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DIFFERENT CONCEPTS OF LOGIC AND THEIR RELATION TO SUBJECTIVITY

In secondary literature, Husserl's *Prolegomena to Pure Logic*[1] has aroused surprisingly little attention. Several circumstances might be responsible for this inattention, the first being that the problem of *psychologism* is considered to be resolved. With this in mind, it no longer seems worth the effort to reconstruct Husserl's meandering and repetitive lines of argument. The fact that the text of the *Prolegomena* essentially stems from a lecture delivered in 1896 is another reason to turn directly to the more mature discussions regarding the relation of pure logic and phenomenology in the Second Volume of the *Logical Investigations*.[2] Finally to some readers, Husserl's extensive discussion of literature contemporary to him seems dated and irrelevant. This is supported by the work of merited scholars, such as Dallas Willard,[3] which has shown that one cannot always trust Husserl's presentation of opposing positions.

Nevertheless, in the following contribution I want to limit myself entirely to the *Prolegomena*. This decision requires an explanation especially since I want to deal with the question of the connection between logic and the subjective consciousness of logical objects. Concerning this question, the Second Volume of the *Logical Investigations* has made significant progresses in comparison to the *Prolegomena*. Apart from the fascination the multi-faceted text of the *Prolegomena* has always had for me, there are, however, at least two motives for my procedure: First, Husserl's tentative attempts to bring logic together with descriptive psychology, in the midst of the discussion with logical psychologism, seem to me especially instructive for understanding the difficulties connected with this endeavor. Usually, these difficulties are not sufficiently accounted for when reading the Second Volume only. Second, the role of logic as a theory of science (*Wissenschaftslehre*) comes into clear relief in the *Prolegomena*, and this in all formulations of logic, i.e., apart from pure logic, in normative logic, and in logical technology (*Kunstlehre*). Therefore, in this paper I will inquire into the question of the relation of objective logic to subjective consciousness

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[1] E. HUSSERL, *Logical Investigations, First Volume: Prolegomena to Pure Logic*, transl. by J. N. Findlay, London and Henley: Routledge & Kegan Paul 1970 (*Logische Untersuchungen I*, Husserliana XVIII, Den Haag: Martinus Nijhoff, 1975). Quotes without further indications are from Findlay's translation of the *Prolegomena*; the German pagination is given in brackets. In certain cases our translation of Husserl's text differs from Findlay's. In this case, D. CAIRNS' *Guide for Translating Husserl* (Dordrecht/Boston/London: Kluwer 1975, *Phaenomenologica* 55) has been consulted.

[2] E. HUSSERL, *Logical Investigations, Second Volume*, transl. by J.N. Findlay, London and Henley: Routledge & Kegan Paul 1970 (*Logische Untersuchungen II*, Husserliana XIX/1-2, Den Haag: Martinus Nijhoff, 1984).

[3] D. WILLARD, *Logic and the Objectivity of Knowledge. A Study in Husserl's Early Philosophy*, Athens: Ohio University Press, 1984.

D. Zahavi and F. Stjernfelt (eds.), One Hundred Years of Phenomenology, 19–29.

in each of these three formulations of logic. Needless to say, the *objective* foundational connection, which unites pure logic, normative logic, and logical technology, will also be examined.

I. Pure Logic and Its Relation to Subjective Lived-Experiences of Evidence and of Ideation

From the most acknowledged Eleventh Chapter of the *Prolegomena* it is known that Husserl attributes three tasks to pure logic, which essentially persist up to *Formal and Transcendental Logic.*[4] 1. The doctrine of primitive apophantic and formal ontological categories and the laws concerning their complication; 2. the doctrine of the connection of these categories in terms of a logic of consequence, which on the side of meanings has developed into independent theories such as syllogistic, and on the side of formal objects into arithmetic; 3. the apophantic theory of possible forms of theory and its corresponding formal-ontological, mathematical theory of manifolds (*Mannigfaltigkeitslehre).* It is also well known that the clarification of pure logic, achieved in the Second Volume of the *Logical Investigations* under the title of a "phenomenology and theory of knowledge," deals especially with the first task of logic.

However, little acknowledged are the definitions of "knowledge," "knowing," and "science," as well as the determination of logic as "theory of science" (*Wissenschaftslehre*), which at the outset of the first chapter of the *Prolegomena* are programmatically introduced. Knowledge or knowing differs from "baseless opinion" (*grundloses Meinen*) owing to its insight into truth. Husserl calls this insight, constitutive for knowledge, "evidence." The object of this subjective lived-experience of evidence is a truth, which concerns the reality of the state of affairs (*Sachverhalt*) asserted in a judgment. Now, truths or true states of affairs can be of an empirical nature, as in the case of a judgment pertaining to natural science, or of an a priori nature, as in the case of a logical or mathematical judgment. The latter truths are super-temporal, general and absolutely valid; one might characterize these sorts of truth as *vérités de raison* in Leibniz's sense. Regarding these, Husserl mostly speaks of "truths in themselves" (*Wahrheiten an sich*). Furthermore, one still has to distinguish these "truths in themselves," as propositions (*Sätze*) or laws from the "being in itself" of the states of affairs to which they refer. In both cases, however, one deals with ideal objects, whose being, referred to as "validity" (*Geltung*) by Lotze, is intuited in an act of "apodictic" evidence. Matters are different for facts of empirical experience: their existence depends on all kinds of changing circumstances. Assertions and laws, which refer to them, involve forms of truth, which are, properly speaking, mere probabilities. Therefore, empirical judgments and the empirical objects to which they refer cannot meet the demand for apodictic evidence.

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[4] E. Husserl, *Formal and Transcendental Logic*, transl. by D. Cairns, Dordrecht/Boston/London: Kluwer 1978 (*Formale und Transzendentale Logik*, Hua XVII, Den Haag, Martinus Nijhoff, 1974).

The difference between a knowing that refers to ideal objects and a knowing that refers to empirical facts persists in the difference between the sciences of essences and the sciences of facts. Logical psychologism, which Husserl battles against, implies a crude misjudgment of the fundamental difference between these two forms of science. However, in both cases we are dealing with genuine sciences or theories, i.e., sciences or theories that systematically order a manifold of known objects under the perspective of a "unity of the foundational connection" (*Einheit des Begründungszusammenhangs*).[5] This unity of the foundational connection is constitutive for the construction of a scientific theory and has its basis in the things themselves. However, the way in which different things are arranged in relation to each other also has a formal-logical aspect. For most essential sciences (except for phenomenology itself!) there arises the possibility of constructing this logical foundational connection under the form of a formal deduction. