

The World, Seen From Within (II)

Sorts of Reality—A Semio-Cognitive Ontology and Phenomenology

Abstract

This short essay discusses the conditions—and the general contours—of a viable ontology assigning a place to meaning in the architecture of the sorts of reality we acknowledge in the framework of a non-reductive realist philosophy (John Searle¹, Barry Smith²) compatible with both cognitive and semiotic approaches to the human world.

Keywords: John Searle, Barry Smith, phenomenology, pheno-physics, other minds, intentionality, Descartes, Spinoza, logos, homunculi, ontology of semiosis

1. Two Physical Realities

As many philosophers, including J. R. Searle and B. Smith, have pointed out, we live in two material worlds³. One is the *macroscopic*⁴, phenomenological, experiential world of things, natural or artificial, that surround us in space and time, including our bodily selves and each other. The other world is the ‘underlying’ *microscopic* world of physical entities and processes that constitute the minute matter, or sub-stance, of the materiality of the former. The macroscopic world, also called our lifeworld, since we live our little lives in it, or the *pheno-physical* reality, with all its forms, naturally and culturally given, is thus constituted in the materiality of—generated by—the micro-physical, geno-physical reality. Our exploration of *geno-physics* is based on measurements of its effects in pheno-physical reality. Massive, big-scale pheno-physical events and processes inversely affect geno-physical reality, often dramatically: we call this intra-physical interaction *ecology*.

2. The Third Reality: Mind

Of course, this doubly (macro- or pheno-, versus micro- or geno-) physical world also contains our own physiology and neuro-physiology, including that of our brain. Furthermore, on a level of structural complexity that we do not yet understand, brains and their sensory-motor extensions and interactions with the pheno-world generate our *mind*, with its intricate interplays of memory and consciousness. We do not currently know how neural processes manage to cause conscious content, i.e. mental *representations*,

but there is little doubt that they do. The characteristic and distinctive property of these representations is that they are not just mental *things* but instead, metaphorically speaking, ‘windows’, that is, *transitive* entities, through which we mentally ‘see’, visualize, apperceive certain aspects of the world (of all kinds); hence the tradition calls them *ideas*. Ideas are ‘in-sights’. They are basically ‘about’ reality (of all kinds), as J. R. Searle stresses, and as E. Husserl had done; they are, in that sense, *intentional*. The mind, as we know it from simply having it, and from experiencing its ‘inner’ and ‘outer’ events, dramas, ideas and problems, is, I claim, to be considered a particular kind of reality: generated by neural, geno-physical processes, but intentional by contrast to other kinds of reality. Our mental ‘life’, including thinking and feeling, remembering, expecting and planning, is genuinely a third level of our world or reality.⁵

3. On Other Minds

Our mind perceives, i.e. interprets⁶, the states and events happening in the pheno-world. It also makes us consciously or unconsciously⁷ act in such a way that we affect (create, move, change, destroy) things in this ‘outer’ world, including signs expressing our own thinking and feeling. Minds are of course as singular, individual, as ‘their’ brains, but they are extremely attentive to *other* singular, individual minds. Other minds pick up what we deposit in terms of such products and expressions, and these minds interpret them in terms of intended or unintended deposits, by which we allow such other minds access to features of our own mental contents and states. This makes it possible to *intentionally interact* and create collective habitats that through evolution drastically change our life conditions. We are correspondingly extremely attentive to other minds and their products and expressions, for the same reasons. Exchanging things and signs between minds therefore is a major concern of any human mind. There are two closely related modes of exchange, namely attending to something *as real* (emotionally significant or not) or *as unreal* (emotionally significant or not). Any ‘unrealistic’ representation is of course in principle a variation of a ‘realistic’ one. Such variations account for the life of the mind and constitute what we call *meaning*.⁸

