

Commentary on Todd Oakley's
A Grammar of Attention
A Treatise on the Problem of Meaning

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When I first read Todd Oakley's book (2003), I realized that I was witnessing one of those rare but oddly familiar events that sometimes happen in the history of science and human thought when in different countries and contexts, different researchers with different backgrounds undertake, independently of each other, a very similar research program. Indeed, Oakley's main concern for offering "a large-scale model of attention as a heuristic for conceiving of and mapping out a dynamic theory of meaning" (chapter I) can be said to coincide to a great extent with that of a group of Italian researchers (Benedetti, 2004, and Marchetti, 2003) that, within the major framework of the studies of mental activity, aim at designing a system for the analysis of the meanings of words based principally on the various kinds of operations attention can perform.

The conceptual and theoretical background from which Oakley's work stems is patently not the same as that of the Italian researchers. While the Italian researchers follow mainly in the footsteps of the founders of the Italian Operative School (from now on, "*FIOS*"), namely Silvio Ceccato and Giuseppe Vaccarino, Oakley's work originates principally from the tradition of cognitive studies, especially those which consider human cognition as situated, embodied, and perceptual (just to mention some authors: Lawrence Barsalou, Gilles Fauconnier, James Gibson, Mark Johnson, George Lakoff, Ronald Langacker, Michael Tomasello, Mark Turner). Moreover, Oakley's work does not bear any sign of even the slightest influence of the *FIOS*' thought. This fact is very significant because it shows how it is possible for different people to arrive at the same conclusion despite starting from different and independent premises. Indeed, the *FIOS* reached the idea that mental activity in general, and the meanings of words in particular, can be analyzed in attentional terms by passing through a hard work of criticism of the various philosophical theories of

knowledge (Ceccato, 1964, 1966, 1988, Vaccarino, 1974). None of the *FIOS*'s peculiar work of criticism is present in this book: it neither directly nor indirectly influences Oakley's work. Nor is Oakley's main intent to attack and criticize the philosophical theories of knowledge, though in the Introduction, while revealing the metaphysical biases of his project, he sketches a short criticism of the Scylla and Charybdis of theories of meaning, rationalism and radical relativism. Moreover, his criticism of rationalism and relativism leads him to take an abductive realistic position, which fits within the greater metaphysical tradition of naturalistic emergentism, that can hardly be said to coincide with the "operative" or "constructivist" solution envisaged by the *FIOS* (at least in Ceccato's and Vaccarino's formulation: von Glasersfeld's "radical constructivism" (1998) can certainly be considered nearer to Oakley's position). Indeed, while abductive realism commits to the position that "the world out there exists" and that "the structure of the perceptual world is already given to an observer in unambiguous way, because organisms attune to environmental properties directly" (Introduction), the operative solution neither poses any "existence of reality out there", nor gives the unambiguousness of the perceptual world for granted: on the contrary, it relies only on human beings' most important capacity to mentally construct the world they live in.

Likewise, the main interpretive method that Oakley uses to perform his analyses – the "Mental Spaces and Blending Theory" originally developed by Fauconnier and Turner – has nothing to do with the methods contrived by the *FIOS* and their followers. While the models and methods worked out by the latter are mainly dedicated to the analysis of the meaning (or meanings, in case of homographs, metaphorical or derivative use, etc.) of the single word, or, at best, to the analysis of the single kinds of attitude that human beings can assume (aesthetic, economic, social, political, etc.), and do not specifically aim at accounting for the way in which the linking together of words in a clause, sentence or discourse progressively gives rise to an evolving overall meaning, Mental Spaces and Blending Theory provides instead, in Oakley's opinion, the possibility of analyzing the online, moment-by-moment construction of the meaning of the entire clause, discourse, or text (whether it is an advertisement, an instruction for those who want to learn to navigate a virtual reality program, a hand-written examination test or an audio presentation for paintings of a museum) as it unfolds in real time and in a given context. To use Oakley's own words, this theoretical model accounts "for the moment-by-moment interpretations we generate about ourselves, about others, and about the world" (chapter II).

