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What Is Cognitive Semiotics? A New Paradigm in the Study of Meaning

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For Su Xiaojun

If semiotics studies meaning, and cognitive science studies the mind, then cognitive semiotics is the study of mind and meaning — the way meaning exists and works in human minds (and ideally, in animal minds in general). By contrast, if meaning in the semiotic sense is considered a part of inanimate nature, such as solar systems, or a part of living beings that do not have minds, such as botanical beings, or a part of genetics, such as DNA sequences, as it occurs in many versions of bio-semiotics, then such a framework is *not* cognitive semiotics (it may instead be some variant of bio-semiotics). Furthermore, if minds are considered to only consist of sensory perceptions or of content that cannot be described, because it does not offer any stability or regularity, then that framework is *not* cognitive semiotics (it may instead be some variant of behavioral science or analytic philosophy). If someone believes that there is *no* meaning and there are *no* minds, but that there still are signs, signifiers, signifieds, and semiotic functions, then that person is definitely not a cognitive semiotician. Such negative determinations can be useful; however, they can neither replace the positive criteria nor the arguments to be made in favor of the positive version — namely the ways in which a cognitive semiotics may lead to specific new insights.

1. Sign typology. The wall

Why do we call certain entities signs at all? Do all such entities share enough properties to make them suitable for being categorized under one heading? Here is

a possible answer to that question, which Eco usefully asked. The notion or concept of *sign* is used when we refer to phenomena that appear or are presented to us in one proximal part of mind, space or time which is *separated* from another part of mind, space or time, where some other, more distal phenomena are represented, which the former phenomena are experienced or presented as *pertaining to* or *aspects of* and therefore 'mean' or 'signify' — so that the separation between the signifying phenomenon and the signified phenomenon can be described as a sort of phenomenal 'wall' isolating the signifier's proximal *locus* and the signified's distal *locus*. The aspects of what we call a *thing*, by contrast, appear in the same *locus* as the thing they are aspects of; the redness of a red apple does not make the apple a sign, a semiotic function, with /red/ as a visual signifier. Things — like apples — are given in one *locus*, whereas signs are given in two separate *loci*. This is, I think, the universal difference between things and signs.

This locative structure — the spatio-temporal semiotic divide — makes the notion of sign into a concept that also can function metaphorically. In a political situation, there can be « signs of peace ahead » — thus not immediately ahead, but close enough to create a bit of hope in the speaker. Every morning the newspapers I read mention the remarkable « signs of recovery » of the American economy; in order to be « signs », they have to be relatively weak, faint, sometimes just barely perceptible, so that they almost need a specialized expert reader of omens to be noticed. In human scale, small things have a general tendency to become signs, because they are readily seen as traces or indices of more extended or complex things absent, past or still ahead. The *sign relation*, or the *semiotic function* of interdependency of expression and content, according to L. Hjelmslev, presupposes this division of experiential mind-or-space-time into 'this side' and 'the other side'. It is as situated as Latin *cis- versus trans-* . This side is where the expression is (proximally) perceived, and the other side is where its content (distally) thrives as conceived; the semiotic function works across the 'wall' between these two parts of the mind-or-space-time of experience. In this sense, the concept of sign is necessarily already oriented by an experiencer's or user's view; it is not and cannot be subject-independent, since the idea of a signifier has to refer to a 'this side' including instances of 'you', 'me', 'us', 'here', 'now' — therefore, *the concept of signifier is implicitly but constitutively deictic* : we are on this side (of the sensible), whereas the signified meaning is on the other side (the intelligible), in some conceivable semantic domain to which *we* are pointing while 'signifying' it[1].

