

The communicative mind*

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Per Aage Brandt is the founding director of the Center for Semiotics at the University of Aarhus, where he taught for thirty years. While a Professor of Cognitive Science at Case Western Reserve University, he started the Centre for Cognition and Culture and led the editorial team of the *Journal of Cognitive Semiotics*. With numerous publications on semiotics, linguistics, literary theory and philosophy, he has also authored several volumes of poetry. In this interview he combines his research experience and his aesthetic perspective in addressing questions on the nature and development of cognitive semiotics, on possible bridges between science and the humanities and on the challenge of understanding human nature.

Orgs. – You are one of the precursors of cognitive semiotics, a field that aims to study the processes of the human mind by analyzing instances of meaning, produced and perceived. What exactly is cognitive semiotics?

PAaB – The foundational idea behind cognitive semiotics is that *the study of the human mind*, of its neurophysiological and neuropsychological underpinnings

should be related to *the study of meaning*, as it is developed in thought, in language, in communication, in social practices, in cultures and all along the history of our ‘symbolic’ species, from the earliest stages of our *semiotic evolution*. What were the ambitions of the intellectual movement of the structuralists in the 60s was transformed and even amplified into those of a cognitive semiotics at present. The perspective remains that of a transformation of the ‘human sciences’ into a cluster of studies on meaning, in its bodily, situational, material condition, yet always related to the mind that inhabits us, to mental activity, imagery, memory, emotions, natural logic, narrative, poetics, rhetoric, aesthetics – in sum, semiotics in all its states.

What makes semiotics *cognitive* is that it no longer just considers ‘discourse’ as its ontological base, but instead intends to dig deeper, into the sense-making machinery of the human mind and consciousness: cognition. The way we think and feel is considered directly connected to *the way we signify* – to ourselves and to each other. Everything looks different from this point of view. So for me, cognitive semiotics is not a specialty like any other in the field of disciplines, but it is rather a trans-discipline, or even an in-discipline,

* This interview was conducted by Ana Margarida Abrantes, Sandra Cavalcante and André L. Souza (Orgs).

as Paolo Fabbri¹ recently suggested – because it constantly questions local knowledge in the domains it touches upon.

Orgs. – Since the debate launched in 1959 by C. P. Snow on *The Two Cultures*, there have been numerous attempts to bridge the gap between science and the humanities in the pursuit of knowledge. When it comes to the study of the human mind, is cognitive semiotics one such possible bridge? What is its place between the human sciences and the natural sciences?

PAaB – The cognitive contribution implies a particular new approach to the old question of the relation between *nature* and *culture* in the production of meaning. Human beings emerge biologically along an evolution which comprises a semiotic or “symbolic”² evolution, by which *the conscious mind*, a neural phenomenon that we share with other animals, begins to develop autonomous mental spaces and articulate discrete and syntactically re-combinable expressions of them, which allow us to communicate contents referring both to present and to absent situations: these mental spaces are purely semantic, “theoretical” structures, but anchored in the concrete situation of communication. As proposed by neuropsychologist and philosopher Merlin Donald,³ this occurs

through different phases, beginning with hominids (particularly *homo erectus*) and their reinforcement of mimetic skills (mimic, gestural), which allow enlarged social communication, both technical and emotional. This cultural creation re-programs, so to say, cognition – conceptual processes of categorization and schematization, and agentic and motor processes – for communication and paves the way for language and cultural routines like music and dance. Which means that the *universal skills* of our species will now be specified, i.e. they come to be culturally ‘rewritten’. Culturally developed meaning is therefore both *natural*, by its ‘universal’ underlying conceptual components, and *cultural* by its profile, i.e. by the specific and rewritten use of these means. By taking into account this “semiobiological” data, we avoid the respective dogmatisms of both “fuzzy” culturalism and “techie” universalism, after Snow.

Orgs. – How can the study of meaning contribute to the understanding of human nature? In other words, what can semiotics contribute to this pursuit?

