already undergone positive or negative appraisal. Everyday cases of such experiences are, for example, when we feel that we are being watched and only later see the person who is (or at least seems to be) staring at us from across the street, or when we feel as if drawn to look in a particular direction only to find there, with some degree of surprise, an attractive member of the opposite (or same) sex.

These late writings of Husserl were the departure point for Merleau-Ponty, who acknowledges in the first pages of *Phenomenology of Perception* the fundamental role of “operative intentionality (*fungierende Intentionalität*) [...] which produces the natural and antepredicative unity of the world and of our life, being apparent in our desires, our evaluations and in the landscape we see” (Merleau-Ponty 1962: xx). But any kind of intentionality implies a subject, and what is the subject in the case of operative intentionality if not the conscious ego? Merleau-Ponty’s famous answer is that this basic subject is the *living body* itself, which is neither a purely physical thing nor an instrument of the conscious ego:

There is, therefore, another subject beneath me, for whom a world exists before I am here, and who marks out my place in it. This captive or natural spirit is my body, not that momentary body which is the instrument of my personal choices and which fastens upon this or that world, but the system of anonymous ‘functions’ which draw every particular focus into a general project. (*Ibid.*: 296)

This primordial bodily subject is guided by what Merleau-Ponty calls the *body schema* (*schéma corporel*), which for the most part operates outside of awareness as it “continuously negotiates its interaction with its surroundings through the contraction and release of muscles, the coordination of the movement of the limbs, the posture of the body and its balance” (Nordlander 2011: 48). It is important to distinguish this “system of sensorimotor capacities that function without awareness or the necessity of [explicit] perceptual monitoring” (Gallagher 2005: 24) from the conscious *body image*, which is the intentional *object* of consciousness involving “perceptions, attitudes, and beliefs pertaining to our own bodies” (*ibid.*), exploited by current Western culture to the degree of fetishism. It is the body image but not body schema that presupposes higher levels of meaning, including focal consciousness, visual representations, cultural practices, and linguistic ideology. Rather, the body schema is, as expressed in the quotations above, characteristic of our pre-personal self as a *subject* rather than as the *object* of meaning making. While some of its normative structures may be prefigured at birth, as suggested by studies in infant psychology (Gallagher 2005), it is for the most part established through reciprocal interaction with the world, providing its capacity for self-transcending, world-directed intentionality: “the body constitutes the world according to sedimented structures, but it is equally true that those structures are themselves acquired in the body’s encounter with the world” (Nordlander 2011: 56). Or, in other words, they arise through the dialectics of spontaneity and sedimentation.

Merleau-Ponty exemplifies the sedimented structures incorporated in the body schema with the phenomenon of *habit*, which “expresses our power of dilating our being-in-the-world, or changing our existence by appropriating fresh instruments” (Merleau-Ponty 1962: 166), emphasising that this is not to be understood in mechanical terms, but indeed as a form of intentionality: “the acquisition of a habit is indeed the grasping of a significance, but it is the motor grasping of a motor significance” (*ibid.*: 165). Let us compare this with a very recent example taken from fiction, where a well-known modern novelist, Paul Auster, describes the behaviour of a protagonist who has lost two fingers on his left hand:

He fell into the habit of sticking his left hand into his pocket whenever he was with other people [...] and the demoralizing thing about this new habit was that he wasn’t aware of what he was doing, the gesture was made out of pure reflex, entirely independent of his will [...] And yet how could he stop himself from doing something he didn’t even know he was doing? There seemed to be no answer to the problem, which was yet another instance of the intractable mind-body problem, in this case a mindless body part acting as if it had a mind of its own. (Auster 2017: 305)

We can see here, on the one hand, a reflection of the meaningfulness of the habit (the concealment of the disfigured hand motivated by social shame) and, on the other, the apparent autonomy of the “mindless body part.” Yet while this description does indeed correspond to lived experience (as most good literature does), we can see how prevalent Western ideology leads to a particular dualistic framing: “pure reflex” vs. “will” and “intractable mind-body problem.” One could say that one of the main contributions of Merleau-Ponty was precisely to diffuse the opposition between the biological body and the personal, felt body, emphasising that while the latter

is not to be reduced to the first, these are different aspects of the same living body. In other words, this is the first clear instance of the *Fundierung* relation in the present analysis, with the *living* body and operative intentionality prefiguring the *lived* body and pre-reflective self-consciousness, which characterize the second level of meaning.

4.2 Subjectivity: perceptual intentionality and pre-reflective self-consciousness

As pointed out in the introduction, Merleau-Ponty's phenomenological analysis radicalizes the later Husserl, who used two different terms for the body, the biological *Körper* and the experiential *Leib*, arguing that they should *not* be regarded as ontologically distinct but rather as different perspectives on the living body. A particular experience displaying this double-sidedness of the body are so-called *double sensations* (*Doppelempfindungen*), described by Merleau-Ponty in the following passage:

[W]hen I touch my right hand with my left, my right hand, as an object, has the strange property of being able to feel too. [...] When I press my two hands together, it is not a matter of two sensations felt together as one perceives two objects placed side by side, but of an ambiguous set-up in which both hands can alternate the rôles of 'touching' and being 'touched.' (Merleau-Ponty 1962: 131)

This ambiguity of the body is not something accidental, but rather an essential feature of our existence, as the body is our means of access to the world and not a physical object among others. As formulated by Nordlander:

The reason that that the body cannot perceive itself perceiving is that the body is the necessary condition for the perceiving of objects and can therefore not be numbered among objects appearing, unless it could step outside of itself and behold itself at a distance – a manifest impossibility. (Nordlander 2011: 39)

Note that with such *perceptual intentionality*, we have rather seamlessly passed from the *living* to the *lived* body (*corps vécu*), which is the locus of subjective experience, "since this particular object, in contrast to all other objects, is co-given as sensing, which is to say as subjective" (*ibid.*: 40). In other words, the (purely) living body has been sublimated through the *Fundierung* relation into what Zahavi (2014) calls a *minimal experiential self*. While Merleau-Ponty, especially in his latter work, downplays the distinction between the living and the lived body, the Semiotic Hierarchy here is consistent with Thompson (2007) in distinguishing, albeit non-discretely, between meaning making on the level of life and meaning making that is potentiated by conscious experience, as the latter necessarily "involves phenomenal selfhood or subjectivity, in the sense of pre-reflective self-awareness constitutive of a phenomenal first-person perspective" (*ibid.*: 162).