On icons. The principle of the semio-phenomenal *wall* invites a strikingly accurate analogy, or instantiation, namely a *building* with an interior and an exterior. The windows show to people situated in the interior what is happening in the exterior part of space : windows show *icons* of the exterior to the observers

1. Explicitly deictic signs, by contrast, such as the *demonstrative* pronouns in language, point to things present but signify that these things contain properties that the speaker finds 'significant' and intends the hearer to attend to — so the wall is still active, only in a slightly different manner.

located in the interior. *Icons are windows*, we could say metaphorically (A IS B, in G. Lakoff's conceptual metaphor format). The logic of interpretation used in the process of understanding an icon consists in first 'seeing' what there is to see through the window, and secondly, extending this view to a belief in the visible character of the unseen rest of the exterior. The content of seeing must exceed the frame of the sight offered by the iconic window. Otherwise (if the rest of the exterior is categorically different from what is shown in the window), the icon, or the window, is perceived as being 'biased' or even as 'lying' about how things are. Human minds are capable of using three-dimensional seeing on certain two-dimensional artifacts that are simulations of visible things; so instead of a real, transparent, glass-covered window, an *image* can be painted on the wall, within a window frame, and our minds willingly 'see' such a graphic simulation as a representation, showing what there may be to see outside … Iconic representations are indeed interpreted by our natural visual equipment, but since we also know the difference between a real window and a pictorial simulation (a *trompe-l'œil*), we know that images cannot be trusted as much as windows (which is already less than entirely). Iconic signs show what is *possibly* true (this modal observation comes from Peirce). However, what we visually see or otherwise sensorially perceive is also only possibly there, as Descartes reminded us.

Moreover, there are *three* temporally distinct forms of iconic representations, or icons : *portraits* (pictures, likenesses) of something, typically something singular, that the shower's viewer relates to the past (since the shower must have seen, in some sense, what he intends to show); *maps* of the (navigating user's) situational present : « You are here now ! »; and *models* (or plans, incl. diagrams[2]) of some intelligible disposition of forms and forces, the knowledge of which may guide the viewer in the future; models are pedagogical. Thus, icons show us what something may have looked like; or what the present situation looks like from an Olympian vantage point; or what is useful knowledge for the future. Maps can of course become decorative pictures; and those can become models (as it happens in architectural historicism). All three iconic forms use extended vision, including 'inner vision' (Zeki, 1999), a basic cognitive capacity we also call *imagination*. We project what the icon shows us onto the 'wall' and almost manage to look straight through it — into the past, the future, the hidden part of the present. The wall becomes a projection screen. This is the very important dimension of depth that icons contribute to human immediate experience of our 'life world', the world of shared meaning in which we live. — Why would it be *shared*? Because I cannot 'see' something without feeling that the clearly 'seen' is 'seen by others as well'; this cognitive routine is built into our mind's architecture. We have to actively restrain it in order not to be dangerously naïve, but we still need to believe that the 'seen' can in principle be 'shown' to others — otherwise we could not effortlessly believe in the possibility of *communication*. We

2. However, *diagrams* seem based on a very particular form of spontaneous mental graphics — incl. arrows, flows, containers, bindings, partitionings — that is still awaiting semiotic theorization.

in fact communicate mainly because icons exist, and factual icons make us steadily corroborate the feeling that the content of extended vision is indeed, in fact, shared. We can of course look out of the same window. Therefore, we feel, other forms of semiotic exchange are equally possible, at least in principle.

On Indices. Natural 'signs' — this term may be a metaphor — have signifieds that are *causally* related to their signifiers (as fire to smoke, and illness to symptom). Still the signified meaning hides behind an experiential wall. Salient, abrupt, and inhabitual sensations, glimpses, smells, etc. that penetrate the surfaces, cracks or holes in the experiential wall make the interpreter use his encyclopedic causal knowledge as a 'code' for 'reading' these indices of 'something going on' — there is necessarily something, but not necessarily what you believe, if indeed you already have a belief : most of the time we just wonder *what* is it that a salient feature 'means'; this feeling of there being a sign without knowing its 'meaning' (in a physical sense) gives rise to human curiosity and *interrogative* attitudes to the world. A *question* is a message about a sign with no filler of its content, or no determination of validity — asking another human being for explanatory help. Natural signs can further be classified according to their (deictic) temporal dimension : they can appear as *traces* of past events, *symptoms* of present states, *omens* of future happenings. All such events, states, happenings are of course still experienced as immediately inaccessible, when they are referred to by a natural sign.