PAaB – *Saussurean* semiotics, based on the linguistic sign, clearly and even joyfully lines up with human sciences, with no major problems for that matter, either as critical discourse analysis (political, for instance), or as descriptive technique in the domain of communication, whether in aesthetic or in commercial fields.

Piercean semiotics classifies signs or rather tries to introduce a semiotic note into analytic philosophy or into biology (bio-semiotics). We may say, retrospectively, that “classical” semiotics

1 Lecture delivered at the Semiotic Seminar in Paris, 2013.

2 Cf. Biologist Terrence Deacon, **The Symbolic Species** – The Co-evolution of Language and the Brain. New York and London: NORTON, 1997.

3 Cf. DONALD, Merlin. **A Mind So Rare** – The Evolution of Human Consciousness. New York and London: Norton, 2001.

keeps a rather modest profile in the contemporary intellectual landscape, despite some breakthroughs, and notably the profile of one single person: the brilliant essayist and novelist Umberto Eco. Without his literature, it would not have broken the wall of indifference.

Cognitive semiotics, on the other hand, naturally inherits the Enlightenment ambition of the *sciences* of Man, an ambition that was still alive before the recent disaster, and in fact ever since rationalism. It concerns *what is human*, ontologically, in all possible registers, from all methodologies, those available and those yet to come.

Human sciences are, incidentally, presently in a strange condition, after the devastation caused by French-American and post-modern deconstructivism. They seem on the verge of collapse, by lack of a motivation other than ideology.

In the natural sciences, despite recent successes in particle physics, I rather have the impression that we live a moment of theoretical standstill, both in mathematics and in physics. Thanks to the historically incredible intensification of inter-scientific communication, experimental results accumulate and are known globally with raging speed; new syntheses, in contrast, are yet to be produced. We await in particular the great breakthrough of the neurosciences, namely the discovery of the precise processes by which the brain produces consciousness, imagination, representational memory; knowing *where*, anatomically speaking, – in such and such cellular networks – this production seems to take place, is interesting but not sufficient for knowing the secret of *how* it works. How can we experience mental content as reality

occurring outside of ourselves, in the world of our bodies? The philosophically famous being-in-the-world experience must be due to a fabulously complex projection onto the sources of our sensory data.

The neurobiology of the mind is evidently a domain that primarily affects psychology and psychiatry (and, why not, psychoanalysis), but it further concerns all disciplines that deal with the exchanges between our body, our language, and our emotional and intellectual life. Since knowledge of this domain is a particularly sensitive social topic, an ethical concern is raised and will be raised acutely: what are the benefits and the possible misuses and abuses related to the applications of such knowledge? Will we witness the rise of a normative natural science (since it is inherently ethical, so to speak), for the first time in the history of ideas? In this case, cognitive semiotics articulates itself without much difficulty the new neuroscientific paradigm, since its position and its tasks are already placed in this field, which is comparable to the classical position of medicine (and as such, already normative and ethically engaged).

Orgs. – The special issue of Scripta we are preparing is entitled: Language, Discourse and Cognition. In your view, how does cognitive semiotics relate to cognitive linguistics?

PAaB – First generation ‘cognitivism’ was symbolic, in the literal sense that the mind was thought to work by strings of abstract symbols. The computing Turing-machine – Alan Turing is the father of modern programmable computers – was thus supposed to be a good metaphor for

representing the real processes of human thought (since it “calculates”). At this stage, a corresponding semiotics was that of calculating machines, in particular of robots (Luc Steels): machine semiotics. It is still alive and kicking, by the way. We can connect Noam Chomsky’s linguistics to the first generation, in the sense that his symbolic theory of a generative syntax matched the “cognitivist” idea of meaning. Semiotics, whether European or American, was likewise “symbolistic”, since it considered the linguistic sign (the word) as a symbol, nothing else, and the syntax of word-strings as a linear mechanism comparable to an equation. Today we realize that this conception is insufficient for accounting for real syntactical processes.