In making the latter argument, Thompson is influenced by the work of Zahavi (2003a, 2003b), one of the experts on the late Husserl, largely responsible for repudiating the older view of the founder of phenomenology as a die-hard proponent of idealism and/or representationalism. In particular, Zahavi points out that Husserl distinguished sharply between the kind of self-awareness that is an essential feature of subjectivity and the kind of explicit self-consciousness that results from an act of reflection. The latter is founded upon (the *Fundierung* relation again) the original and basic form of self-awareness that is part and parcel of lived experience:

For this is not merely a continuously streaming lived-experiencing [*Erleben*], rather when it streams there is always simultaneously consciousness of this streaming. This consciousness is self-perceiving. Only exceptionally is it a thematic noticing performed by the I. To that exception belongs the reflection, possible at any time. (Husserl 2001: 320, cited by Zahavi 2003b: 160)

As the recurrent metaphor of the "stream of consciousness" used in the quotation implies, in order to account for the identity of subjectivity and pre-reflective self-consciousness, it is necessary to account for *temporality*, which Husserl did in his famed but difficult analysis of *time-consciousness*. To understand how the latter relates to perceptual intentionality directed to external objects is relatively easy: when we see, hear, feel, smell, or touch some particular object like an apple or a melody, there is a moment of "nowness" (called *primal impression*), but this is always "embedded in a twofold temporal horizon" (Zahavi 2003b: 165) of the *retention* of the way the object was just experienced and a rather indeterminate anticipation in which it is to be experienced in the immediate future, called *protention*. Such retentions and protentions are part of any individual *intentional act* and are to be distinguished from other types of intentional acts such as remembering, imagining, and expecting, constituting their objects in respective way. But how are the intentional acts, rather than their objects, constituted themselves? Note that this could not be through acts of reflection, as this would make them into intentional objects, and thus abolish the distinction between pre-reflective and reflective self-consciousness, leading to an infinite regress. Retention does indeed make explicit reflection possible, but if pre-reflective self-consciousness is what gives the qualitative "feel" of experience, i.e., subjectivity, then it cannot be constituted in such acts of

reflection. The question is then *how* to account for the constitution of primary subjectivity, when identified as pre-reflective self-consciousness.

The question is difficult, and Husserl apparently struggled with it to the end of his life. Zahavi offers the following answer, based on both interpreting Husserl's writings on the matter and independent phenomenological analysis: time-consciousness applies not only to "external" objects, but to the "inner" acts of intentionality themselves, to the *experiencing* and not just to the *experienced*. Such "inner" time-consciousness is thus reflexive rather than reflective. It is "self-perceiving," and thus constitutes pre-reflective self-consciousness, which we saw before is the same as primary subjectivity:

Inner time consciousness is the pre-reflective self-awareness of the act, and to say that the act is constituted in inner time-consciousness simply means that it is brought to awareness thanks to itself. It is called *inner* time-consciousness because it belongs *intrinsically* to the *innermost* structure of the act itself. ... This internal consciousness is not a particular intentional act, but a pervasive dimension of self-manifestation, and it is exactly this which precedes and founds reflective self-awareness. (Zahavi 2003b: 168)

This discussion may appear to be veering towards a kind of "idealism," but we can relatively easily "ground" it by bringing back the body into the picture. As pointed out earlier, the subjectivity of the experiential self is not an "absolute," but is itself founded on the *pre-conscious* meaning making of the living body, i.e., the first level of meaning in the Semiotic Hierarchy. Quite possibly, some of Husserl's difficulties, and definitely those in my earlier work (Zlatev 2007, 2009b), could be alleviated by avoiding a too-sharp distinction between what is "accessible to consciousness" and what is "unconscious" (which is also why I here use the term "pre-conscious" rather than "unconscious" to refer to meaning making on the most basic level). The "minimal" experiential self is also a bodily self (Gallagher 2005) and while subjectivity may sublimate the kind of meaning provided by the value systems of the living body, it is clearly in continuity with it as well.

The relative fluidity of the first two levels of meaning is reflected in the difficulty to draw borders between the values based on *affect*, motivated by life-preserving factors such as physical danger, hunger, and reproduction, and the corresponding *emotions* such as fear and desire. The ambivalent nature of emotions like joy and anger, involving visceral processes, bodily motion, and subjective experiences is well known (James, 1894; Fuchs, 2005) and is reflected by the term "emotion" itself (Foolen et al. 2012). Still, as we are here dealing with subjectivity, we may focus on the experiential dimension of emotions, which is tightly interwoven with the temporality of experience discussed above. In one of the final chapters of his interdisciplinary monograph informed by phenomenology on "the deep continuity between mind and life," Thompson (2007: 361) emphasises that "protention always involves motivation, an affective tone, and an action tendency or readiness of action." In other words, time-consciousness is not fully "pure" and perceptual intentionality is not, at least primarily, a matter of neutral, detached "observation," but rather is intimately linked with action, as emphasised in the ecological theory of perception (Gibson 1979). While affective/emotional motivation operates already on bodily movements, where we are more or less "automatically" drawn to what is attractive and repelled by what is repelling, with primary subjectivity, and even more so with reflective consciousness, we become increasingly free in our choices. While this does not amount to the ideal of absolute "free will," as we are always free in a "needful" way (Jonas 1968), with the higher level(s) of meaning making potentiated by (first) subjectivity and (then) reflection, the conscious subject has relatively more autonomy than the the purely animate body.⁸

At the same time, in a book-long argument for the founding role of primary subjectivity with respect to intersubjectivity, our next level of meaning, Zahavi (2014: 96) points out that there "is nothing in the notion of the experiential self that makes it incompatible or in tension with a strong emphasis on the fundamental intentionality or being-in-the-world of consciousness," or, in other words: the subject remains a worldly and "needful" subject. By being in constant interaction with the world, the bodily subject is provided with richness and depth that goes beyond the bedrock of "pure and poor" (Zahavi 2014) subjectivity. According to Abram (1996), who in his plea for rekindling the magic of existence in a world threatened by technological objectification follows in the footsteps of Merleau-Ponty (and Heidegger), perception should be understood as reciprocal *participation*:

By asserting that perception, phenomenologically considered, is inherently participatory, we mean that perception always involves, at its most intimate level, the experience of an active interplay, or coupling, between the perceiving body and that which it perceives. (Abram 1996: 59)

And the most participatory of all kinds of perception is that of *other* embodied subjects: "Husserl said the perception of others is like the 'phenomenon of coupling.' The term is anything but a metaphor. In perceiving the other, my body and his are coupled" (Merleau-Ponty 1964a: 118). This proposal, to be elaborated below, brings together both this and the previous levels of meaning as grounds for the next level of the Semiotic Hierarchy.