4. The Authority of Truth in Thinking

When human minds interact and collectively create special surroundings that affect—in some respects improve and stabilize—their material hosts’ conditions of life and procreation, their thinking has to *transcend* the level of individual minds in a particular respect. They not only exchange versions of ‘aboutness’, through the signs of intentional attitudes toward some identified object or situation, but also—remarkably, intriguingly—have to refer to a principle validating their attitude: an *authority*, a source of validity. There are always many ways to signify an idea about something, but some ideas, however meaningful, are felt to be more adequate than others—in terms, that is, of *truth*.⁹ There

are, in this sense, better or worse ways to refer to an item that the referential expression is ‘about’; the authority of truth makes a difference in quality of reference that human minds are intensely aware of and readily express in emotional terms. “You are wrong!” is an emotional exclamation we have all heard or made many times in our life; ‘wrongness’ and ‘rightness’ are appeals to an epistemic authority.¹⁰ And they are often accompanied by emotional outbursts. Here, the use of the copula verb—you *are* wrong!—is determined by a peculiar alliance between the speaker’s mind and the authority of truth.¹¹ This phenomenon does not follow from intentionality; *aboutness does not account for rightness*—it does not account for what it means to be ‘right’ about something to which we attach a predicate. “I see S as P”, not simply because I am me but rather because I have to believe that S really *is* P, so I think of and will want to remember S as P.¹² S will appear on my future list of P-carriers.

Human thinking and memory have a strong and vibrant relation to epistemic authority, the irresistibly attractive force of truth: a ‘good idea’ carries with it a promise of being a ‘good’ representative of the fact or problem it is about. (This led Baruch Spinoza and many modern philosophers to imagine and decide that ‘aboutness’, as closeness, is in fact grounded in identity: an idea of X is an aspect or attribute of X itself; therefore, ideas cannot be ‘wrong’, in that conception, they can only be fuzzy, blurred, instead of being clear and distinct¹³).

Individual minds strive for ‘rightness’; they therefore *transcend* themselves in expressing themselves impersonally and thus implying a non-embodied instance—normally unnamed¹⁴ and simply presupposed—that legitimately determines what is ‘really right’, not just what is preferable or pleasing to our individual imagination. This *reality of truth in thinking* has an origin that deserves consideration.

5. Homunculi, Voices, Doubt, and Irony

So what does *truth* mean—how can something at all be ‘right’, or ‘true’? We know that this is the case¹⁵, since otherwise our thinking would collapse.¹⁶ We think of X in order to *find or approximate the truth of X* (about something of which there can be an interesting, somehow important truth, a non-trivial and yet true predicate); this is a basic practical purpose of thinking.¹⁷ ‘True’ etymologically means worthy of ‘trust’—but what is it that makes some idea trustworthy? There seems to be a semantic analogy to *people* who are trustworthy, so that they are worthy of talking to and sharing thoughts and actions with.

We think *predicatively*, representing to ourselves that some X *is* or *may be* organized in some way; and we are normally able to mentally hold a predicative representation while *doubting* it or even plainly rejecting it. In doing so, while rejecting an idea, our representation seems to create in our mental theatre a homunculus H1 who believes in the predicative idea X is P, and then another homunculus H2 who rejects it and states that X is not P but maybe instead Q. H2 defeats but does not silence H1. This is probably what happens in *ironic* uses of language: saying (sounding like a defeated H1) that X is P, in order to communicate the belief (of a wiser H2) that X is not P but rather Q. Once we think,

we also easily come to think (as H2) about the fact *that* we (H1) think, and about precisely *what* it is that we (H1) think, and repeat it as many times, recursively (Hn over Hn-1), as is useful to our mental ‘clarification’ of ideas, that is, our striving for minimization of doubt and maximization of certainty. Does this sound Cartesian? Yes, I assume and accept.

