

On Giorgio Marchetti's commentary on my book "*Semantica Operativa*" [Operational Semantics], vol. I, 2004

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Having read Giorgio Marchetti's commentary on the (uncompleted) first part of my book "*Semantica Operativa*" [Operational Semantics] (see www.mind-consciousness-language.com), the first thing that I wish to do is to thank Marchetti publicly on two things that his commentary clearly shows: an extremely careful reading of the book and a very deep reflection upon it.

The second thing I wish to do is to congratulate Marchetti on another thing that his commentary clearly shows: the perfect understanding of all the contents of the book, without exceptions. Up to now no one has done the same. It was not a simple task. First of all, because the book is in the state of an uncompleted proof, which needs a work of revision. Then, because the book, because of its very nature, is not easy. Furthermore, because this book, having been conceived to be read especially by specialists of the matter, that is people who know Ceccato's thought perfectly (and, possibly, Vaccarino's too), has a general statement and a style which are very much conditioned by this. This makes the reading of the book much more difficult than the reading of other later works of mine, which have a propedeutical proposal (the reason why I left "*Semantica Operativa*" in the present state is exactly that I have completely devoted myself to writing works that have a propedeutical proposal).

Finally, I wish to congratulate Marchetti on the summary (about six pages) of "*Semantica Operativa*" that he has made in his commentary. It is a very well written summary: clear, systematic, complete and, above all, which proves, as I said, a perfect understanding of my work. I recommend these few pages to everyone who wants to quickly have an idea of the contents of "*Semantica Operativa*" and to everyone who has already read the book and wishes a general survey of it.

In the last part of his commentary, Marchetti makes a criticism and raises an objection to my work.

The criticism is that in the book I give no definition of "mental activity". There are two reasons for this. The first reason is that "*Semantica Operativa*" is a book that, as I said, since the beginning has been especially conceived for a public of specialists, that is persons who already perfectly know S.O.I.'s thought. Since in this circle a definition of "mental activity" has been frequently given (it is the one that Marchetti quotes on page 10 of his commentary: "*mental activity is that activity whose products last only as long as the activity lasts, and coincide with it*"), this has unconsciously led me to take for granted that the reader knew it. The second reason why I did not see the necessity of giving an explicit definition of "mental activity" is that we all know very well what the meaning of "mental activity" is and we can distinguish very well the physical things from the mental ones, even if we do not give an explicit definition of "mental activity". Sometimes I had the occasion of exposing the fundamental theses of S.O.I. to students of the secondary school and in the presentations I put some slides where I gave a much simpler definition of "mental" things than the aforesaid one, which is not suitable for such a public. On these occasions I realised that to give this definition explicitly was completely superfluous: even boys only 12-13 years old distinguish physical things from mental things with surprising ease and certainty.

Nevertheless, from a strictly methodological point of view, Marchetti's objection is well founded. We had better give a definition of "mental" things when we speak of this. The definition that Marchetti proposes (which, as I said, is the classic one in S.O.I.'s circle) maybe is substantially correct, at least for activities such as thought and representation (I should have some doubts about memory, which is surely a mental activity: the evocation of a memory is something that lasts as long as this activity lasts,

but the fixation of a memory creates something which is *stable* by definition). Apart from this doubt, I consider this definition rather difficult to understand, therefore I never used it in any of my works that have a propedeutical proposal. In such works, on one hand, I based myself on the aforesaid ability, even if it is unconscious, of distinguishing the physical things from the mental ones. On the other hand, in order to be clearer, I used a definition that is much simpler, as I said. In fact, I said that the “physical” things are the ones that we can perceive (or the ones of which we deduce the existence by means of experiments that have perceptions as their outcome), while for the “mental” things it is not so. This definition, which is surely more empirical than the other, has however the advantage of being immediately understandable.