4.3 Intersubjectivity: empathy and shared intentionality

As suggested by the term, intersubjectivity implies the interrelation between a plurality of subjects of experience. It is a highly complex and controversial notion, even within phenomenology (Zahavi 2014), and a good way to approach it is to acknowledge its multifaceted nature as “*the sharing of affective, perceptual, and reflective experiences between two or more subjects*. Such sharing can take different forms, some more immediate, while others more mediated by higher cognitive processes” (Zlatev 2008: 215). Still, we may inquire, as we did with subjectivity: what is its most primordial form? And we may reply, as done by Husserl and Merleau-Ponty, that the dual nature of the body as *Leib* and *Körper*, as shown in the experience of double sensation described at the onset of the previous section, is foundational, as explained by Zahavi (2003a: 104, my emphasis):

Thus, it is exactly the unique subject-object status of the body, the remarkable interplay between *ipseity* and *alterity* characterizing double-sensation, which permits me to recognize and experience other embodied subjects. [...] I am experiencing myself in a manner that anticipates both the way in which an Other would experience me and the way in which I would experience an Other [...] *The possibility of sociality presupposes a certain intersubjectivity of the body.*

In other words, at the most basic level we do not need to “infer” or “simulate” the subjective life of another human or animal being, but may directly perceive the bodily manifestations of their subjectivity in their movements and bodily expressions, which are much like our own. This particular kind of intentionality is what Husserl calls *empathy* (*Einfühlung*), even though the term may be misleading by suggesting that we “project” our own experiences “into” others (Zahavi 2014). Still, an essential asymmetry between self and other remains, as we experience our own intentionality through a first-person, subjective perspective, while that of the other from a second-person (rather than third-person) perspective. Not to acknowledge this asymmetry would be to “assimilate” the other into one’s own experience or into an anonymous collectivity, both of which would be untrue to phenomenology and ultimately unethical (Zahavi 2003a, 2014).

It is for this reason that Zahavi states, again and again, that “the inherent and essential first-personal character of experiential life must be regarded as a prerequisite for, rather than impediment to, a satisfactory account of intersubjectivity” (Zahavi 2014: xiii). In other words, we can treat the relation between the two as a matter of *Fundierung*. Having said this, we can readily acknowledge that with intersubjectivity, our selves and experiences become profoundly richer and more elaborated. The forms for these new forms of meaning making are too many to be mentioned here, but three central ones for Husserl and Merleau-Ponty are the following.

Once my eyes have opened to the subjectivity of the other, I can acknowledge when they direct their intentional acts towards *me*, giving rise to a “kind of ‘original reciprocal co-existence’ [...] in which my self-apprehension is mediated by the Other” (Zahavi 2003a: 117). This “gaze of the other” is fundamental for the constitution of an interpersonal concept of the self. It is arguably on this higher level that we fully realize our humanity, or as stated rather poignantly by Husserl: “The other is the first human being, not I,” (quoted in Zahavi 2014: 81). A second consequence is that with the awareness of others being oriented in perception and practical act towards the same objects as us, these (intentional) objects gain in objectivity.⁹ This is not only a matter of “joint attention,” but a basic *shared intentionality* (not just in the psychological, but also in phenomenological sense), which leads to the constitution of an objective world.

Thirdly, this brings us to the domain where the notion of “meaning” is usually first used: *communication*, since, as argued by Merleau-Ponty (1964a), communication presupposes differentiation between the subjectivity of the communicator and the audience, a differentiation that is still lacking on the first two levels of meaning making in the Semiotic Hierarchy and arguably also in the first months of human life, characterized by bodily interaction that is still “pre-communication.” With communication, a whole new dimension of normativity emerges, given that communicative, other-directed acts can succeed, leading to shared intentionality, or, for one reason or another, fail.

On the most basic level of communication, we “read” the subjectivity of the communicator directly from their bodily movements and expressions. As pointed out above, we do not need to *infer* a hidden mental state behind the tears of a friend, or the aggressive posture of a foe: we perceive the mentality of the other directly through the intentionality of empathy. Of course, we can be sometimes mistaken (which shows again that we have here a form of normativity that, however, differs from those on the previous levels), but most often we are not, due to “the phenomenon of (bodily) coupling” mentioned earlier. Note that on this level, communication is by no means a prerogative for human beings. I have no difficulty to see the excitement of my dog when she greets me by stomping and tail waving, or her desire for food by leading me to her bowl, or for a walk when she directs me to the door. With the latter example, we are even on the verge of a higher level of communication, involving so-called *communicative intent*, often analysed as a second-order intention (in the psychological sense of desire) to have the basic intention recognized (Sperber and Wilson 1995). These do not have to be understood in an over-mentalistic manner, as it is in the famous analysis of meaning proposed by Grice (1957), as this communicative

intent has a bodily realization such as shifting one's gaze between the audience and the desired object (Zlatev et al. 2013).¹⁰

A still-higher and now arguably uniquely human, though still strongly embodied, form of communication is that based on *bodily mimesis* (Donald, 1991; Zlatev, 2008), the volitional use of the body to first imitate the movements and actions of others, and eventually combining this with communicative intent in order to re-enact particular actions and events (and possibly even narratives) to others. With the latter, we have crossed over to the next level of meaning, since such "pantomimes" count as *signs*. But before we proceed we should note two things.

First, the reason that fully fledged imitation (as opposed to mimicry, bodily resonance, "mirroring," etc.) is so difficult is because it requires a *body image* and not just the body schema of the first level in the Semiotic Hierarchy (see Section 4.1), as the subject must consciously compare their own bodily posture and movements to those of a target – and to "get it right." Secondly, through such acts of imitation and their sedimentation emerges the inter-individual repertoire of social conventions that we call *culture*, understood as both practical (implicit) and theoretical (explicit) knowledge "capable of affecting individuals' behavior that they acquire from other members [...] through teaching, imitation, and other forms of social transmission" (Richerson and Boyd 2005: 5). This, naturally, is a major step in the development of shared intentionality and normativity since this repertoire counts as a higher-order value system, constraining individual acts not only on the basis of their functional adequacy (as on the level of life), perceptual validity, or even communicative efficacy as mentioned above, but also on the basis of implicitly "agreed upon" rules of what is socially appropriate. Still, such social norms are not yet signs, given a sufficiently constrained understanding of the latter notion as the one to be presented in the following section.

4.4 Sign function: signitive intentionality

Simpson summarises Merleau-Ponty's thesis on the interrelations between the lower levels of meaning that we have discussed already and the two highest ones in the Semiotic Hierarchy (sign function and language), as follows:

An intersubjectivity that is first intercorporeality and becomes culture through bodily communication serves as a ground or a field that can foster thought – even though that comes to forget its intercorporeal origin. [...] The symbolic field of cultural objects, the symbolic apparatus, is a surplus of sense that is not a separate intelligible world but emergent from the intersubjective. The relationship between carnal intersubjectivity and logical objectivity is that of *Fundierung*. (Simpson 2014: 59)

But there is quite a jump here since, as we saw, intersubjectivity and bodily communication (and arguably even culture) is hardly limited to the "human order." On the other hand, conflating the different kinds of meaning that define humanity under the general term "symbolic" is much too constraining. As *symbolic* meaning making (at least in one of the many interpretations of the term) characterises above all language, I will reserve this for the next and final level in the present analysis. Here, it is necessary to define an intermediary notion, that of the *sign function*, and the level of signification that it serves to define, as this could help fill in a lacuna in Merleau-Ponty's overall framework.