The individual and naturally self-critical mind (as H2) can stop a ‘wrong’ thought (held by H1) and try to correct it by finding a thought that would appear to have a chance to be more ‘right’ about its object. Rightness, or truth, clearly does not appear to the critical thinker to depend on his own feelings (as H2).¹⁸ Instead it depends on what *is* right, *despite* his feelings... Thoughts therefore can, and even should, be critically discussed. Remarkably, when an idea is finally experienced as being on the ‘right’ side, it calls for being shared. H2 performs a critical analysis of H1’s idea and then issues the result as relevant to extra-mental addressees. (This is the meaning of ‘knowing what one is saying’). However, the question remains: what is it that allows H2 to momentarily distance H1? In other words, what is doubt?¹⁹

6. Logos and the Origin of Truth: Time

Shared ideas are shared as a function of their being thought of as ‘right’. Ideas that are deemed ‘wrong’ are inherently deemed not fit for sharing, except maybe for the sake of laughter.²⁰ We don’t share only for this reason, of course, since the ideas also have to be useful or interesting, non-trivial, intriguing, challenging, difficult, etc. Still, at the end of the day, they would fall apart if they were not also ‘promising’, i.e.: experienced as some sort of promise of eventually turning out to be relatively true, sufficiently close to ‘truth’ to deserve our attention. Ideas are ‘promising’ if their promotor H1 (despite an H2’s attempts to silence him) sounds like a person who is likely to make us a trustworthy promise. Promises have to be kept, not immediately but in due *time*.

What is it that we trust in truth? Before proposing a solution to the question, I think it is useful to consider this particularly important and neglected dimension of the pheno-physical world: *time*. When something has happened but all involved persons for particular reasons deny that it has happened, for example a crime, then it may sink silently into the past.²¹ But our minds understand that what really happened does not depend on those who were silent about it. They understand that past events are real independently of our thoughts and statements about them, and that the truth about their reality may turn up in the future: *Time will tell...*

Since the past, in this sense, does not coincide or comply with what we want it to be, but constitutes a realm of reality in its own right, it is the object par excellence of critical scholarship; it can be explored, it is decidable; if you ignore it, it will possibly return to punish you... This is particularly, or exclusively, the case of lifeworld events and acts, such as crimes, mistakes, errors, historical calamities in general, that we supposedly can ‘learn from’. So here is my suggestion: *The root of truth and authority in general—and all discursive authority must (at least appear to) be based on truth—is pheno-physical past*

time and tense.²² A past ‘fact’ (*factum* is a past participle) is not psychological, not a matter of memory, it is ‘there’, ‘out there’, it is objectively real, even if no one can presently perceive it or sometimes even remember any of it. If we are rational, we recognize it while thinking; it is *logos* itself. In a sense, History, the very historicity of history, is thus the root and origin of *logos*; more poetically it can be said that time and truth are one.²³ Not that logic is in things of the world (Spinoza’s belief); but *logos* is the *principle* of truth saying that something decidable truly happened; *logos* is the trans-mental voice that says that something decidable happened and now is a fact. *Logos* is therefore a level of reality that can be reduced neither to the level of mind nor to any other level. *Logos* is a level of reality in its own right, though appearing and officiating in human minds, but as a fundamental extra-mental authority,²⁴ constituted by the *temporal* essence of pheno-physical reality. *Logos* affects our active, conscious minds in every minute as a transcendent, regulative principle without which there would be no consistent or critical thinking—and no emotions, since emotions are epistemic: they know that they have to be built on what is the case. It is as untouchable as the past. To control or own—to reach, touch, possess—the truth is therefore impossible. Only religious discourse appears to ignore this condition.²⁵

7. Logos, the Epistemic Attractor

Social communities and ethnic traditions emerge, exist, and become quasi-authorities, as ideological ways to approach *logos*.²⁶ It is standard for any such community to believe that it has privileged access to some truth; but it is still more ‘logical’ to doubt this. Cultures are driven by more or less arrogant pretensions that amount to this hope: to be, as a community, all ‘right’. It is particularly tempting for naïve communities to identify this instance, the *epistemic attractor*, as a divine instance. Therefore it is important to understand that the instance in question is neither an externally existing entity (in the ‘heavens’...), nor an internally existing entity (in the ‘head’, i.e. the subjectivity of the individual), but instead a genuinely abstract instance of authority that comes with the temporal destiny of ‘what happens’, which makes it reside in the ‘specious past’, we might say (to paraphrase the “specious present” of William James²⁷). The pheno-worldly past is thus a constitutive *model of truth* as an epistemic parameter. A present theory of something can have such an epistemic parameter to the extent that under convenient circumstances, it would at least ideally be possible *for time to tell* in the future if the theory was true now (now: in this past of its future). Verifications of all methodological kinds are attempts to ‘help time’ tell what is—ideally, what is and already was, and will have been—true about what is. Ontology is the epistemic attractor of all methodologies, as paths toward truth. It is also the generalization of the inevitable, *time-based intuition of truth*.²⁸

8. Realities

Ontologically speaking, we end up, through considerations such as the above, not with

a number of ‘worlds’, but with a set of *levels* of reality in our world, as we see it from within. We eventually have to recognize the following four levels as distinct: **geno-physical reality (I), pheno-physical reality (II), mental reality (III), and epistemic reality, logos (IV)**. In a sense, and despite his mythological setup, Plato must have been right about ideas and their ontological status; Husserl likewise, in his anti-psychological claim.²⁹ My modest contribution is the following: these philosophers believed in an eidetic institution; what I am proposing is an epistemic principle, logos.³⁰ Authority *cannot* be an institution, though inversely, institutions claim authority; each time history makes a mistake in this respect, sad things happen. Epistemic reality is a genuine fourth sort of reality in the world according to this view *from within*—not a substance to be grasped separately by a hand intruding from outside. Seen from inside the world, conceptual, epistemic reality exists as a semiotic objectivity—the realm of truths that meanings mean.

9. An Ontological Model

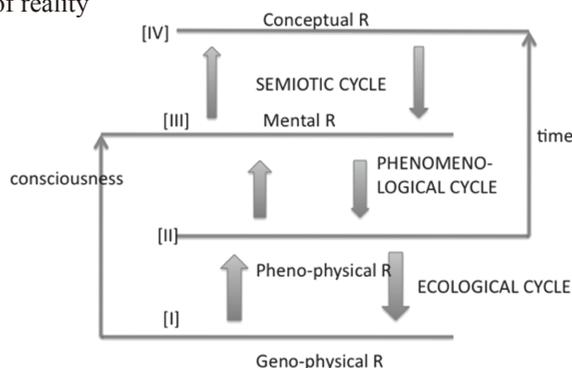
If we think that our lifeworld is a specific ‘slice’ or region of the physical world, then, as mentioned above, Realities I (the physical) and II (the experiential) form a process of *ecological* interaction, an ecological cycle: R I generates R II immediately, and sometimes makes violent irruptions, while R II modifies R I, slowly but surely.

Realities II (the experiential) and III (the mental) form a different process of mutual causal determination, namely of *phenomenological* interaction, a phenomenological cycle: R II informs R III (perception), and R III informs R II (projective conceptualization, expression and action: participating in the experienced world).

Finally, realities III (the mental) and IV (the epistemic) constitute a process of *semiotic* interaction, a semiotic cycle: R III intentionally refers to R IV, and R IV epistemically orients R III. And through this process, R IV conceptually contains everything true that can be referred to by meanings.

In the ultimate analysis, we are confronted with a chiasmus. Since in this view, R I in fact delivers the (neuro-cognitive) substance of R III (brain → mind), and R II delivers the (temporal) substance of R IV³¹, the result is a double folding as shown in the following graph:

Figure 1. Four levels of reality



This may be the delicate ontology we live in, whatever we choose to call it.³² I can see that it paradoxically unites views of materialism and of transcendental idealism, within its three superimposed cycles: the *ecological* cycle (R I \leftrightarrow R II), the *phenomenological* cycle (R II \leftrightarrow R III), and the *semiotic* cycle (R III \leftrightarrow R IV). It furthermore offers an articulation of Descartes' *res extensa* (R I – R II) and *res cogitans* (R III – R IV), based on the duplex structure of both material *res*, in that R I generates R III (minds are 'made of' brains), while R II generates R IV (truth is 'made of' time). The *ecological* cycle implies that what man-made reality deposits in the macroscopic (experiential, pheno-physical) reality has effects in the microscopic (geno-physical) reality. The *phenomenological* cycle accounts for the interaction between the social and the individual realities. Finally, the *semiotic* cycle concerns the circulation of meaning between two statuses, as knowledge (epistemic, conceptual, R IV) and as (signified) creative semantic invention or psychological state of mind (R III).