On symbols. The wall is still a useful metaphor for the signs we call *symbols*. Walls can have doors, and often these lead to places we need to distinguish before going there through them ; for example, toilet doors carry inscriptions indicating which gender goes where (thanks to J. Lacan for the idea). Gates in airports, or train stations, indicate destinations. Inscriptions over gates or doors typically rule over the subjects crossing them. Such indications are symbols ; their meanings have to be learnt, and in general they form series containing contrasting meanings and form contrastive paradigms ; their shapes are to be found in codes that are conventionally, that is, historically, given[3]. If the airport contains corridors leading to other corridors to the gates, the paradigms give rise to place-bound syntagmatic combinations of symbols. The modality of symbolic signs is interestingly neither /possibility/ nor /existence/, but instead /obligation/, positive or negative, that is, *deontic necessity* : so for example, if you want to leave this place relevantly and go where you intend to go, you *must* 'follow the signs'. Not obeying a symbolic sign can even be a criminal act and can put you and others in danger (cf. traffic signs). Symbols are always place-dependent[4], and therefore lose their meaning when they

3. As mentioned below, symbols grow out of metonymic icons, and the metonymic context specifies the code in question.

4. By contrast, images of different kinds can be carried around and still mean what they mean (photos in wallets, maps in cars, diagrams on blackboards). Symbols are parts of a contextual syntax, whereas icons are not. *Writing*, mathematical, linguistic or musical, are fine examples of the *syntagmatic* condition of place-dependency I am referring to here.

are out of context. The place so to speak guarantees the 'force' of a symbol ; in the wrong place, a symbol means nothing[5]. An interesting aspect of symbols is their derivation : if an idea allows a foregrounding of a visible or otherwise perceptible aspect, taking a part of that aspect and reproducing it (the principle of *metonymy*) produces a symbolic signifier.

And again : Symbols can be past-oriented, like *monuments* ; they can be present-oriented, like *signals* ; and they can point to the indefinite future, like signs of *writing* (linguistic, mathematical, and musical instructions). Writing in fact produces corpora of 'texts' that tell readers how to perform certain mental and physical acts when and where it is relevant (like recipes), in order to obtain an intended result — which may be a work of art, of gastronomy, of science, of law, etc.

Let us summarize this classification organized in terms of interpretants and temporal reference (Fig. 1) :

Sign Type	Past	Present	Future	Interpretant 'Code'
Nat. signs :	*traces*	*symptoms*	*omens*	Causal knowledge
Symbols :	*monuments*	*signals*	*writing*	Conventional codes
Icons :	*portraits*	*maps*	*plans*	Conceptual imagination

Fig. 1. Signs in time.

What is particularly *cognitive* in this array is 1) the view that *icons* are rooted directly in human capacities for extended sensing using a mental, working-memory based process of completion : vision and hearing — again : partly perceptual, partly based on 'inner' vision or audition — completing the signifier outside of its frame. Icons therefore need no 'code' at all. 2) The view that *symbols* are learned, encoded deontic conventions ; as mentioned, it might be shown that they are all rooted in forms of metonymic representation, which would explain their deontic modal force[6]. And 3) the view that *natural signs* just consist of distant but causally related events ; their 'code' is the reader's causal understanding of a natural phenomenon.

2. Mental spaces[7]

In semiotic mental space theory, meaning and meaning production in thinking or communication are seen as based, grounded, anchored in human facts, that is, approached as emerging from personal and interpersonal conscious experience in

5. Like a no-parking sign in the middle of a desert.

6. Metonymy is, it can be shown, a set of semiotic operations producing forms of occasional *naming*, allowing us to call and recall an entity, prototypically a person. Calling is obliging someone who hears the call, to respond !

7. Blending, also called conceptual integration, and mental space theory, were first elaborated and introduced by Mark Turner and Gilles Fauconnier (2002). The semiotic re-elaboration is our own responsibility.