The sign concept is often defined within the "science of signs" of semiotics either too broadly, making it more or less synonymous with meaning making as such, even on the level of bio-chemical processes (as in Peircian biosemiotics), or too narrowly, constraining it to language, or at least to convention-based meaning making (in Saussurean semiotics). In his life-long work on a *phenomenological* semiotics, Sonesson (1989, 2007, 2010) has striven for an intermediate position, which is arguably also most adequate for cognitive semiotics (Zlatev 2009b). In particular, he defines the *sign (function)* through:

[...] the following properties: (a) It contains (at least) two parts (expression and content) and is as a whole relatively independent of that for which it stands (the referent); (b) These parts are differentiated, from the point of view of the subjects involved in the semiotic process [...] (c) There is a double asymmetry between the two parts, because one part, the expression, is more directly experienced than the other; and because the other part, content, is more in focus than the other. (Sonesson 2010: 24–25)¹¹

This can be rather straightforwardly interpreted in terms of what Sokolowski (2000), following Husserl, calls *signitive intentions* (here generalizing the term beyond linguistic signs) as follows. In the case of perception, and more complex forms of intentionality such as remembering, imagination and anticipation, consciousness targets its intentional objects (which may be concrete like my dog or abstract like God) *directly*. When I now imagine the meal that I plan to have for dinner, I still intend this meal and not a "mental image" of it that serves

as proxy.¹² But signitive intentions are precisely not direct in this way; they are representational in the sense that they are mediated through three types of signs. These correspond to the classical Peircian triad of *icon*, *index* and *symbol*, based respectively on the semiotic grounds of similarity, contiguity / factorality and conventionality (Sonesson 2007). This, of course, is an idealization, since actual signs usually contain a combination of different grounds (Jakobson 1965). My intentionality can “go” to my dog, irrespectively whether she is present or absent, if (a) I see a picture of her (a type of icon), (b) I see her collar (an index) or (c) I hear her name *Zafira* (a symbol). There are many layers of semiotic complexity that can be added, but the important thing here is that in all three cases the intentional object remains the same, while we have three different kinds of indirect, signitive intentions. As Sokolowski (2000: 98) emphasises, this approach provides a solution to many thorny problems in philosophy and semantics concerning the nature of “meanings” or “contents:”

They are postulated, not given, and they are postulated because we think we cannot explain knowledge and truth without them. How do they exist? What sort of entities are they? Are they in the mind, or in some sort of third realm between the mind and the world? How do they do their work of referring to objects? How many of them do we have? Do they come into actual existence and then go out of it, moving from virtual to actual and then virtual again, as we call them up? They seem to be duplicates of the things and states of affairs outside us; why do we need to postulate them?

The solution lies in thinking of contents (distinct both from the expressions and from the referents in the sign function, see the citation from Sonesson above) not as “things,” but as different *acts*, based on signs that embody more or less sedimented *construals* of the intentional objects (Zlatev 2016a). The reason “contents” are not (clearly) given in experience is precisely because they are primarily intentional *acts*, processes rather than structures, and phenomenological reduction, or at least reflection is needed to make these, rather than their objects, thematic. In the case of conventional signs (i.e., symbols), social sedimentation of these acts is essential, but even here, the intentional act is not determined by the “meanings” the way free activity is not determined but is *guided* by norms. In the case of icons and indexes, the freedom of the intentional act vis-à-vis social conventions is even greater, though not absolute. Just consider the changing norms for visual representations, or the prototypical (performative) index – the pointing gesture – with various cultural constraints on its form and function (Kita 2003). As with meaning making on the other levels, here we have a clear case of the dialectics of spontaneity and sedimentation.

What are the grounds for this level of signitive intentionality based on the sign function? Exactly the kinds of intentionalities provided by the “lower” levels of meaning. Most directly, the level of intersubjectivity as reflected in the citation from Sonesson above, mentioning “the subjects involved in the semiotic process.” This is because even if a particular case of sign use is not intentionally (in the psychological sense) communicative, as in the case of the observed collar serving as a so-called abductive index for my dog, there is an irreducible social component to my interpretation of this as a sign: not just I, but anyone with the adequate knowledge would be justified to make this inference. Further down, the ground is given by both pre-reflective and reflective subjectivity, the latter necessary to make the needed differentiation between what is directly perceived (the sign expression) and what indirectly intended (the object). And still further down is the living body, necessary not only for subjectivity and intersubjectivity, as argued earlier, but for providing a *Fundierung* relationship between bodily movements and signs. As Merleau-Ponty writes in one of his lectures in Collège de France, cited by Simpson (2014: 60), human communication transforms “motility into symbolic gesticulation, and implicit expression into open expression.” By “implicit expression,” he is here referring to the kind of communication based on “signals” such as postures and vocalizations, which operates through empathy as discussed in Section 4.3. And with “symbolic gesticulation” and its “open expression,” he must surely mean indexical and iconic gestures, of the kind afforded precisely by bodily mimesis, which, as pointed out, is arguably the cognitive-semiotic capacity through which sign use emerges in both evolution and ontogeny (Zlatev 2013). However, we are still one step away from symbols and language.

4.5 Language: symbolic intentionality and expression

Already in *The Structure of Behaviour*, Merleau-Ponty characterised the human order as providing a higher level of meaning by providing “symbolic behaviour.” However, as we established, he had a rather broad conception of “symbols,” more or less corresponding to the notion of sign function. For example, Merleau-Ponty claimed that one of the distinctive features of symbols, compared to (animal) signals, is that they “imply the ability to grasp something as an object, in the phenomenological sense of something that remains invariant through perspectival variation and is graspable by the subject as also available to other subjects” (Thompson 2007: 76). But this, as we saw above, is precisely what characterises signs in general, including pictures and indexes. However, Merleau-Ponty also insisted “that symbolic structures do not exist in isolation but belong to symbol

systems. In these systems each symbol is related not simply to what it symbolizes [...] but also to other symbols" (*ibid.*). This necessarily *systematic* nature of symbols is seldom included in definitions of the notion, but has more recently been emphasised by Deacon (1997) in his characterization of human beings as "the symbolic species." However, before either of the authors, the systematic, network-like relation between linguistic signs was heralded by "the father of modern linguistics," Saussure 1960 [1916], and with the spread of structuralism, his relational, difference-based theory of meaning was (over)generalized to practically all semiotic systems.

Thus, it is hardly surprising that when Merleau-Ponty discovered the work of Saussure after publishing *Phenomenology of Perception*, he felt a strong degree of affinity and used this to help articulate the *Fundierung* relation between the world given by the body, empathy, and perception, which he eventually termed "the visible," and the world of knowledge and (abstract) thought, "the invisible:"

We are certainly not denying the originality of the order of knowledge vis-à-vis the perceptual order. We are trying only to loosen the intentional web that ties them to one another, to rediscover the paths of sublimation which preserves and transforms the perceived world into the spoken word. (Merleau-Ponty 1973: 186)

The "spoken word" (*le langage parlé*) is his re-formulation of the notion of "the language system" (*la langue*) of Saussure, but without divorcing it from specific and always more or less creative acts of speaking (*le langage parlant*), as the former is nothing but the sedimentation of such acts, which create, maintain, and constantly change it, in the already familiar dialectic of spontaneity and sedimentation (Zlatev and Blomberg In press). Further, while fully acknowledging Saussure's emphasis on the social and conventional nature of language, Merleau-Ponty's approach to language, left unfinished due to his premature death, has the advantage of not understanding language as a "disembodied," abstract kind of sociality, divorced from social interaction, consciousness and sensory experience, as pointed out by Hass (2008: 190):

Language is a marvellous conjunction of a social-cultural structure sustained by carnal life, but a structure which can be transformed by embodied acts of expression. In a phrase, carnal life, and non-material linguistic structures are in a relation of *reversibility*. They are an intertwining of the visible and the invisible.