Despite these differences in background and method, Oakley's view about the role played by attention in meaning construction resembles very much that of the Italian researchers. In his opinion: "a theory of attention stands as a prerequisite for building the theoretical framework of a cognitive semiotic: the study of the online construction of meaning as we stand, walk, sit, think,

speak and listen, read and write, and otherwise apprehend, perceive, and muse *in* and *about* the world, *with*, and *about* ourselves and others” (Introduction). And again: “a theory of attention is the most appropriate metatheory for developing a theory of meaning” (Introduction). We can see at a first glance the similarity of Oakley’s position to that of the Italian researchers if we consider the fundamental importance that in general they and the *FIOS* give to attention for the study of mental life and its products. As stated by Ceccato (1987), for instance, attention is at the base of the working of our mind: it provides the raw material for the construction of mental constructs. The attentional state represents the fundamental analytical criterion that allows us to investigate meanings (Ceccato and Zonta, 1980). The similarity becomes even more straightforward when we consider the fact that Oakley specifically speaks of a “theory of attention” instead of generically referring to “attention”: indeed, this makes his view comparable with Benedetti’s (1999, 2004) and Marchetti’s (2003) in that they too clearly strive for an analytical system based on an articulate and comprehensive attentional model, capable of accounting for the various and diverse operations attention perform.

Such a view of the role of attention necessarily leads Oakley to design a model of attention capable of accounting for how human beings construct meanings. Oakley identifies six components of attention that “may count as the basic cognitive scaffolding for a general theory of meaning” (chapter I): *alerting, orienting, selecting, sustaining, controlling, and sharing*. According to him, meaning construction can be explained by means of these six fundamental processes. They represent the necessary conditions for the construction of meaning as well as for the execution of the other cognitive processes, such as perception, conceptualization, consciousness, memory, learning, social interaction, even though they are not sufficient because they are determined by memory, categorization, valuation and emotion. They are the building blocks on which he founds his analyses of acts of meaning making that occur verbally, non-verbally, and communally.

Even on this issue, Oakley’s position is very close to that of the Italian researchers. Benedetti (2004), for instance, identifies nine elementary kinds of mental operations, most of which represent specific and basic working modalities of attention, that serve as the fundamental analytical atoms for his analysis of the meaning of words. In this specific respect, the position of Benedetti and Marchetti differs from that of the *FIOS*, because the analyses carried out by the latter are based on an unstructured model of attention: Ceccato’s (1964, 1966, 1987) and Ceccato and Zonta’s (1988) analyses are based on the single “attentional state” *S*, and Vaccarino’s ones (1981, 1988, 1997, 2000) on the moments of “active attention” and “interrupted attention”.

Oakley's analyses generally differ from those of the Italian researchers, both in method and kinds of case studies. In some rare occasions, however, he comes very close to the Italian style of research. In chapter III, for instance, while comparing the phrases:

(a) ...now just a click away

and

(b) ...now only a click away,

he analyzes the adverbs *just* and *only*: "These adverbs focus attention on complementary aspects of the process associated with getting what you want: the adverb *just* focuses on the manner or duration of execution; the adverb *only* focuses on the number of executions required. *Just* construes perspective as internal to the event of clicking, (...) whereas *only* construes an external perspective of iterative instances of clicking and the fact that only one instance is necessary as opposed to many. *Just* profiles short duration while *only* profiles the number of sequenced steps required of the computer user". Another example is represented by the analyses of the nominal:

(c) just a click away

and the verbal

(d) click your way.

The nominal (c): "focuses attention on the endpoint. (...) The mental simulation is construed statically as plotting a course from one fixed location to another and assessing its relative distance". On the other hand, the verbal (d): "focuses attention on the process of moving to the desired location. The mental simulation is construed dynamically so that the person doing the pointing and clicking is creating her own path to a desired site rather than traversing an already plotted trajectory" (chapter III).