the actual life world of humans. This evident but nevertheless most often neglected principle could be called the *phenomenological prerequisite*. We cannot just grasp meaning patterns as ideas combined with other ideas out of the blue. The mind is embodied and situated; the 'body' in question is not only a physiological entity but also a social and emotional entity equipped with consciousness — inner life, if you will. Experience takes place in *domains* of experience, or semantic realms, so in any situation, a human subject will be interacting with specific physical circumstances, with other subjects, collectively or individually, and with its own thinking and feelings. We live in *situations* that have to be represented while we live them, that is, represented in certain domains. *The present moment of a human being is also in itself a representation*[8]! Life is a dream, as the baroque writers said (P. de Calderón). This is why the present — a situation — can be kept as such (albeit for further editing) in long-term memory. Recollections build on the representational format of present experience; we live in experiential scenarios that have a spatio-temporal format — as to episodic time, probably the Pöppel-window of 3 seconds is a standard minimal pulsation rate. The present moment, as an episodic representation, is thus a mental space. In cognitive semiotic blending theory, we call it the *semiotic base space*. It has prevalent domain structure and linguistic, historical, cultural, physical, and universal cognitive properties, which all can give rise to particular ideations. When in a situation we *refer* to things absent or present, we build a mental space by 'space delegation', an operation anchored in our semiotic base space by signifiers linked to the spaces of things represented. We can thus *refer* to things in thinking or in communication; so what sort of things do human beings refer to while thinking or communicating?

Let's take a look on absent things, which can only exist by space delegation. Basically, absent things are of two kinds : either they are absent because they have never been and cannot be or become present, like mythical episodes, fictions, philosophical principles, mathematical facts, hypotheses of research, counterfactual ideas, personal memories, encyclopedic bits of knowledge (like Wittgenstein's birthday, same as mine), etc.; or they are absent for reasons of space or time, while still being real in a historical sense, including abstract history and history of ideas (things we know and are really thinking of and attending to are mentally real).

Now when we think of something, we do it IN and OUT OF our base space, and the target of our thinking is always the deictic content, the state of affairs our thought refers to and is *about* (J. Searle's preferred formula : thoughts have 'aboutness', they are about something; Searle, 1983).

8. This sentence upsets my anonymous reviewer. But technically, the experiential present is built up 'online', in real neural time, using a host of Gestaltung routines and integrations that record themselves so that second-short changes can appear as continuous, even across breaks caused by gaze saccades and attention shifts. What we 'presence' is conceived while perceived. Therefore, the so-called mental spaces include those delegated from the real space we are in, but also includes the real space we are in. This *semiotic base space* is an unfinished representation specified by the fact that we are in it — now. See Brandt (2004) and Brandt & Brandt (2005).

But *what* it is that we then think *about* it (about this deictic content) is the generic content that we apply to it, predicate on it[9]. So it appears that (situated) thinking implies a double space delegation : one deictic, one generic. Is it possible to think about something without thinking *something* about it ? No. As a minimum, when I am thinking about a person, I see this person mentally and remember situations the person was in ; these images are now generic (so to speak, frozen) predicates to the deictically referential person, I propose to say. The remembered scenes are about this person, not separated from the person by a copula verb, but still *about* in the sense of *around* the person[10]. What a person has done or has been, is now 'around' (about) the person remembered. This is, we could say, basic predicative phenomenology. In this sense, thinking is predicative — with or without language. 'Language' did not invent it. Here is where *mental space* theory is called for.

Mental spaces, according to this semio-cognitive view, are phenomenological 'chunks' of mental content that our consciousness can hold and attend to ; or rather, these spaces themselves are the frames of such composite contents. The predicative format I mentioned involves two mental spaces delegated from the base space we are in : the predicative *presentation* space and the *reference* space displaying the subject of that predicate. The content of the presentation space is given in the generic mode, whereas the content of the reference space appears in the deictic mode, since it is what I am thinking about while applying the generic predicate to it. The constellation of mental spaces, one presentational, the other referential, thus creates two default 'input spaces' for a blended space, when we are thinking something of something, that is, when the 'subject' is taking a 'predicate', to a certain extent and in a certain way that has to be stabilized schematically. This warm and sunny weather *is nice* for taking a walk, but not for studying ; that cold and rainy weather *is nice* for studying but not for picnicking. The stabilizing entity is some *relevance*-making extra schematic instance (walk, study) from where it appears possible to see something *as* something (else, or just specified) — *in a certain respect*, which often is not the only respect occurring to the speakers or thinkers. The fact of seeing something mentally as something specific by this predicative operation creates a new mental vision : the *blended space* in which, often in surprisingly strange and unrealistic ways, we see (imagine) the referent in a mode specified by the 'aboutness'. *Applying a relevance schema to a blend* produces a structuring effect that makes it meaningful, and lets the relevant principle stand out as a salient, emerging semantic effect, typically involving an emotion, or a deontic message : do this, do that… a take-away *meaning effect* that feeds back into the base space, of course, since that is where it is destined to be understood and acted upon.