Language may thus be defined as *an articulated symbolic system for the expression of thought*, more or less in line with traditional definitions, but with the important proviso that the constituent concepts of this definition need to be carefully redefined. Starting with the concept of *symbols*, re-using (and clarifying) notions that were introduced earlier, these can be understood as signs which are:

(a) *representational*, i.e., they are understood by their users as denoting general or specific objects, properties, and events (Sonesson 2007), (b) *conventional*, i.e., shared within a community (Itkonen 2003), though not necessarily "arbitrary," (c) expressed along with *communicative intent* (Zlatev 2013), and (d) *systematically* interrelated (Saussure 1916; Deacon 1997). (Zlatev 2016b: 152)

Starting with (a), stating that symbols are representational should not be understood in the classical sense of Aristotle and Locke as saying that they represent pre-existing concepts or thoughts, since language "does not translate ready-made thought, but accomplishes it" (Merleau-Ponty 1962: 207), a theme which becomes increasingly important in the later writings, where Merleau-Ponty elaborates the notion of creative *expression* (Hass 2008). Rather, as all signs, symbols represent objects and relations in the world, not in neutral ways but through both conventional and contextual *construals* (Möttonen 2016), which is definitional for signitive intentionality (see Section 4.4).

Moving on to (b), the conventionality of symbols implies several layers of social normativity, such as those of correctness (Itkonen 2003), appropriateness, and congruence (Coseriu, 1985; Zlatev & Blomberg, In press). However, it does not imply "arbitrariness" as both individual spoken words (and even more: the "signs" of signed languages) and composite linguistic constructions are strongly *motivated* by pre-linguistic experience through relations of (diagrammatic) iconicity (Jakobson, 1965; Itkonen, 2005; Zlatev, 2016b; Devylder, 2018).

As for (c), it is possible to diffuse objections that this needs to commit one to a private, mentalist notion of linguistic meaning as, first of all, communicative intent does not fully ground meaning (as in a classical Gricean analysis) and, secondly, the "second-order intention" of the language user is typically implicit in the act of expression itself. It is characteristic that when we encounter the product of such an expression, even when this is displaced or "differed" from the act of producing it, for example, when we attempt to interpret a piece of writing, we inquire not only what it *means* but also what the author *meant* by it. As pointed out by Sokolowski (2000: 110), symbols "serve to *indicate* or to signal that the speaker is carrying out the acts of thinking that constitute the categorial objects." The phenomenological notion of *categorial object* is used to denote complex "objects:" not just a car, but a *red car*; not just John and dog, but *John's dog*; not just food and tasty, but *this food*

is *tasty*; etc. With such categorial objects, we come to the last and arguably most original aspect of language: (d) symbols are not just interrelated differentially, as emphasised by Saussure, but combine in *articulated* structures, with the help of “syncategorematic” (i.e., grammatical) elements to form constructions such as predication, modification, conjunction, and subordination, which can be used to represent (again, in the sense of construe) complex states of affairs, and express corresponding thoughts (*ibid.*).

Sokolowski uses the term “syntax” to refer to this central property of language, but it should be highlighted that this is a far cry from any Chomskyan or other purely formal understanding of the notion as phenomenology permits us to understand grammatical constructions as a specific form of *symbolic intentionality*. The notion of “meaningless symbols” and structures is itself meaningless, as symbols (and not just the syncategorematic elements):

[...] function in [symbolic] intentionality: the syntax of language is related to the way things can present themselves to us, to the way we can intend and articulate them. Syntactic parts of language serve to express the combinatorics of presentation, the way things can be presented to us in various part-whole relations. (*Ibid.*: 109)

There is much more to be said about a phenomenology of language, which must here for the sake of space and time be left out. It is unsurprising that the topic is often left incomplete in phenomenological investigations, including those of Merleau-Ponty, since to understand linguistic meaning making we need both to understand the levels of meaning that precede it and make it possible through the *Fundierung* relation, as well as how language goes “back dialectically over what preceded it and transforms the purely carnal and vital coexistence with the world and bodies into a coexistence of language” (Merleau-Ponty 1973: 20). It is also necessary to take into account the dialectics of spontaneous, creative linguistic expression, and the sedimented norms both emerging from such expressions and constraining future language use (Zlatev and Blomberg In press). We may thus conclude with a rather poetic formulation of these interrelations in the spirit of the late Merleau-Ponty:

Language is not a fixed or ideal form, but an evolving medium we collectively inhabit, a vast topological matrix in which the speaking bodies are generative sites, vortices where the matrix itself is continuously being spun out of the silence of sensorial experience. (Abram 1996: 84)

5 Summary and conclusions

In the analysis presented in this article, I undertook the rather arduous task of re-thinking earlier work (Zlatev 2009b) aiming at “a unified theory of meaning,” following in the footsteps of Merleau-Ponty, but interpreting and elaborating his analyses with reference to the work of other phenomenological thinkers and commentators such as, in alphabetical order, Abram, Gallagher, Hass, Husserl, Nordlander, Simpson, Sokolowski, Sonesson, Thompson, and Zahavi. In the process, I have had to rely on carefully chosen quotations from these authors, especially given the breadth of the topic, and the limits in time and space to deal with it here.

One of the main new proposals has been that a general notion of meaning as a value-based relationship between the subject and the world is essentially identical to a broad notion of *intentionality*, the “openness to the world” through which both the entities in the world and the subject become co-constituted. A second proposal was that such an understanding of meaning and intentionality presupposes a similarly broad notion of *normativity*, as each level of meaning making is characterized by criteria of validity which guide and constrain individual meaning-making acts without thereby determining them. These claims implied re-formulating the levels of meaning in the original Semiotic Hierarchy as *levels of intentionality*, with corresponding normative structures and acts of meaning making. Table 1 summarises much of the analysis in Section 4, placing higher “sublimating” levels of meaning/intentionality above lower “grounding” ones.