In their unformalized, coarse, but nonetheless essential, formulation, these analyses resemble very much some of the analyses performed by the *FIOS* and the Italian researchers, above all those that are preparatory to a more accurate and formal formulation. Indeed, the research performed by the Italians (see, for instance, Ceccato and Zonta, 1980, Marchetti, 1993) is very often characterized by the fact i) of analyzing the meaning of each single word at a time, as opposed to the whole and complex meaning of a phrase, clause or sentence, and ii) of being based on the comparison of the analyzed word with other words by alternating the former with the latter in the same, or in a similar, phrase or clause. By changing the word, the phrase or clause assumes a different meaning. The

researcher tries then to account for each different meaning of the phrase or clause by identifying which different mental operations (mainly attentional ones) the analyzed word implies (the opposite procedure is also sometimes used: the researcher uses the same word in different phrases or clauses, and tries to account for what remains unchanged through the different phrases or clauses by identifying which mental operations remain constant).

Even so, the kind of analysis just mentioned represents an exception in Oakley's work. In fact, he is mostly interested in analyzing case studies of texts operating in specific settings and contexts (chapter V is emblematic of this approach). This is due to the fact that he considers the influence of the context as decisive for meaning construction, and as prevailing over the basic meaning of each single word, even though he recognizes that "basic meanings are, for the most part, remarkably stable, and it is their stability that allows us to continuously generate new (enriched) meanings" (personal communication). As he observes, the situation in which meaning arises strongly contributes to determine it: the immediate environment, the interaction with other human beings, and more in general the context frame the mode of constructing meaning. In his view, it is therefore necessary to "construct an approach to meaning construction that would be at once semiotic, linguistic, and rhetorical in character" (Introduction), that is, a method able to incorporate into its analyses the specific physical, social, cultural and contextual conditions of enunciation.

This necessity leads him to adopt Fauconnier and Turner's modelling device of Mental Spaces and Blending Theory, because it affords: "a mechanism for grounding acts of meaning making in the immediate physical surroundings human beings invariably find themselves" (chapter II). A mental space is a dynamic, real-time enactment of a mental model activated to satisfy specific local purposes. It is phenomenologically characterized by a temporal window of two-three seconds (according to Oakley, this is the "rhythm of our lives", the interval out of which we live our lives, and which is necessary for us to become aware that an event has a particular quality). Mental spaces exist in networks: "We are constantly building, elaborating, modifying, and disintegrating networks of mental spaces. Meaning arises both within and among these dynamically connected entities" (chapter I). Mental space networks, once up and running, tend to produce and develop new integrated spaces called "blends", which contain selected aspects of structure from each input space and an emergent structure of its own. Blends are the processes that account for human creativity. Mental Space and Blending Theory "provides psychologically plausible constraints for semioticians to model the online construction of meaning" (chapter II).

How does Fauconnier and Turner's modelling device relate to a theory of attention? According to him, the composition, development, integration, and erasure of mental spaces are attentional phenomena *par excellence* (chapter II). The speaker produces mental spaces to bias and pilot the

listener's attention. While producing and developing blends, mental spaces allocate "attention to specific tightly organized scenes for satisfying perceptual, conceptual, analogical, deductive, explanatory, deliberative, and emotional purposes" (chapter I).

In all his analyses, Oakley shows very clearly how the working of mental space networks pilots the reader's or listener's attention, moving it from one space to another one, prompting the reader to shift attention backward and forward, disengaging it from a scene, dividing it between two or more elements, or sustaining it appropriately on some feature for a certain time. An excerpt from chapter V concerning the analysis of a set of instructions for a fictitious detective who wants to learn to navigate a virtual reality program shows Oakley's typical way of investigating meaning construction: "Close examination of lexical and grammatical structure reveals how the writer manages *to shift the reader's focus of attention* within the mental space network. The first six sentences keep the Reality space as the viewpoint while adding new structure to the Virtual space, *making it the focus of attention*. This is evidenced by the role of personal deixis (...). These forms establish the Reality space as the initial viewpoint from which new information from the other spaces is made accessible, *which effectively divides attention equally between the Reality and the Virtual spaces*, so the reader *can focus her attention on* the relationship between initial computer command and the subsequent screen event" (italics are mine).