9. Lovers' dialogue : « I think of you. » – « Yeah, so *what* do you think of me, when you think of me ? » – « I just think of you… » – « No, there must be something you then think of me, tell me ! » – « Of course, my dear, but I dare not mention it. » Subjects without predicates do not work well.

10. This may be why « *I think a cat » is ungrammatical, while « I think about a cat » is not.

So one input space is presentational and generic, while the other is referential and deictic. This difference between input spaces elucidates a certain amount of semantic problems.

The content of the presentation space is a signifier, and the content of the reference space, a signified. So the entire network seems to be that of a semiotic function. Some Peirceans may say : Representamen = Presentation space, Object = Reference space; Relevance = Interpretant. Such Peirceans only miss the blend itself, its result, and the anchoring of the network in a base space, which would be the *pragmatic* circumstance of the semiotic process of meaning production through such a network.

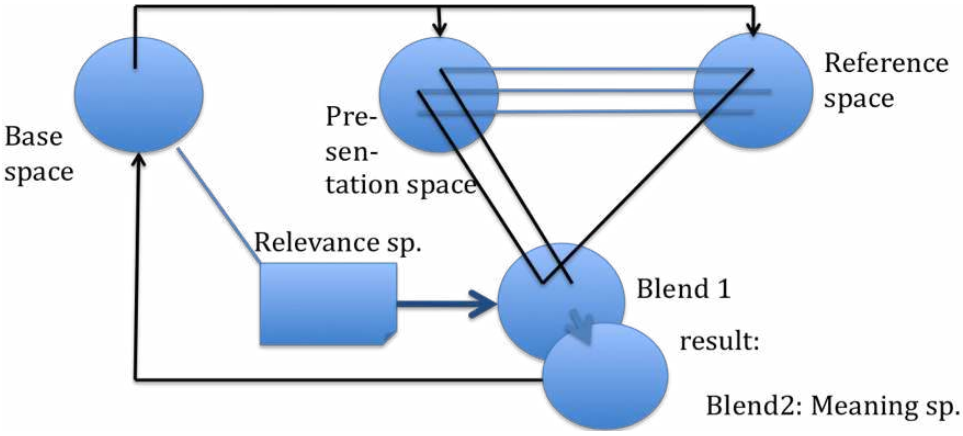

Fig. 2. The standard blending network.

3. Metaphors

Let us take a look on metaphors. A special type uses imagery from the target field; for the time being, let us call them auto-metaphors. The following is a selection of such 'auto-metaphors' from American newspaper titles :

(1) Blowing our horn on wind [energy]
(2) Colorful migration is just the tip of the wing
(3) Data Show Arctic Climate Is on Thin Ice
(4) 2008 is turning out to be a stellar year for astronomy.
(5) State puts cork in plan to change wine shipping.
(6) Air mall chief looks to land new business at Hopkins [Airport].
(7) Africa's great apes are running out of time.
(8a) [Michael] Phelps helps swimming make splash.
(8b) Meanwhile, gymnastics has tumbled to third [position, in latest Gallup Poll].
(9) Popularity of birding is flying high in U.S., latest statistics show.
(10) Turning another page in retailing to readers. [Local booksellers 'branching out' to keep going]

(11) Carmakers realize suppliers are industry's nuts and bolts.
(12) Clearing the air on lung disease.
(13) First Energy brings back light bulbs, but is this a brighter idea?

The semantic network of (3), for example, can be analysed thus (Fig. 3) :