Furthermore, the classic definition of “mental activity” given by S.O.I. presents another delicate problem. Because of this problem, I never use this definition if not giving very clear explanations together with it. To speak about this problem leads us close to the subject of Marchetti’s objection. Ceccato coined and always used the aforesaid definition of “mental activity”, specifying that the mental activity “constitutes its object”, while the physical activity “transforms its object”. As I said, perhaps the definition of “mental activity” given by Ceccato is substantially correct, but what does not convince me is this speaking *only* of “activity”, of “operations”. These words seem to me correct when we speak of the mental things: the mental things do not exist independently from an activity; *they are activity*, that is they identify themselves with the activity. It is not the same for physical things. Apart from the obvious consideration that in the physical world certainly there is a lot of dynamism, or activity, but there is also the simple existing in a completely inert way, this definition does not underline enough the fact that the physical things exist by themselves, independently from our mental activity, and they are as they are by themselves, not because we make them so. We have to notice that, with his own definition of “physical activity”, Ceccato implicitly recognized the existence of an independent physical world: if the physical or “transformative” activity happens on a pre-existing object and its result persists after it, then the physical world has an independent existence. The problem is that Ceccato considers perception as a mental activity like other activities (thinking, remembering, imagining etc.), which in the common language are labelled as mental activities (while perception generally is not). Therefore all these activities would be “constitutive of the object”.

This is an extremely dangerous statement. What is the meaning of the verb “to constitute”? Above all, what does the reader understand when he or she reads it? That the object is “created”? This is correct for the activities that are called “mental” in the proper sense, that is the activities that are commonly called in this way. When I form a thought, a representation, a memory, I really *create* them. But, for an object that we perceive, certainly it is not so. It is surely true that perception is an activity and not a “dematerialised” passive duplication. It is also surely true that the outcome of the perceptive activity, that is perception, is something that persists in our head as long as we perform this activity and that disappears when we stop this activity. But certainly this is not true *for the thing on which the perceptive activity is performed*. This exists independently from the fact that we perceive it or not. We must not mistake two things that are very different: on the one hand, the *result* of the perceptive activity, that is the thing that forms in our head, which is a mental thing, even if, as I said, a *sui generis* one (for example: the *perception of a dog*); on the other hand, *the substratum* on which the perceptive activity is performed, which is a certain part of the physical world, that is *a dog* (or better: what we call a “dog”). At the end of the perceptive activity, for example the visual one, we *isolate* a part of the physical world and in our head something forms (the essential outlines of a certain form, certain colours etc), something that surely does not exist by itself in the physical world, but which is *conditioned* by a *certain part of the physical world* (we can also, as Bettoni¹ does, call it a certain *configuration of matter and energy* [CEM]) that is in front of us, a contingent one, which instead *exists by itself*. This part of the

¹ M, Bettoni, Introduction to Glasersfeld E. Von (1998) *Il costruttivismo radicale*, Società Stampa Sportiva, Rome.

physical world that we can isolate from the rest and that we call “dog” is something very different from our perception of a dog: it is something that is completely independent and pre-existing with respect to our perceptive activity and which persists after it; it is something physical that performs some physical actions (it barks, it eats, it wags its tail etc); and it is *indispensable* in order to perceive a dog. It is absolutely true that even the simple perception is a classification (therefore something mental) because we call “dog” many individuals of the same species, even if they have noticeably different characteristics. It is also true that, in order to perceive a dog, as well as every other figure, we need to make an operation of separation from a background (also this operation is a mental one). But it is also true that this operation of separation between figure and background *is not arbitrary*, but it is conditioned by the fact that the whole mass of the animal presents a luminous contrast with a background and moves all together with respect to the background. And, above all, it is true that the group of atoms, molecules, that we call “dog”, exists by itself.

This is the fundamental difference between the perceptive activity and the other activities we commonly call “mental” activities. The mental activities like thought, representation, memory etc are in principle free, independent, arbitrary (we may think, imagine, remember etc what we want), perception is not (we may not see, hear etc what we want).

Therefore, *an activity* (which “constitutes”, or produces, something persisting until the activity persists) and *some physical substratum, completely independent from the activity, on which the activity is performed*, are *both equally indispensable* in order to have a perception.

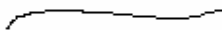
With regard to this, I would like to underline something that concerns the relationship between the perceptive activity and the semantic activity. In his commentary, Marchetti quotes one of the fundamental S.O.I.’s thesis when he writes:

According to this new scientific paradigm -[...] [the] “operative methodology”, [...] - everything we name and designate, either through a single word or an entire text, is the result of the operations we mentally perform to construct it. Contrary to what traditional linguistics maintains, the counterpart of a word or text is no longer the object of the world the word or text refers to, or the abstract concept or idea of such an object, but the mental operations making up the thing we name. It is precisely such mental operations that represent the meaning of words and texts.