The benefit of this phenomenological analysis is, above all, that it helps understand the *unity and diversity of meaning*. Meaning is not “enactive, participatory, interactive, or symbolic” (the kinds mentioned in the title of this special issue of Cognitive Semiotics) – it is all of these and more! To the extent that *enaction* involves “a history of structural coupling that brings forth a world” (Varela, Thompson & Rosch, 1991: 206), all meaning making presupposes such coupling, from acts of moving and sensing to linguistic expression. The reason behind this is that all acts of meaning making involve one or more kinds of intentionality, in which the subject “brings forth” a world of significance, an *Umwelt* or *Lebenswelt*, from a meaningless “environment,” which is phenomenologically not a primary but a secondary construct, derived by objectifying the meaningful world. Further, at least from the level of perceptual intentionality, all meaning making involves the participation of the animate world, and may thus be characterized as participatory.¹³ By acknowledging the subjectivity of other embodied subjects, communication becomes possible (and necessary), and with sign use, especially with

the symbolic structures of language, we uncover increasingly complex forms of intentionality, sublimating our meaning making into the “life of reason” and ourselves into “agents of truth” (Sokolowski 2000). Yet, even at the highest levels, we do not become pure transcendental egos, “for meaning, as we have said, remains rooted in the sensory life of the body – it cannot be completely cut off from the soil of direct perceptual experience without withering and dying” (Abram 1996: 80). This is the main advantage of an analysis based on the *Fundierung* relation between the levels instead of a standard empiricist approach, which would attempt to reduce the higher to the lower, or some kind of idealist (or “social constructivist”) philosophy, which would either downplay the lower levels or attempt the opposite reduction (Merleau-Ponty 1962).

Table 1: The Phenomenological Semiotic Hierarchy, with higher and lower related levels through the non-reductionist notion of *Fundierung*, and a dialectic relation between sedimented norms and spontaneous acts of meaning on each level.

<u>Meaning level</u>	<u>Kind of intentionality</u>	<u>Normative structures</u>	<u>Acts of meaning making</u>
Language	Symbolic intentionality	Symbols Syntax	Symbolic expression Linguistic expression
Sign function	Signitive intentionality	Signs	Sign use
Intersubjectivity	Shared intentionality	Empathy Conventions Communicative intent	Bodily communication Imitation
Subjectivity (pre-reflective self-consciousness)	Perceptual intentionality Inner time consciousness	Emotions The lived body	Feelings Actions Perceptions
Life	Operative and drive intentionality	Body schema Habits Affect	Movements Sensing

Also, the present analysis has been careful not to construe the levels as based on ontological differences, as that would both fail to account for their interrelations and not do justice to our experience of a multifaceted and yet unified world of experience. Yet, it is also important to acknowledge the differences between the forms of intentionality and normative structures on the different levels of the Phenomenological Semiotic Hierarchy, since this is also part of our subjective first person perspective, where we constantly need to navigate mismatches, and possible conflicts between, say, sexual desire, feelings of love, social norms, and linguistic expressions.

The analysis also aims to do away with another recurrent controversy: whether meaning should be understood primarily in terms of structure or process, in terms of norms or acts? The proposed resolution is the dialectics on the “horizontal” dimension of each level (see Figure 4): normative structures, from the body schema specifying what is a “good” posture to the norms of language specifying what is “correct language,” are by no means pre-given, but instead emerge as sedimented structures through countless acts of both individual and social meaning making throughout a single life and, especially on the higher levels, across generations and history. At the same time, such sedimentations are a precondition for the transitions across the levels on the vertical dimension: the “minimal” experiential self may be “pure,” but with repeated engagement with the world and others, it becomes a person and, in the case of *Homo sapiens*, an intersubjective and ethical *human being*. And it is only with the “acquisition” of the sedimented structures of language that the person can truly become an agent of truth, capable of rising beyond the everyday “natural attitude” into a questioning, philosophical attitude (Sokolowski 2000). Thus, while the uniqueness and spontaneity of individual meaning acts may in one sense be given priority, since they are always “one step ahead” of the structures they create and maintain, this should not be taken to an extreme position since on every level the normative structures provide for coherence and stability in individual and social meaning making. To point out once again, norms provide the criteria for producing valid acts of meaning making, even as the creative nature of expression, linguistic or not, always allows the transgression of these standards (Coseriu, 1985; Zlatev & Blomberg, In press).

Finally, the phenomenologically interpreted version of the Semiotic Hierarchy defended here can be offered as a useful tool against any kind of meaning reductionism, whether biological, mental, social, or linguistic. This negative side of the argument has been rather implicit in the presentation, but it can be fairly easily reconstructed, as cognitivist, constructivist, structuralist, and post-structuralist theories typically privilege only one of the levels, reducing or “deconstructing” the others. The phenomenological approach, and especially that

Automatically generated rough PDF by ProofCheck from River Valley Technologies Ltd

of Merleau-Ponty, escapes this by being resolutely pluralist and thus offers one of the best possible means for unifying our understanding of meaning making:

What might be gained from a return to Merleau-Ponty now [...] is a turn away from the antihumanist radicalization of ontology and the cultivation of new ways of exploring the ontological correlation of human beings and the world that has been of renewed interest to scholars, for instance the late neuroscientist Francisco Varela, whose work sought to bridge the humanities and the sciences. (Carman and Hansen 2005: 22)

As the unification of our being in the world – amid our fragmented fields of knowledge, including claims that “philosophy is dead” by leading scientists,¹⁴ and anti-scientific positions by leading philosophers – is the overarching aim of cognitive semiotics, such a “return” should be promising for the field in many ways.

Acknowledgements

I wish to thank the two reviewers, Piotr Konderak and Matthew Harvey, as well as Johan Blomberg, Simon Devylder, and Göran Sonesson, for many constructive comments that helped improve the quality of this article. The work was in part supported by the project *Phenomenology and Typology of Motion* (PATOM), funded by the Swedish Research Council, grant 2015-01583.

Notes

1 “Far from being, as has been thought, a procedure of idealistic philosophy, phenomenological reduction belongs to existential philosophy: Heidegger’s ‘being-in-the-world’ appears only against the background of the phenomenological reduction” (Merleau-Ponty 1962: xvi). While some commentators (Hass 2008) emphasize the discontinuity between Merleau-Ponty’s philosophy and that of the founder of phenomenology, Edmund Husserl, it is possible to view most of Merleau-Ponty’s ideas related to the body and the layering of meaning that are essential for the present argument as elaborations and radicalizations of ideas already expressed in the late work of Husserl (Welton 2003; Zahavi 2003a; Sonesson 2007).

2 It should be noted that by adding the “new” third layer of *intersubjectivity* to the analysis, this does not leave the second (in the original model: *consciousness*) and the now fourth layer (in the original model: *signification*) unchanged, but rather calls for their re-analysis, and “renaming” as *subjectivity* and *sign function*, respectively. Sonesson (2015) also suggests extending the original Semiotic Hierarchy with an intermediate level, which he calls “culture.”

3 This, I believe, is a more charitable formulation of the “principle of principles,” than the one given by the Master himself: “every originally given intuition is a rightful sources of knowledge, that everything that presents itself [...] is to be taken as that which it gives itself to be – but also only within the bounds in which it gives itself” (Husserl 1982 [1913]: 44).