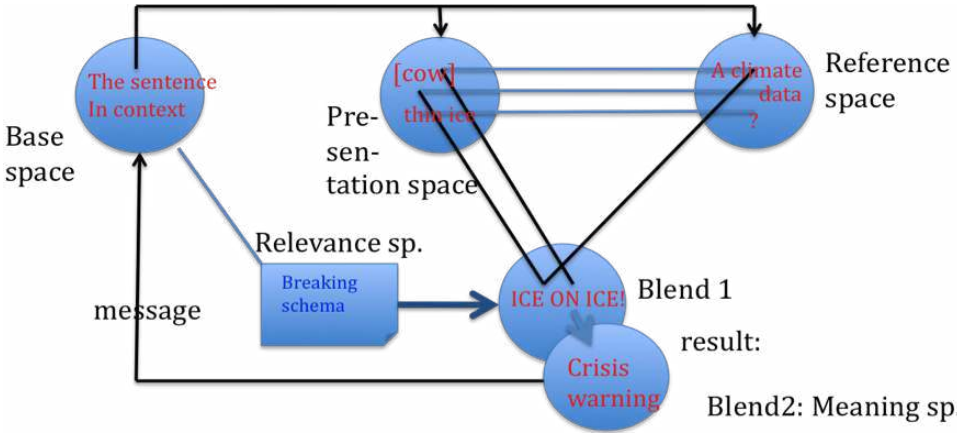

Fig. 3. The semantic network of a metaphor.

Comment :

Base space : The title is typically perceived as humoristic, while still dramatic and compelling (according to my students).

Input spaces, Pres. and Ref. : Metaphor requires a domain difference between the contents of these inputs[11]. But in auto-metaphor, we seem to have a counter-example of this requirement, so that the blend seem to absurdly say « (Thick) ice is on (thin) ice »! However, the idiomatic expression « to be on thin ice » only — metonymically[12] — extracts visual aspects of the climate crisis from the Relevance space and posits them in Presentation space for emphatic attention-calling; the crisis itself is geo-physical, ecological, and political, whereas the « thin ice » image is only physical. I have arbitrarily inserted the dummy entity [cow] from the Danish idiom : « There is no cow on the ice » [Dan. « *Der er ingen ko på isen* » — meaning : there is no problem].

The blend : This blend is overtly absurd, which creates the comical effect typical of auto-metaphors. The more absurd it appears to be, the stronger it foregrounds the anti-absurd Relevance schema (in the box, on diagram), imported from the Base space of shared idiomatic knowledge of the interlocutors, here : journalist

11. As to the notion of domain — semantic, or experiential — see Brandt (2004), chap. 3. The unfolding of domain ontology is entirely missing in Lakoffian theory of metaphor.
12. Metonymy consists in extracting visual material from the Ref. space to the Pres. Space in order to use this extracted imagery as a provisory 'name tag' for the source of the extraction. As mentioned in a former note, metonymy is, semiotically, a process of naming that is at the root of the creation of symbols (which therefore often appear to be iconic).

and readers. The *breaking* schema is an obvious dynamic dramatization of a life-threatening crisis. The dynamic schema dramatically opposes gravitation and the force of the support of a heavy solid object.

4. The semiosis as a network

The semiotic blending network of mental spaces allows us to represent sign structures as processes[13]. This is maybe the most interesting result of the cognitive research on semiotic phenomena. Signifiers and signifieds are mapped onto each other as Presentation and Reference contents; the relation is a blended space content stabilized by an interpretant 'code' (iconic, symbolic, or causal), and the semantic product appears in the second state of the blend as an emergent instance of communicable meaning — here called a *sememe*, with an expression inherited from A.J. Greimas (1966).

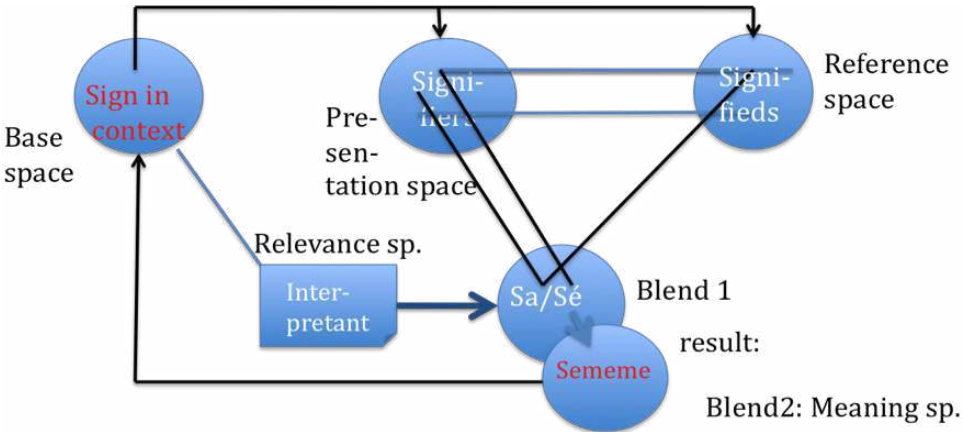

Fig. 4. (The sign as a network) shows the principle of semiosis, the 'semiosic' process, as it may be performed by the human mind, using the format of predicative thinking in general.