The second cognitivist generation, in the 1970-1980s, in turn, admits *iconic* representations, especially in the form of metaphors and non-defined categories, which are constituted by means of prototypes, and it admits the existence of a schematizing semantics, built out of half-symbolic, half-iconic mental diagrams (Lakoff, Langacker, Talmy, Sweetser), so that a *semantic syntax* of schematized categories begins to emerge. This version is of course compatible with the *structural semantics* of the École de Paris, even if this connection is not always acknowledged; the substantial correlation, or rather parallelism, of the American and the French schools, for example in the analysis of modal semantics (the meaning of modal verbs and nouns), gave rise to the development of a *dynamic semiotics* in Denmark, in the 1980s. Nonetheless, cognitive science remained focused on meaning attributed to perception, and had not yet acknowledged the importance

of meaning in intersubjective, social communication, i.e. cognition embodied in the social realm. It had left in the shadow the pragmatic dimension of cognition, a dimension that in Greimas, for instance, emerges in the model of the so-called ‘generative trajectory’ (*le parcours génératif*) at the level of the discursive surface structure.

Cognitive *semiotics*, which accounts for the expressive activity in socio-cultural contexts, then constitutes a third generation of cognitive studies. Here is an example of this: *Deixis*, which consists in appealing to another, addressing the other and specifying the *enunciative mode* of this appeal – e.g. volitive, interrogative, instructive or affective – is a signifying gesture that is crucial to all communication and more fundamental than any other sign type; it is in fact the basis of the symbolic sign function.

Cognitively, the ‘invention’ of the deictic gesture increases the human capacity to direct attention entirely to *the attention of the other*, rather than to a referential object, and correlatively to call the attention of the other to our own.⁴

Here is my particular take on this: basically, this expressive phenomenon is dual and does not directly imply more than two subjects, but it becomes *triadic* by the superimposition of a third subject on it, who succeeds in turning his attention to the attention that the first subject brings to the attention of the second subject, by calling it: S3 → (S1 → S2); this is where a gesture freezes or

4 Cf. OAKLEY, Todd. **From Attention to Meaning**. Explorations in Semiotics, Linguistics, and Rhetoric. Bern: Peter Lang, 2009.

5 BENVENISTE, Émile. **Problèmes de linguistique générale**. Paris: Gallimard, 1966.

formalizes and becomes an autonomous impersonal symbolic sign, detached from the dual intersubjectivity, now transportable and susceptible of being learned by a community. Our personal pronouns – I, you, he, she, it, we, they... – are based on this triadic interplay of attentions, of which they are a trace. Émile Benveniste⁵ based his analysis of the representation of communicating subjects in language (*l'homme dans la langue*) on morphological personhood, which always is somehow related to deixis, like the demonstrative pronouns are.

Orgs. – Does our thought have a dialogical structure? Is communication a part of thinking?

PAaB – We are ‘thinking to ourselves’ when we experience a so-called stream of consciousness. Rather than a stream, it may be compared to a rhythmic sequence of musical phrases. In general, our thoughts are organised chunks of meaning and are already implicitly pre-addressed to some person we know – we get ideas *for* others; so thinking is intentional not only in the sense of being directed *at* something but also by being built *for* someone. This phenomenon is reflected in language. Relative clauses, for example, are uptakes or anticipations of the other’s thinking, and something similar can be shown to yield in all other cases of clausal embedding. Cleft sentences insist on an aspect of the uncleft idea which the addressee is supposed to not yet have got right – read a page of Jacques Lacan’s prose or seminar, and you will get my point. All argumentative prose is built sentence by sentence around implicit counterarguments. Even the

very predicative relation between subject and predicate is dialogical, I claim; one of these categorial entities – subject or predicate – is signed by the speaker, the other by the hearer. The dialogical phenomenon is, I think, closely related to the mental space structure in the mind: referring to the ‘Aarhus model’ (see below BRANDT; BRANDT, 2005),⁶ I now suggest to observe that one of the input spaces often ‘belongs to’ the first person, the other to the second person, whereas the relevance schema comes from an instance in the third person; so enunciation may be the direct building ground of all blending formations. But note that ‘dialogue’ could suggest that only first and second person instances are involved; third person instances are crucial to all stable symbolic functions. ‘Triologue’? (Esther Pascual’s suggestion.)⁷

Orgs. – An important theoretical contribution of your work in cognitive semiotics to cognitive linguistics and cognitive science was the “Aarhusian” version of blending theory (named so for it emerged at the Center for Semiotics that you directed at the University of Aarhus). What is the main difference between a semicognitive view of Blending and the theory proposed by Gilles Fauconnier and Mark Turner?