4 “Nothing determines me from outside, not because nothing acts upon me, but, on the contrary, because I am from the start outside myself and open to the world.” (Merleau-Ponty 1962: 530)

5 “According to the current state of our conjectural knowledge, the inanimate part of world 1 is by far the oldest; then comes the animate part of world 1, and at the same time or somewhat later comes world 2, the world of experiences; and then with the advent of mankind comes world 3, the world of mental products; that is the world that anthropologists call ‘culture’” (Popper 1992: 9).

6 In this respect, *Fundierung* can be said to resemble the concept of *supervenience* in analytical philosophy, in particular in the way it is applied to the “mind-body problem:” by stating that mental states supervene on neural states, one acknowledges that they are not reducible to the latter and at the same time depend on them for their existence. This implies that “every mental phenomenon must be grounded in, or anchored to, some underlying physical base (presumably a neural state)” (Kim 2009: 40), and yet leaves the possibility that some crucial properties of the mental such as “qualia” remain specific the supervenient level. However, the notion of *Fundierung* is more radical, as through it, the “lower level,” the “originator,” is both made more epistemically accessible (“manifest”), as well as affected by (what could be called) circular causation. I wish to thank Piotr Konderak for raising this question.

7 The overlaps and differences between the ideas of Alan Gurwitsch – well known for his analysis of the “field of consciousness,” which includes centre, theme and margins – and those of Merleau-Ponty are briefly but informatively described by Toadvine (2001).

8 I thank Matthew Harvey for helping me spell out the idea of the relative growth of freedom brought along with consciousness more clearly here (even if he may disagree with the final formulation).

9 “Husserl’s thesis is that my experience of objective validity is made possible by my experience of the transcendence [...] of foreign subjectivity” (Zahavi 2003a: 115).

10 Characteristically, dogs are apparently even better than chimpanzees in understanding the communicative intent behind human pointing, which is probably due to their 16,000 years of domestication (Hare and Woods 2013), leading to their significant capacity for empathy with us.

11 Sonesson adds a fourth condition stating that “the sign itself is subjectively differentiated from the referent, and the referent is more indirectly known than any part of the sign,” but this runs the risk of reifying the content and pushing away the referent, while in the interpretation offered here, I follow Sokolowski in interpreting the content as part of the signitive act (the *noesis*), with focus remaining on the intentional object (the *noema*). It is differentiation between expression and object that is essential for the sign function.

12 The intentional acts of remembering, anticipating or imagination involve what Husserl calls *Vergegenwärtigung*, in English often rendered as “presentifying,” presenting the absent as present, and what Thompson (2007) renders as “visualising” and “re-presenting.” Unlike in signitive intentions, there is no sign function involved here yet, since there is no “material” expression that is used to construe the intentional object in either communication or individual sign use.

13 On the basis of personal experiences and anthropological documentation of meaning making in various indigenous, pre-literate societies, Abram (1996) even proposes that this extends to the inanimate world, since “at the level of our spontaneous, sensorial engagement with the world around us, we are *all* animists” (Abram 1996: 57).

14 “How can we understand the world in which we find ourselves? How does the universe behave? What is the nature of reality? [...] Traditionally, these are questions for philosophy, but philosophy is dead. Philosophy has not kept up with modern developments in science, particularly physics” (Hawking and Mlodinow 2010: 13).

References

- Abram, D. 1996. *The spell of the sensuous: Perception and language in a more-than-human world*. New York: Vintage.
- Andrén, M. 2010. *Children's gestures between 18 and 30 months*. Lund: Media Tryck.
- Aristotle. 1986. *De Anima*. London: Penguin.
- Auster, P. 2017. 4 3 2 1. London: Faber & Faber.
- Carman, T. 2005. Sensation, judgment, and the phenomenal field. In T. Carman & M. Hansen (eds.), *The Cambridge companion to Merleau-Ponty*, 50–73. Cambridge: Cambridge University Press.
- Carman, T. & M. Hansen. 2005. Introduction. In T. Carman & M. Hansen (eds.), *The Cambridge companion to Merleau-Ponty*, 1–25. Cambridge: Cambridge University Press.
- Coseriu, E. 1985. Linguistic competence: what is it really? *The Modern Language Review* 8(40). xxv–xxxv.
- Deacon, T. 1997. *The symbolic species*. New York: Norton.
- Devyllder, S. 2018. Diagrammatic iconicity explains asymmetries in possessive constructions: Evidence from Paamese. *Cognitive Linguistics*. DOI: <https://doi.org/10.1515/cog-2017-0058>.
- Donald, M. 1991. *Origins of the modern mind: Three stages in the evolution of human culture*. Cambridge: Harvard University Press.
- Foolen, A., U. M. Lüdtke, T. P. Racine & J. Zlatev (eds). 2012. *Moving ourselves, moving others: Motion and emotion in intersubjectivity, consciousness and language*. Amsterdam: John Benjamins Publishing.
- Fuchs, T. 2005. Corporealized and disembodied minds: a phenomenological view of the body in melancholia and schizophrenia. *Philosophy, Psychiatry, & Psychology* 12(2). 95–107.
- Gallagher, S. 2005. *How the body shapes the mind*. Oxford: Oxford University Press.
- Gibson, J. J. 1979. *The ecological approach to visual perception*. Boston: Houghton Mifflin.
- Grice, P. 1957. Meaning. *Philosophical review* 66. 377–388.
- Hare, B. & V. Woods. 2013. *The genius of dogs*. New York: Plume.
- Hass, L. 2008. *Merleau-Ponty's philosophy*. Bloomington: Indiana University Press.
- Hawking, S. & L. Mlodinow. 2010. *The grand design*. London: Bantam.
- Husserl, E. 1982 [1913]. *Ideas pertaining to a pure phenomenology and to a phenomenological philosophy*. F. Kersten trans. The Hague: Martinus Nijhoff Publishers.
- Husserl, E. 2001. *Analyses concerning passive and active synthesis: Lectures on transcendental logic*. Dordrecht: Kluwer Academic.
- Ihde, D. 2012. *Experimental phenomenology: Multistabilities*, Second edn. Albany: State University of New York.
- Itkonen, E. 2003. *What is language? A study in the philosophy of linguistics*. Turku: Turku University Press.
- Itkonen, E. 2005. *Analogy as structure and process: Approaches in linguistics, cognitive psychology and philosophy of science*. Amsterdam: Benjamins.
- Itkonen, E. 2008. The central role of normativity in language and linguistics. In J. Zlatev, T. Racine, C. Sinha & E. Itkonen (eds.), *The shared mind: Perspectives on intersubjectivity*, 279–306. Amsterdam: Benjamins.
- Jakobson, R. 1965. Quest for the essence of language. *Diogenes* 13. 21–38.
- James, W. 1894. The physical basis of emotion. *Psychological Review* 1. 516–529.
- Jonas, H. 1968. Biological foundations of individuality. *International Philosophical Quarterly* 8(2). 231–251.
- Kim, J. 2009. Mental causation. In B. McLaughlin, A. Beckermann & S. Walter (eds.), *The Oxford handbook of philosophy of mind*, 29–52. Oxford: Oxford University Press.
- Kita, S. 2003. *Pointing: Where language, culture, and cognition meet*. Sussex: Psychology Press.
- Leder, D. 1990. *The absent body*. Chicago: Chicago University Press.
- Lovejoy, A. O. 1936. *The great chain of being: A study of the history of an idea*. Cambridge: Harvard University Press.
- Merleau-Ponty, M. 1962. *Phenomenology of perception*. Taylor & Francis e-Library ed., 2005. New York: Taylor & Francis Group.
- Merleau-Ponty, M. 1963. *The structure of behaviour*. A. Fisher, trans. Pittsburgh: Duquesne University Press.
- Merleau-Ponty, M. 1964a. *The primacy of perception*. Evanston: Northwestern University Press.
- Merleau-Ponty, M. 1964b. *Signs*. Evanston: Northwestern University Press.
- Merleau-Ponty, M. 1973. *The prose of the world*. Evanston: Northwestern University Press.
- Moran, D. 2005. *Edmund Husserl: Founder of phenomenology*. Cambridge: Polity.
- Möttonen, T. 2016. *Construal in expression: Intersubjective approach to cognitive grammar*. Helsinki: University of Helsinki.
- Nordlander, A. “*Figuring flesh in creation: Merleau-Ponty in conversation with philosophical theory*.”, Lund University, 2011. PhD Dissertation.
- Popper, K. 1979. *Objective knowledge: An evolutionary approach*. Oxford: Clarendon Press.
- Popper, K. 1992. *In search of a better world: Lectures and essays from thirty years*. London: Routledge.
- Richerson, P. J. & R. Boyd. 2005. *Not by genes alone: How culture transformed human evolution*. Chicago: University of Chicago Press.
- Rota, G. C. 1989. Fundierung as a logical concept. *The Monist* 72(1). 70–77.
- Saussure, F. 1960 [1916]. *Cours de Linguistique Générale*. Paris & London: Payot & Duckworth.
- Searle, John R. 1983. *Intentionality: An essay in the philosophy of mind*. Cambridge: Cambridge University Press.
- Simpson, C. B. 2014. *Merleau-Ponty and theology*. London: Bloomsbury.
- Sokolowski, R. 2000. *Introduction to phenomenology*. New York: Cambridge University Press.
- Sonesson, G. 1989. *Pictorial concepts: Inquiries into the semiotic heritage and its relevance for the analysis of the visual world*. Lund: Aris/Lund University Press.