10. Predicative Semantics

The role of ontology in daily life is evident. Let us reuse one of J. R. Searle's primary examples³³:

- (1) Water is H_2O —namely on Reality level I. As far as we know...³⁴
- (2) Water is also *wet*—at least often, but only on Reality level II.
- (3) Water is *quenching*—on Reality level III, where we can feel thirst.
- (4) Water is *the condition of life* (as we know it)—on Reality level IV.

These predicative utterances do not semantically contradict each other, since they do not refer to the same sort of reality for their verification. (1) does not replace (2), and the subjective statement (3) does not merge with a theoretical statement such as (4).

11. Communication and Meaning

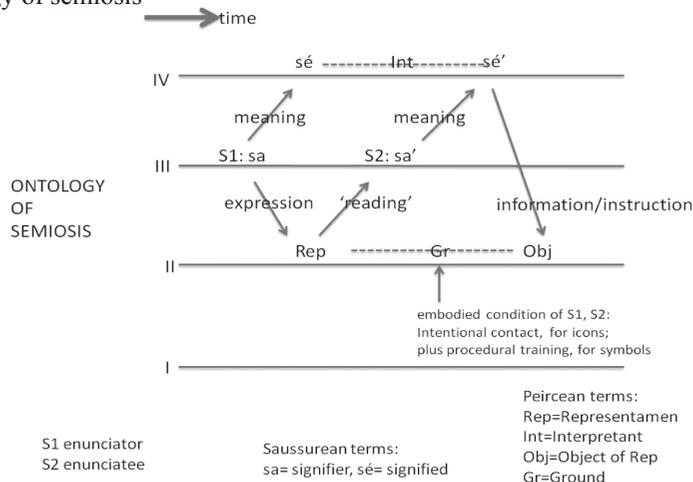
In this terminology and analysis, *semiosis*—if this term is still useful at all—would be ontologically grounded in lifeworld, which in turn originates in a physical *ecology* that gives rise to both the *phenomenological* and the *semiotic* cycle. These three cycles are distinct but necessarily connected. Semiosis, the function linking expressions to contents intentionally communicated between conscious beings, connects our mentally identified *signifiers* (expressed in our phenomenology) and our conceptually given *signifieds* (signified meanings) that further refer to realia of all kinds.³⁵ Phenomenology establishes objects, events, acts, including signifiers, through cognitive schematization and categorization of expressive motor activity and sensory input in perception. Ecology constitutes the material support—geological, technological, physiological, etc.—of states and processes relevant to the niches of the living and the evolution of the living in its physical reality.

The essential vehicles of the semiotic cycle are thus the entities we call *signs*, or sign

functions. There are many ways to describe, classify, and explain the domain of these entities. Here, we will just mention two basic functional categories: icons and symbols—i.e. signs by iconicity and signs by symbolicity. Both are essential to intersubjective communication; iconicity is a prerequisite to culture, while symbolicity *is* culture itself. Interestingly, intersubjectivity can thus be pre-cultural or cultural.³⁶ *Iconic* communication uses the sensory, mimetic, and cognitive equipment common to human minds, and essentially conveys *informative* imagery. *Symbolic* communication additionally uses acquired or learned conventions, typically conveys norms and instructions backed by norms, and regulates intersubjective behavior; it is by nature *performative*.³⁷ Language has iconic syntax and symbolic vocabulary and can therefore build complex informative-performative structures—such as the argumentative, narrative, and descriptive sequencings we call *discourse*.

