

SOME REMARKS ON DOMINIQUE PRADELLE'S LECTURE:
"DOES HUSSERL HAVE A PRINCIPLE OF REDUCIBILITY?"

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As we have seen, the purpose of Dominique Pradelle's lecture was to give a critical account of the so-called "reductive reflections", which are briefly mentioned by Husserl in the work *Formal and Transcendental Logic* (Second section, Chapter four). The fact is that Husserl himself gave little information about the nature of such a "reduction". Paragraphs eighty-two and eighty-three of *Formal and Transcendental Logic* are laconic and mix up thoughts belonging to pure morphology, consequence-logic and truth-logic. The exposition of the same reductive method at the beginning of *Experience and Judgment* is not very explicit either. Thus it is Dominique's merit to propose a clarification of the sense of reduction at any level of logic.

In order to understand the main implications of such an approach, I would like to begin with recalling the framework in which Husserl's reductive thought take place. This framework is that of the genetic or "explanatory" (*erklärende*) phenomenology. More exactly: one could say that the examination of this "reduction problem" is directly linked to a much-discussed difficulty of Husserl's genetic views. This difficulty comes from the apparent opposition—or apparent contradiction—between two theses which are equally defended by Husserl: on the one hand, the idea that logical and mathematical laws are totally independent from the *data* of experience (that is what I will call the Independence-Thesis); on the other hand, the idea that logic and mathematics are deeply rooted in the ground of experience and finally *refer* to the empirical objects of a possible perception—thus that logic and mathematics say something about the world (that is what I will call the Referentiality-Thesis). Let us have a quick look at those two arguments.

1 / It is probably right to say that the Independence-Thesis is essentially based on the formal feature of logical propositions. Just like mathematical laws, logical laws have the very remarkable property of containing empty places, which theoretically can be filled in by any kind of objects. As Husserl notes in paragraph twelve of *Formal and Transcendental Logic*, the "algebraisation" of propositional terms makes possible the symbolic representation of

such empty places by small letters like *a*, *b*, *c* and so on. This formalization process erases at a glance all material distinctions. For that reason, it clearly has to be distinguished from the process of generalization, which keeps a reference to a specific object-domain. That is why Husserl very early introduced a formal concept of object (*Gegenstand überhaupt*) as correlate of any possible act of nominalization; that is also why he rejects, in his *Logical Investigations*, the classical theory of abstraction and maintains the absurdity of an empirical foundation of logic and mathematics. The reason is not only that judgments of logic speak about fully unspecified objects but also that they involve no ontological commitment to a real world of empirical objects. At the very least could one say that Logic and mathematics rather deal with a platonician “world of ideas”, a world of significations *in se*—a view that Husserl attributes (rightly or wrongly) to Bolzano and Lotze. So, Husserl notes, an empirical foundation of logic is a mere nonsense: no matter which individuals are given in the experience, logical judgments are independent of it.

2 / Yet the Referentiality-Thesis seems to dictate some important *restrictions* to such views, stating that logical laws, despite the formalization process, presumably “keep” a reference to the world of individuals given in the experience. This second argument, as one knows, is particularly emphasized after the so-called “genetic turn” of Husserl’s phenomenology. Regarding the philosophy of logic, this genetic orientation of phenomenological analysis notably gave rise to the topic of a “World-Logic” (*Weltlogik*), which appears in *Formal and Transcendental Logic* and in *Experience judgment* as well. Accordingly, the judgments of the logician do not have “truths *in se*” (*Wahrheiten an sich*)—that is to say a mere “world of ideas”—as content, but are rather related (*bezogen*) to a “world” of primitive substrates (*Experience and Judgment*, Paragraph four)¹. Now, Husserl argues, those primitive substrates are empirical individuals and the lower level of judgmental activity is itself based on a pre-judgmental yet already structured experience. Just like we find no syntactical material (for instance the significations “table”, “red”) free from any syntactical form (substantivity, adjectivity and so on)—an argument which can be traced back to Lotze’s second *Logic*—, just like every single syntactical material has a morphological feature which makes possible its connection with other materials (“red table”, “this table is red”), experience do not give us mere disconnected entities (the table, the red color). It rather brings us in contact with “syntactically” structured entities (things with properties: this red table itself). According to Husserl, this is not only a parallelism, but syntactical structure of propositions

¹ E. Husserl, *Erfahrung und Urteil*, Hamburg, Meiner, 1985, p. 13.

refers to syntactical structure of the perceived world, which would be the primitive one. He therewith maintains that judgments are always characterized by referentiality (*Sachbezüglichkeit*), for every judgment says something about the world.