Oakley's method of analyzing meaning certainly represents a first important step toward the identification of the sequence of attentional operations that gives birth to, and are necessary to understand, the unfolding, overall meaning of phrases, clause, sentences, and discourses: a method, however, that in my opinion needs further refinement with respect to its capacity to translate and describe in attentional operations what has previously been analyzed in terms of Mental Spaces and Blending Theory. Despite giving from the Mental Spaces and Blending Theory's point of view a clear idea of how the overall meaning of a phrase or clause takes form, his descriptions of the working of attention seem to be too much gross-grained and in need of additional refinement. The qualitative gap between the descriptions in Mental Spaces and Blending Theory terms and the descriptions in attentional terms is quite patent. While the use of the vocabulary and model of Mental Spaces and Blending Theory gives rise to extensive, fine and reasonably exhaustive descriptions of the interplay of mental spaces (which, moreover, are usually accompanied by useful figures and diagrams), the use of the vocabulary of attention originates only limited and partial analyses, with no accompanying diagrams. I believe that this is mainly due to the fact that, compared to Oakley's vocabulary and model of attention, Mental Spaces vocabulary is more developed, articulated and structured. Consequently, Mental Spaces vocabulary overwhelms the attentional one, both in frequency of use and effectiveness. The general impression, therefore, is

that Oakley's attentional analyses are not only subsequent to Mental Spaces analyses, but also marginal and subsidiary with respect to them.

Oakley's intention is not only that of developing a model of attention as a heuristic for conceiving of and mapping out a dynamic theory of meaning, but also of "re-reading" and "re-thinking" the disciplines charged with investigating human meaning making: semiotics, linguistics and rhetoric. Oakley intends to perform such an operation on the basis of his theory of the six component of attention. As far as linguistics is concerned, for instance, he claims that "the six components provide the sensational, perceptual, and conceptual anchor of language" (chapter III). After having described the peripheral status of attention in the Generative linguistic tradition (Chomsky and Jackendoff), a tradition that viewed knowledge of language as cognitively-encapsulated and separated from the outset from the other general cognitive processes (memory, attention, categorization, etc.), he presents an alternative paradigm of research: Cognitive linguistics. Unlike Generative linguistics, Cognitive linguistic approaches (mainly represented by the works of Fauconnier, Lakoff, Langacker and Talmy) rally around the common theme that knowledge of language depends on other cognitive processes, attention included. Unlike Generative linguistics, Cognitive linguistics does not consider linguistic competence as a set of abstract, a priori rules that, with maturation, eventually link up with normal but peripheral cognitive processes. Rather, it considers linguistic knowledge as a system continually shaped by linguistic usage events constrained by general cognitive operations. Mastery of linguistic symbols implies linking them up with constructional schemas (moving, transferring, having, etc.) which themselves emerge from perceptual and interpersonal experience.

Oakley articulates a linguistics of attention that widely draws on the Cognitive linguistic approaches: "The guiding principle of this study is that linguistic knowledge *emerges* from and subsequently *exploits* other cognitive functions such as sensation and perception, categorization, memory and attention. (...) Language fits a brain already primed for shared attention, imitative learning and modelling devices manifest externally before manifest internally" (chapter III). Nonetheless, Oakley's linguistics of attention differs from most of the Cognitive linguistic approaches for two main reasons.

The first reason is that his approach: "does not begin with structure but begins with models of interpersonal use (i.e., the six components of attention) or what Benveniste called *énonciation*" (chapter III). The adoption of Mental Spaces networks allows him to incorporate into his analysis the specific conditions of enunciation.

The second reason is that attention lies at the very core of Oakley's linguistic approach (and here again we can see how Oakley's position is very close to the position of the Italian researchers). He

assumes that: “language and attention are inextricably related and that the components of awareness and attention influence language structure and use in the same way they influence perception and sensation. Language, like perception, is a way of organizing what someone wants herself or others to pay attention to. Linguistic constructions are not just empty syntactic vessels, but instructions for making something stand out as figure against a less differentiated background” (chapter III).