Iconic communication occurs when subjects are in intentional contact and are aware of each other's attention to things, perception of things, and expressive targeting of objects: *deixis*. Symbolic communication adds to this requirement the conditions of sharing a certain amount of acquired or learned normative procedural behavior, and of using it for coordination of certain acts, especially for collaboration in thinking and action, which requires memory. The following diagram (Fig. 2) intends to show a basic aspect of the process of semiosis, in terms of our ontological unfolding. It proposes a view of how this process involves different ontological instances, and in the last instance involves all levels of reality (cf. Fig. 1), a complexity making its precise description a challenging task. Subjects, here S1 and S2, share expressions (signifiers *sa* and *sa'*) and signified meanings (*sé* and *sé'*) that eventually refer to the realia of their lifeworld, whether abstract or concrete. A precondition for this to happen is the embodied condition of the subjects, in so far as they must be on 'common ground' as to shared knowledge, cultural routines, competences, acquired and trained automatisms and semiotic competences of all kinds. The philosopher C. S. Peirce sketched out some basic notions in his sign model: Representamen – Interpretant – Object, which this diagram suggests to combine with F. de Saussure's semiological terms (*sa/sé*).

Figure 2. An ontology of semiosis



Semiosis³⁸—exchange of meaning—is a necessary condition for human intersubjectivity and thus for the formation of cultural entities in the human lifeworld. Semiosis anchors *culture* in *logos*, we may say.³⁹

Cultures (in the plural) are lifeworld phenomena. They unfold, store, develop material behaviors, including techniques, rituals, and kinship systems, and let those carry meanings, that is, certain immaterial references such as beliefs and narratives. Cultures are iconico-symbolic practices, which means: practices determined by phenomenological *and* semiotic processes that specify and motivate each other. The basic ‘grounding’ condition is that they are partially embodied in their subject populations’ territorial and cognitive, bio-physical constitution, including a procedural long term memory determining their territorially collective habits in terms of selective features that may stabilize during the individuals’ childhood, youth, or lifetime.⁴⁰

The most prominent manifestation of a culture is no doubt *language*, inscribed in the processes of the semiotic cycle that make individual language development and collective language states and changes possible, a possibility again grounded in acquired, embodied, procedural and normative routines of expression and interpretation. The double nature of human communication, and of language par excellence, as mental and conceptual on the one hand and as material and bodily on the other, explains how *meaning production* can both be materially constrained by ethnic and institutional conditions (idiomatic) and nevertheless be universally translatable and compatible with the trans-cultural exchange of ideas and the trans-cultural – universal – collaboration in the development of knowledge and imagination by which we like to define human *civilization*. For this to be the case, the ‘transcendent’ instance I have called *logos* is required, since truth must transcend cultural beliefs and has to be approached through open, in principle infinite, semiosis.

Notes

- 1 As in: *Minds, Brains and Science*, Searle, 1984.
- 2 As in Barry Smith, 1995 and 1998.
- 3 I wonder if it would improve the discussion to talk about *realms* instead of worlds. The expression ‘worlds’ in the plural is as metaphoric as ‘realm’.
- 4 Barry Smith would call the pheno-world *mesoscopic*, since this allows him to see us living squeezed in between a *microscopic* world and a truly universe-sized *macroscopic* world, both inaccessible to our senses, unless we use microscopes, telescopes, and other -scopes. In my view, such a ‘scopic’ sandwich ontology, eloquent and useful as it is, would underplay the shared physical properties of *micro-* and *macro-*matter, in Smith’s terms.
- 5 Mental contents are intentional. Mental *states*, however, such as headaches, sleepiness, or even moods (depressive, ecstatic), may seem less intentional. Nevertheless, they shape the atmosphere or ‘frame of mind’ in which the contents appear, in time and space, and also ‘edit’ the contents in particular ways.
- 6 Perception and interpretation form a continuum from sensory Gestalt organization of qualia to categorization and contextual evaluation.