This representation may well be offered as *the* sign model of a cognitive semiotics. It obviously combines the models of Saussure, Peirce, Fauconnier-Turner, and Greimas.

Metaphors are iconic signs (of a special kind), whereas metonymies are symbolic signs (of a special kind[14]), and the entire rhetoric of the mind is 'semiosic'. All figures and tropes of the human mind are, I think, rooted in the *semiotic revolution* that must have occurred, maybe not very early, during the evolution

13. This idea was suggested by Line Brandt and appears for the first time in Brandt & Brandt (2005) (« Making Sense of a Blend »).

14. Again : a metonymy is a provisory *name* for something that the speaker needs to refer to and call attention to, sometimes even call on : « Hey, you over there with the red nose, come here ! » It uses a perceivable property as a sign for the conceivable referent.

of our species, by which the present became a representation, and a possible 'referent', or reference space (*here*, *now*, *you*, *I*, *this*, *that*), so that there could be variable presentations of it — and a sort of semantic recursivity could emerge, as appears from grammatical recursivity (I say/think that I say/think that…). The world of signs studied in semiotics is probably just the more entrenched part of an open cognitive workshop, namely the experimental everyday life of cultures and communications.

The most important catalytic factor in this hypothetical semiotic revolution may have been the early *esthetic* activity in the supposedly mimetic phase of our mental evolution (cf. Donald, 2001). But what, then, can have triggered the emergence of such an esthetic mode of perception and performance? We still do not know or even have interesting guesses[15].

5. Philosophical postscript : the disembodiment of the mind.

The mathematician-philosopher René Descartes' ontology distinguished spatio-temporal, material reality (*res extensa*) and non-spatial, non-temporal immaterial reality (*res cogitans*) ; these two realities could interact but not merge[16]. The Cartesian dualism allowed him to maintain that ideas are distinct from what they are about, and to doubt and evaluate the truth of ideas by examining the reality they refer to. It also allowed him to acknowledge introspection as a method for examining them. What this immaterial reality, 'intro-spectable' in our own minds, corresponds to is *meaning* — in its distinction from material states of affairs — including what we can recognize as *sememes* in the semiotic blending analysis we have considered. Cognition becomes semiotic the moment when introspection also becomes 'extro-spectable', namely when we start to see that meaning can be shared, because we can *signify* it to each other. Semiosis makes Meaning a potentially public instance, however private it immediately may be and is. This moment is the origin of the *re-public*, *res publica*, the foundation of the human life-world and of abstract thinking. Since then, Meaning has been a realm in its own right, so different from each of us, so disembodied, that we now have to take it down to human scale by a theory of embodiment. But our bodies are semiotic and cannot stop being so; they are dreaming when they are awake — we are the stuff that signs are made of… there is nothing we can do about it. We now *have to* be human.

Bibliography

Brandt, Per Aage (2004), *Spaces, Domains, and Meaning*, Bern-…, Peter Lang.

15. Could it be the discovery and systematic use of drugs for sacred practices? The philosopher Georges Bataille would suppose so.

16. Whereas his student Baruch Spinoza let them merge.

Brandt, Per Aage & Brandt, Line (2005), « Making Sense of a Blend. A Cognitive-Semiotic Approach to Metaphor », *Working paper – Center for cultural research University of Aarhus*, 132–05.

Donald, Merlin (2001), *A Mind So Rare. The Evolution of Human Consciousness*, New York, Norton.

Greimas, A. Julien (1966), *Sémantique structurale*, Paris, Larousse.

Searle, John (1983), *Intentionality : An Essay in the Philosophy of Mind*, Cambridge, Cambridge University Press.

Turner, Mark & Fauconnier, Gilles (2002), *The Way We Think. Conceptual Blending and the Mind's Hidden Complexities*, New York, Basic Books.

Zeki, Semir (1999), *Inner Vision : An Exploration of Art and the Brain*, Oxford, Oxford UP.