In my opinion, this thesis is partially wrong. The meaning of a word is made up of mental operations when this word designates a mental category. If, for example, we use the conjunction “or”, what we designate is the fact that our attention firstly has focused on something, then it has discarded that thing and it has focused on another thing. On the contrary, the words like “dog” do not designate mental operations. It is true, as we saw, that some operations that we may even call “mental” operations (taking into account the specifications that I mentioned) are necessary in order to perceive a dog, but, when we say “dog”, we do not designate these operations. These operations are the *means*, the *instrument* that has allowed us the perception and that allows us to arrive at the designation, but they are not *the object* of the designation. The object of the designation of a word like “dog” is, as we saw, some part of the physical world, or CEM, which we have isolated by means of the perceptive activity. But, the object of the designation is precisely *this part of the physical world* and *not those perceptive operations*. If it were not so, we should arrive at the paradox statement that we cannot designate physical things. We do this continuously and surely the human being has done this since he became able to speak, because his survival depends on the physical things. And, moreover, if the meaning of a word like “dog” were some “mental” operations (the perceptive ones), the thing designated could not become the subject of physical verbs like “to bark”, “to eat” etc (naturally, the same consideration is true for these verbs: they designate physical things, and the only mental component that they have is the fact of being verbs).

Lets come to the objection that Marchetti raises. He writes:

If the entire job depended only on the sense-organs or the somatosensory system, there could be only two alternatives. In the first one, we would perceive nothing more than unrelated, meaningless fragments of sounds, colours, and sensations, forming no definite, distinct object or event. In the second one, supposing that we have an innate capacity to identify objects or events [...] we would not be able to perceive the same object or event in different ways: a certain object would be seen only in a certain way, and of a certain object we would see only certain characteristics. The possibility we have of perceiving many aspects of the same object (of a cat, for instance, we can perceive the tail, the nose, the mouth, the whiskers, and so on), or of perceiving an object in different ways (we can see, for instance, the following

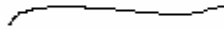


either as a “line”, a “streak”, a “scratch”, or a “cut”) can be explained only if we resort to the concept of a mechanism - such as attention - able to stop at will the automatism of the sense-organs and the somatosensory system, and to pilot these latter according to the subject’s intentions, expectations, goals, etc.

I never affirmed that “*the entire job [depends] only on the sense-organs or the somatosensory system*”, simply because I do not think so. What I affirm is that the perceptive activity is a lower-level activity than the activities that we commonly call mental activities (the forming of mental categories and of thought, memory, imagination, the assuming of an attitude). The perceptive activity fundamentally consists in *discriminating an object (or a stimulus) from another one*. In the human being this ability is highly sophisticated, but most living beings have a perceptive ability, even if less complex. Even plants have it, even if few people know this: the so-called “plant sensitivity”, which orientates the equivalent in the plant world of the movements of the animals, that is the so-called “tropisms” (like growing in the direction where there is more light), is a form of perception. And even the simplest animals have a perceptive ability. Sponges, for example, have a sensitivity for mechanical stimuli. The visual perception of the earthworm is only the so-called “photophobic reflex”: the animal takes shelter under the ground when the few light-sensitive cells of its skin signal it is exposed to light (and therefore it is vulnerable). Also these activities are forms of perception, I should not know what different name to give them. In the human being, the perceptive activity is present in its simplest forms since birth (simple response to tactile, thermal, sound stimuli etc), but even much more complex kinds of perception appear very early, from the first months of life: a baby very early shows the ability to discriminate forms.