7 PASCUAL, Esther. *Imaginary Trialogues: Conceptual Blending and Fictive Interaction in Criminal Courts*. Utrecht: LOT Dissertation Series, n. 68, 2002.

6 BRANDT, Line; BRANDT, Per Aage. Making sense of a blend. A cognitive-semiotic approach to metaphor. **Annual Review of Cognitive Linguistics**, v. 3. Amsterdam and Philadelphia: John Benjamins, 2005. See also BRANDT, Per Aage. **Spaces, Domains, and Meaning**. Essays in Cognitive Semiotics. Bern: Peter Lang, 2004.

PAaB – The cognitive theory of mental spaces and blending (Fauconnier and Turner)⁸ introduced the idea that we think by chunks of meaning more like scenarios than like objects. This is already an important step forward. These chunks, or mental spaces, can be rather independent semantically, but you can go from one such space to another by following the so-called ‘space-builders’, in fact *signifiers*, that are part of the scenarios, but linked to other spaces that they refer to, or in fact *signify*.

We can hold several mental spaces in our mind simultaneously, and these authors discovered that we often use that faculty in order to extract parts from the different spaces and project them into a space where they blend and form new meaning. This is the essential finding, and it is certainly important. Now, the Aarhus model takes three new steps forward: 1) it explicates the mental space where the input spaces come from: instead of being free-floating UFOs, they are themselves signified from the base space of a situated communication; 2) we build huge amounts of blends, and do so incessantly, but most of them collapse immediately due to their lack of *relevance* – a blend has to be stabilized by schematisms from base space – that is, from the current context – that can make a new construction meaningful in the situation of its production; 3) the processes of blending always takes place in networks, and these have a canonical format, which allows the construction of larger networks, and makes it possible for the addressee to complete and anticipate

the meaning of what is signified. A recent unfolding of this discussion is to be found in Line Brandt 2013.⁹

As she shows, with the introduction of the notion and the study of *enunciation*, semiotics – or rather semiolinguistics – makes an important contribution to the understanding of the intersubjective and social dimension of communication.

With the transformation of Mental Space and Blending Theory into a theory of cognitive processes *anchored* in semiotic base spaces, which determine signifying exchanges and their situational, emotional, institutional, social, cultural, phenomenological, cognitive, physiological and physical conditions, research has reached a new stage, I think. By the way, I would now reserve the term ‘conceptual integration’ for the integration of qualia into objects, objects into situations, situations into notions, notions into emotions – in the stratified *mental architecture* of meaning.¹⁰

Let me add that there is a strange incoherence in the Fauconnier-Turner ‘diamond’ model with its two input spaces, a generic space regulating the mappings, and the space of blending. This theory admits *multiple inputs*. But there is a problem with multiple input spaces. What happens to the mappings? So with four inputs, you already get six sets of possible dual interspace mappings, and therefore six generic spaces, in all eleven spaces, and a chaotic mess of ‘selective projections’ to the eleventh, the blend.

9 Cf. BRANDT, Line. **The Communicative Mind**. A Linguistic Exploration of Conceptual Integration and Meaning Construction. Cambridge: Cambridge Scholars, 2013.