- Sonesson, G. 2007. From the meaning of embodiment to the embodiment of meaning: A study in phenomenological semiotics. In T. Ziemke, J. Zlatev & R. Frank (eds.), *Body, Language and mind. Vol 1: Embodiment*, 85–128. Berlin: Mouton de Gruyter.
- Sonesson, G. 2010. From mimicry to mime by way of mimesis: Reflections on a general theory of iconicity. *Sign Systems Studies* 38(1/4). 18–65.
- Sonesson, G. 2015. Le jeu de la valeur et du sens. In A. Biglari (ed.), *Valeurs: Aux Fondements de la Sémiotique*, 85–101. Paris: L'Harmattan.
- Sperber, D. & D. Wilson. 1995. *Relevance: Communication and cognition*. Malden: Blackwell Publishing.
- Thompson, E. 2007. *Mind in life: Biology, phenomenology, and the sciences of mind*. Cambridge: Harvard University Press.
- Toadvine, T. 2001. Phenomenological method in Merleau-Ponty's critique of Gurwitsch. *Husserl Studies* 17(3). 195–205.
- Varela, F. J. 1997. Patterns of life: Intertwining identity and cognition. *Brain and cognition* 34(1). 72–87.
- Varela, F. J., E. Thompson & E. Rosch. 1991. *The embodied mind: Cognitive science and human experience*. Cambridge: MIT press.
- von Uexkuell, J. 1982. The theory of meaning. *Semiotica* 42(1). 25–82.
- Welton, D. 2003. *The New Husserl: A critical reader*. Bloomington: Indiana University Press.
- Zahavi, D. 2003a. *Husserl's phenomenology*. Stanford, CA: Stanford University Press.
- Zahavi, D. 2003b. Inner time-consciousness and pre-reflective self-awareness. In D. Welton (ed.), *The New Husserl: A critical reader*, 157–180. Bloomington: Indiana University Press.
- Zahavi, D. 2014. *Self and other: Exploring subjectivity, empathy, and shame*. Oxford: Oxford University Press.
- Zlatev, J. 2007. Language, embodiment and mimesis. In T. Ziemke, J. Zlatev & R. Frank (eds.), *Body, language, mind. Vol 1: Embodiment*, 297–337. Berlin: de Gruyter.
- Zlatev, J. 2008. The coevolution of intersubjectivity and bodily mimesis. In J. Zlatev (ed.), *The shared mind: Perspectives on intersubjectivity*, 215–244. Amsterdam: Benjamins.
- Zlatev, J. 2009a. Levels of meaning, embodiment, and communication. *Cybernetics and Human Knowing* 16. 149–174.
- Zlatev, J. 2009b. The semiotic hierarchy: Life, consciousness, signs and language. *Cognitive Semiotics* 4(supplement). 169–200.
- Zlatev, J. 2013. The mimesis hierarchy of semiotic development: Five stages of intersubjectivity in children. *Public Journal of Semiotics* 4. 47–70.
- Zlatev, J. 2016a. Turning back to experience in Cognitive Linguistics via phenomenology. *Cognitive Linguistics* 27(4). 559–572.
- Zlatev, J. 2016b. Preconditions in human embodiment for the evolution of symbolic communication. In G. Etzelmüller & C. Tewes (eds.), *Embodiment in evolution and culture*, 151–174. Tübingen: Mohr Siebeck.
- Zlatev, J. & J. Blomberg. In press. Norms of language: What kinds and where from? Insights from phenomenology. In *Normativity in language*. Amsterdam: Benjamins.
- Zlatev, J., E. Madsen, S. Lenninger, T. Persson, S. Sayehli, G. Sonesson & J. V. D. Weijer. 2013. Understanding communicative intentions and semiotic vehicles by children and chimpanzees. *Cognitive Development* 28. 312–329.

Jordan Zlatev is Professor of General Linguistics at Lund University, working in the Division for Cognitive Semiotics at the Centre for Languages and Literature, and editor in chief of *Public Journal of Semiotics*. His research focuses on language as a predominantly conventional-normative semiotic system for communication and thought, and especially on its bio-cultural evolution and development in children, in relation to other semiotic systems such as gesture and depiction. In his work he attempts to integrate methods and insights from phenomenology, the philosophy of human experience. He is the author of *Situated Embodiment: Studies in the Emergence of Spatial Meaning* (1997), and over 80 articles in journals and books. Most recently, he co-edited (with A. Foolen, U. Lüdtke and T. Racine) *Moving Ourselves, Moving Others: Motion and Emotion in Intersubjectivity, Consciousness, and Language* (2012).