The perceptive activity (that is the activity that, as we said, has the fundamental purpose of discriminating an object -or a stimulus- from another one) is “standard”, that is presumably *the same* (or almost the same) in all human beings, and *automatic*, that is out of the control of the will. This is the reason why the results of perception are substantially the same for all human beings, so that the only variable that seems to us to condition the result is the physical situation that is in front of us. This is the reason why the impression of the “cognitive doubling” of which Ceccato speaks is born. From a theoretical point of view to think that this happens is wrong, because perception is not the “photograph” of the external reality. When we perceive a tree, for example, we do not see the thousands of leaves and the hundreds of branches it is made up of, but only the essential outlines that allow us to discriminate a tree from another object. However, we always have to isolate the tree from a background. But, practically, exactly because this basic perceptive activity is “standard”, the outcome is that we tend to have the same perceptions, as if the perceptive activity were only a passive “duplication” of the external things. Surely, this basic perceptive ability can also be influenced by cultural factors (the many kinds of snow that Eskimos see and designate are probably the most famous example of this); surely, perception can vary even greatly in accuracy; above all, we can direct our attention towards something or something else and so we may perceive different things, and this is influenced by our personality, by the intentions of the moment, by our mood, by our culture etc. But this is a completely different matter, which is surely and obviously right.

Let's take again Marchetti's words "we can see, for instance, the following



either as a 'line', a 'streak', a 'scratch', or a 'cut'". Let's examine these words carefully. It seems to me that the only word that is correct is "line". Normally, we do not use the word "streak" when we wish to indicate lines drawn with ink on the paper. We use this word in contexts that are different from this. Neither 'scratch' nor 'cut' are correct, because they necessarily imply depth, the third dimension. Furthermore, what is there, inside the word "etcetera"? I cannot imagine anything, or almost nothing. This kind of example is the one that is typical of Ceccato. First of all, we can object that these examples are drawings, not photographs of objects of the real world. Often drawing is a "summary" way of representing something, therefore it is more ambiguous than a photograph. But the main objection that we can make against this kind of argument is another. When Marchetti says "we can see, for instance, the following either as a 'line', a 'streak', a 'scratch', or a 'cut'" he is not simply *perceiving*, he is *speaking*, and at this level he is obliged to use mental categories. When we simply discriminate, for example, a triangular form from a square or a circular one, we are at a level that is hugely simpler than when we "see" (or, better, we *consider*) a triangular form as a triangle. In the latter case we apply notions like the one of angle, of side, of relationship between angles and sides, that is we are *at a completely different level*, much more complex. The mistake that, in my opinion, Ceccato makes, when he makes such examples, is always the same: he always and only sees the level of the mental categories, and he does not realise that there are simpler levels where there are no mental categories. It is not that I do not "believe" in the mental categories. I "believe" in them, and how, to the point that I wrote a book about them and I am writing another one. But I think that there is a level where the mental categories are not yet there, and not to distinguish between these two levels is a big mistake. That's all.

Therefore I prefer to consider the perceptive activity as an activity apart, keeping it distinct from the ones that are commonly considered as mental activities. Nevertheless, we also may consider the perceptive activity as a mental activity (because it has some features that we commonly consider "mental" features), provided that we clearly say that it is a "basic" or "first-level" activity with respect to the properly-called mental activities, in the sense that the perceptive activity is on a lower hierarchical level and it provides the mental activities the "rough" material that they use; and, above all, provided that we clearly say that the results of the perceptive activity are conditioned by the contingent physical situation, which is something that is completely independent and existing by itself.

The perceptive activity occurs through processes (which we have begun to understand) that do not imply the construction of the mental categories at all. When we, for example, separate a figure from the background, we do not use the mental categories of "figure" and of "background" at all, but at the basis of this operation there is simply a mechanism that, at the level of the retina, makes the cells that are on the boundaries of zones of different brilliance strongly active, while the ones on which a zone of uniform brilliance is projected are not. In such a way the cells, where what we, *a posteriori*, making up a mental construct, call the "outline" of the image, is projected, are active. The mental construct of "outline" has nothing to do with perception, it is at a hugely superior level, the categorial-semantic one, and only human beings are surely able to make it up, while visual abilities are possessed by a great many animals. Attention is indispensable for the conscious perception, but, as far as we know, it occurs in the end phases of the perceptive process, after a complex process where information about the essential features of visual objects (like form, colour, depth and movement) is processed in parallel without the intervention of attention).

In short, *to perceive* is a matter, *to speak about what we are perceiving* is a completely different matter: there is a huge difference between these two matters.