So, you see the difficulty: How can one reconcile those two arguments? How can formal logic say something about the world of perception? In other words: what is the meaning of the Referentiality-Thesis? Does it mean an empirical foundation of logic and mathematics? Or does it mean something else? It is easy to see that the examination of the topic of reduction, as laid down by Dominique, is directly connected to this problem. Indeed, why does Husserl introduce the topic of reduction, if not to justify the Referentiality-Thesis involved in his genetic program? That is why, at first sight, the general function of the reductive method inside Husserl's argumentative strategy is clear and easy to understand. Because the judgments of logic do not *immediately* refer to a world of empirical objects, one could hastily consider them as a counter-example, which invalidates the Referentiality-Thesis. Obviously, the function of reduction is to avoid such an objection by adding to the Referentiality-Thesis, if we may say, a "clause of mediation". Accordingly, the argument of referentiality has to be reformulated as follows: all judgment *immediately or mediately (that is to say: by way of a number of intermediate levels)* refers to empirical objects of a possible perception. As Dominique rightly suggested at the very beginning of his lecture, the reductive method has to *prove* the mediation clause and, therefore, to justify the Referentiality-Thesis itself. It has to show that, if one submits a judgment of higher level to a reductive analysis, it is possible to obtain a judgment of lower level and so on—up to what Husserl calls a "judgment of experience" (*Erfahrungsurteil*), that is to say a judgment about empirical objects. In short: clarifying the sense of the reductive method is *ipso facto* clarifying the sense of the Referentiality-Thesis.

To my opinion, this approach could throw a new light on Husserl's genetic program and on its pretended legitimacy – and that is probably a central issue of Dominique's lecture. Let us just recall his conclusion: the topic of reduction is *equivocal* or is affected by a basic *ambiguity*, for it denotes sometimes the *reversibility* of syntactical complexions, sometimes the possible *instantiation* of a law and sometimes *semantic* or ontological constraints which apply to all our judgments (and therefore to the most formal ones as well: those of logic and mathematics). Yet, Dominique notes, the principles of reversibility, instantiation and semantic coherency do not satisfy at all the conditions of reducibility, for reducibility supposes a strict *equivalence* between judgments of different levels. Such an equivalence exists in one single case, namely in the case of extensional reduction of propositions in the logic of validity.

Basically, in all other cases, we should admit that the term of reduction is not used in proper sense.

What are the repercussions of this interpretation on our understanding of Husserl's foundational program? I will merely mention two points.

1 / The first point concerns the general difficulty mentioned above, namely the apparent incompatibility between the Independence-Thesis and the Referentiality-Thesis. Indeed, if the topic of reduction does not denote an empirical reducibility, then this apparent incompatibility is probably less serious than one could think at first sight. The so-called "world of ideas" is not reducible at all to the world of empirical substrates and remains independent from it. The Referentiality-Thesis would rather express the fact that the syntactical structure of our judgments formally corresponds to the syntactical structure of the world itself, and the fact that logical and mathematical laws have a possible "application" (*Anwendung*) to every empirical objects to the condition that one substitutes congruent object-names to the variables.

2 / Yet, if this interpretation is right, then we have to consider the second point, which concerns—I would say—the misleading relation between the Referentiality-Thesis and Husserl's genetic program. As Dominique suggests, it is very doubtful whether one could understand the principles of instantiation and semantic coherency in a genetic way as Husserl does. Moreover, even the genetic meaning attributed to the first principle, namely that of syntactical reversibility, is not self-evident, for it would be justified to dissociate two different arguments: on the one hand, the statement of a parallelism between propositional syntax and ontological syntax; on the other hand, the statement that both syntaxes are genetically connected and that the second one is more original than the first one. Anyway, according to those critical observations, one could wonder whether the reductive method really legitimates the genetic program. And if not, one could wonder, as Jean Cavaillès does², whether Husserl does not rather keep the "myth of the return to the past" alive.

² J. Cavaillès, *Sur la logique et la théorie de la science*, Paris, PUF, 1947, p. 77.