- 7 By ‘consciously or unconsciously’ I mean: with variable degrees of awareness, from explicit volition to an absence of experienced agency of self. Such degrees of awareness are objects of volition themselves and can be modified by a sort of decision: attention.
- 8 Meaning is a property of representations. A representation of something believed to be real is believed to be true. Around such a representation, other representations, created by imaginary variation, form a swarm of representations of things believed to be less real but often more interesting and relevant to the subject: counterfactual or hypothetical states of affairs, objects of fear or hope, contents of daydreams, etc. Such representational swarms are meaningful.
- 9 Descartes’s term for this was objectivity: the (relative) objectivity of an idea is the degree to which the idea refers to something real.
- 10 Of course, wrongness and rightness can refer to deontic or ethical principles; the speaker must then presuppose the truth of the validity of these principles.
- 11 It sounds odd to say: “I am angry because you *may* have offended me!”—I must believe that you indeed offended me, in order to justify my anger. We do not feel grief because someone *may* have died. Basic emotions are based on epistemic evaluations of their motivating representations.
- 12 When we deem some statement wrong, we can say: “Forget it!”. The information filter of our long-term memory is epistemic; wrong things do not easily get access.
- 13 This is the primary argument against correspondence theory. See Margaret D. Wilson’s nuanced analysis of Spinoza’s theory of knowledge, in Garrett, 1997.
- 14 It is only occasionally named, namely in swearing: “By Jove...”, etc. Swearing is in fact intensely epistemic. It does not imply, however, that we believe that authority is a divinity; rather it may be the inverse: divinities are partial and casual embodiments of authority.
- 12 Except in speech acts, where validity and felicity replaces truth.
- 16 In fact, when our thinking does collapse, e.g. in states of psychosis, a certain degree of epistemic confusion is a primary manifestation (something can then be the case without it being true that it is the case). Rosenbaum and Sonne, 1986.
- 17 Thinking is inherently critical, in so far as it is triggered by the impression that ‘something is wrong’, either in our understanding or with things themselves.
- 18 H1 must always be suspected of being a self-deluded dreamer or a subject of ‘mauvaise foi’, as Sartre said. H2 must indeed try to state what ‘regretfully’ is true, that is, must still state it while regretting that a subjectively preferred alternative must be rejected.
- 19 This is of course the great Cartesian question, groundbreakingly discussed his *Meditations* and elsewhere. What I am humbly proposing in this paper may be read as an attempt to describe some ontological and semiotic consequences of Descartes’ methodological thinking.
- 20 Laughing at H1.
- 21 A dramatic example of this appears to me: 9/11. The falling World Trade Center Towers were strangely enough demolished by controlled explosion from underneath, according to scientific reports and analyses that have been suppressed. The seventh tower was not even hit, but fell nicely and vertically, as if by the same controlled demolition. Many people, despectively called ‘truthers’, keep insisting that the case must be reopened; they suffer from the lack of evidence in favor of the official version, which has dominated the world stage of politics and social life since

- the catastrophe. A lack of truth often makes us suffer; in our political social life, this epistemic feeling can affect the whole of our cultural and personal life. In countries whose regimes deny the population access to free speech, this epistemic situation can become insufferable.
- 22 There is indeed, in a sense, as one of my reviewers notes, much truth without authority, as well as much authority without truth. What I am saying is that on one hand, authority has to parade as trustworthy, thus true, based in truth, even if it is not so based; if it does the contrary, it collapses. Truth, on the other hand, is authority for those who seek it or find it, even if the truth of something is not recognized by others as such; if it were, it would become authority (in the sense that denying it would damage the credibility of the denier). It is surprising that professional philosophers do not notice, or understand, or acknowledge, this link; it works particularly well in philosophy.
 - 23 In one sense, time and space are aligned in the grammar of natural languages, namely in the locative case, which admits calendar time indications as ‘places’: ‘In April’ is as locative as ‘In Paris’. However, core adverbs such as *always*, *never*, *sometimes*, *often*, *seldom* are *temporal and epistemic* in one; here, time appears itself to be epistemic. So, *always* is epistemically equivalent to a strong *yes*, while *never* is a strong *no*. Truth and time are intimately linked in the cognitive intuition underlying modal adverbials.
 - 24 We are of course still describing an ontology of the world as experienced, *seen from within*. I am not claiming that there is an actual being ‘out there’ (with name and address) knowing everything.
 - 25 Religious feelings, beliefs, and doctrines may be based on the stress-, fatigue-, or drug-induced mystico-epileptic experiences that we readily call ‘revelations’. These reportedly contain encounters with some version of absolute Truth itself. Still, it is never the Whole Truth, rather a feeling of nearness to it. Revelations are metonymical.
 - 26 The Cartesian mathematician-philosopher René Thom refers to Heraclitus’ epistemic use of the notion of logos when introducing his own rationalistic idea of *logoi* underlying morphogenetic processes and morphologies of all kinds, as explained in Thom, 1980, and Thom, 1990: *Apology of Logos*. See also Aubin, 2004, for an excellent account of Thom’s thinking on this point.
 - 27 “The prototype of all conceived times is the specious present, to the short duration of which we are immediately and incessantly sensible”. William James, 1890. By contrast, I say, the prototype of all conceived truths is the specious *past* of what happened, as such, unmediated by our conjectures.
 - 28 The simplest demonstration of the principle is the following: Where were you last night? It is necessarily true that you were somewhere, and highly probable that you know the answer to the question. *That* is what truth is about.
 - 29 Especially the fifth “meditation”, on intersubjectivity, in Edmund Husserl’s *Cartesian Meditations* (Husserl, 1960).
 - 30 I believe that this proposal is close and comparable to the epistemology presented in the philosophical mathematician René Thom’s ‘apology for logos’ (Thom, 1990).
 - 31 The epistemic level of reality—R IV—is the level of thoughts, or *concepts*, if by ‘concept’ we mean a predicative perspective on a category: something particular in so far as it is, has, or does