According to Oakley, the importance of attention for linguistic knowledge (and knowledge more in general) is patent since the very beginning of the process of language acquisition. In fact, as Tomasello’s work shows, shared attention between subject and others forms the foundations of learning. Moreover, the lack of shared attentional strategies is what mainly distinguishes nonhuman primates and humans in their inability to develop structured and complex linguistic systems, and transmit innovations and creations.

On the basis of his theory of the six components of attention, Oakley sketches a taxonomy of the parts of speech. Selective attention, for instance, explains the use of proper nouns, common nouns, indefinite articles, deixis of place and time, verbs and other linguistic structures (e.g., adverbial and prepositional phrases): they “are typical elements of linguistic construction designed to select entities, objects, and relations for further processing”. Sustained attention, on the other hand, explains the existence of pronouns, reflexive pronouns, appositives, restricted relative clauses, prepositional phrases, and definite articles: they “are elements of linguistic structure designed to sustain attention by focusing in and elaborating on the selected entity or topic”.

Toward the end of his interesting book, Oakley incidentally touches on a very serious methodological problem that worries all those who intend to analyze meaning construction: “no theory of meaning currently exists that rises to the level of explanation, only more or less ones” (chapter V). This is due to the fact that, at present, the only available methods of analyzing meaning are *reverse engineering* ones (taking apart an object to see how it works). As such, “they only permit indirect access to the mental and cultural processes of production and reception”. Every time we deal with mental activity, we cannot directly access it or “see” it. We can only *post hoc* infer from what it produces (perceptions, meanings, words, signs, sounds, etc.) that it should be so and so. Therefore, we cannot verify directly if our analyses are right: we can only give more or less plausible explanations.

The best thing researchers can do at present is to try to develop a proper theory and set of methods, rules, protocols, etc., and devise proper constraints in order to limit the possibility of making mistakes when performing their analyses of meaning. By articulating a theory of meaning based on the six components of attention, and by trying to devise a model able to constrain as much as possible his analyses, Oakley certainly demonstrates that he is working in this direction.

References

- Benedetti, G. (1999). "La categoria di spazio". In AAVV.: *Studi in memoria di Silvio Ceccato*. Società Stampa Sportiva. Roma.
- Benedetti, G. (2004). "Basic mental operations which make up mental categories". To appear in www.mind-consciousness-language.com
- Ceccato, S. (1964). *Un tecnico tra i filosofi. Come filosofare*. Marsilio. Padova.
- Ceccato, S. (1966). *Un tecnico tra i filosofi. Come non filosofare*. Marsilio. Padova.
- Ceccato, S. (1987). *La fabbrica del bello*. Rizzoli. Milano.
- Ceccato, S. (1988). *Il perfetto filosofo*. Laterza. Roma-Bari.
- Ceccato, S. and Zonta, B. (1980). *Linguaggio consapevolezza pensiero*. Feltrinelli. Milano.
- Glaserfeld, E. von (1998). *Il costruttivismo radicale. Una via per conoscere ed apprendere*. Società Stampa Sportiva. Roma.
- Marchetti, G. (1993), *The Mechanics of the Mind*. Espansione. Roma.
- Marchetti, G. (2003). "Foundations of Attentional Semantics". www.mind-consciousness-language.com
- Oakley, Todd (2003). *A Grammar of Attention. A Treatise on the Problem of Meaning*. www.cwru.edu/artsci/engl/oakley/aga.html (the book is now partly available at www.mind-consciousness-language.com/articles_oakley1.htm with the new title *Elements of Attention: A new Approach to meaning Construction in the Human Sciences*)
- Vaccarino, G. (1974). *L'errore dei filosofi*. G. d'Anna. Messina-Firenze.
- Vaccarino, G. (1981). *Analisi dei significati*. Armando Armando. Roma.
- Vaccarino, G. (1988). "Le categorie elementari (I). *Metodologia*, 3: 5-72
- Vaccarino, G. (1997). *Prolegomeni. Vol. I*. Società Stampa Sportiva. Roma.
- Vaccarino, G. (2000). *Prolegomeni. Vol. II*. Società Stampa Sportiva. Roma.