10 BRANDT, Per Aage. **The Music of Meaning**. New Essays in Cognitive Semiotics, forthcoming 2014.

8 Definitively formulated in FAUCONNIER, GILLES; TURNER, Mark. **The Way We Think**. New York: Basic Books, 2002.

This chaos will never work in actual processes of blending in meaning production. Try five inputs: sixteen spaces..., and still no anchoring in any base space. What I think happens in our semantic processes is an open embedding of *formatted networks* into spaces in other *formatted networks*; most such networks – when multiple input spaces are connected – are of course not built online but preestablished and simply available. Such an ordered embedding will be as intelligible as the embedding of clauses in sentences.

Orgs. – With two university centers, at the universities of Lund and Aarhus, named after the discipline, cognitive semiotics seems to be a Scandinavian field par excellence. What do you see as the specificity of this field and its geographic and disciplinary future?

PAaB – The Scandinavian cultural area has a long tradition of double orientation, both Anglosaxon and ‘Euro-continental’. Philosophically, both analytical and hermeneutic-phenomenological. Contradictions are therefore frequent, sometimes violent, and often productive, in Nordic academia. In linguistics and literary studies, Russian and Czech formalism and French structuralism were strong here. The Linguistic Circle of Copenhagen, founded in 1931 by two great theoreticians, Viggo Brøndal and Louis Hjelmslev (who never agreed on anything theoretical), still exists and publishes its *Acta Linguistica Hafniensia*. In Sweden, the linguist Bertil Malmberg was an important inspiration for the leading figures now in Lund, such as visual semiotician Göran Sonesson. What about Finland and the Baltic countries,

where semiotics is high? I am curious and hopeful. – To me, Copenhagen has always been the hottest spot in the experimental scientific landscape; it is a place where the waves from Niels Bohr’s school may still be felt. Nevertheless, there is still no cognitive semiotics there, to my knowledge.¹¹ Its humanities stay, surprisingly enough, mainly deconstructive and postmodernist, and struggle as much with updating as do Paris, Liège, Bologna... A glorious past can generate a certain inertia in the present.

Orgs. – Considering your work as a poet, is there a point at which human nature can no longer be addressed by science and only art (poetry or music) is the only way to ask the relevant questions?

PAaB – Well, Cartesian science teaches us to study things both from the inside (as *res cogitans*) and from the outside (as *res extensa*): especially while studying expressive acts. So you will get the outside information from the semiotic functions that can be gathered from comparative observation, but this approach mostly favours the reception side of the process. The production side can only be approached from the inside, phenomenologically. Of course everyone speaks and knows what it is like to do so, but if you *write* – which is like speaking in extreme slow-motion – you will have a totally different experience. Poetry, which is indeed slow-motion writing, has

¹¹ The journal **Cognitive Semiotics**, created in 2007, in Cleveland, Ohio, and whose early co-editors included Ana Margarida Abrantes, Line Brandt, Todd Oakley and votre serviteur, is now in the hands of the groups at the universities of Lund and Aarhus.

always been my semiotic laboratory.

Meaning production in slow-motion is an invaluable experience; *translating poetry* is even more efficient as a 'window into' the laboratory of the mind. The fascinating thing about writing or translating poetry is that you are not 'thinking' in the ordinary sense of this word, you are listening inwards, and therefore you do not know where you are going; the only active operation left to you is that of eliminating what you don't want (and that is in itself a difficult question). Musicians also listen inwards and often have the impression to transmit, rather than to create. It is just like 'having an idea': we don't 'create' an idea, we just receive and have it, and secondly decide how welcome it is...

Research on the conscious mind and its content is very difficult, and in a sense more difficult than the sciences of physical nature, because looking and listening inwards is a very demanding exercise, inhibited by prejudices of all kinds. Poetry is a method for doing this, and *accounting for poetry in the making* would be the ideal method, but it is impossible; instead, we have different brands of cognitive poetics that try to catch up retrospectively. However, doing poetry or poetics requires a type and amount of semantic and emotional sensitivity that most good scientists and scholars do not have; semantic sensitivity can certainly be trained but only through a life-long process. The father of *Alice in Wonderland*, the mathematician Lewis Carroll, is a fine counter-example and teaches us a lesson: if you can keep up your infantile love of pure nonsense, you are on the right path towards meaning.