- something. Predicating on a category is thinking, and implies a *binding epistemic force* between categorized item and predicate; it implies a ‘truth-making’ principle to bind the predicate to the subject. To ‘conceive’ of something is to perform an act of thinking establishing such a bond. In this sense, the epistemic level is conceptual. This is not a standard view in cognitive science, where concepts are typically just seen as nominal representations. But in order for us to ‘conceive’ of something, we have to assign some value of truth to it—truth, in that sense, is *in* the concept—belief, hypothesis, or even counterfactual ‘thought experiment’.
- 32 If hard pressed, I might call this model an expression of ontological dualism, considering the distinction between I-II (matter) and III-IV (‘spirit’). However, since level I *constitutes* level III, and level II *constitutes* level IV, as we have seen, and since the result is therefore an architecture that cannot be reduced or collapsed into a two-story building without a devastating loss of ontological force, one may feel tempted to call it a complex monist model.
- 33 Chapter One, “The Mind-Body Problem”, in Searle, 1984.
- 34 For a fine history-of-science discussion, see Hasok Chang, *Is Water H₂O?* (Chang, 2012).
- 35 Ferdinand de Saussure’s insight (Saussure, 1962), that lexical and other arbitrary signs relate concepts to concepts, not things to things, is still relevant, but it needs further determination: signified concepts are of the order of *logos*, whereas signifier ‘concepts’ (perceptual categories) are mental.
- 36 This explains how minds can be ‘critical’, or dissident; they do not necessarily or inherently identify themselves with their (or any) culture. Not identifying themselves in this way does not annihilate them, it just makes them critical.
- 37 Symbolicity is performative; symbolic meaning is modal (can be expressed by modal verbs and concepts: something must be, cannot be, etc.), whereas iconic meaning is simply deictic and predicative: I show you this, or that this looks like that. Combinations of symbolic and iconic meaning occur in most of our sentences.
- 38 The Peircean terms simply refer to the laconic indications in “Logic as Semiotic: The Theory of Signs”, CP 2.227-9, 1897, reprinted in Buchler, 1955. I am not engaging in any neo-Peircean scholasticism, just suggesting some standard anchoring points. With one exception: the Interpretant is not a sign here; it is *logos*.
- 39 What is going on at level IV in semiosis could deserve an extensive study in itself. Here, we are only suggesting that there is such an instance and a paradox or problem, namely, that communicated meaning must in fact be believed to be *shared* beyond all concerns for the psychological conditions of the implied subjectivities. This belief—which is often manifested by the occurrence of ‘conduit metaphors’ of communication—can disappear, and when it does, so does communication.
- 40 Leonard Talmy, 2000, “The cognitive culture system”, chap. 7 in vol. II, discusses an embodied enculturation process that appears to determine children’s and adolescents’ cultural (ethnic) group identity, in terms of inclusion or exclusion, and deep feelings of belonging.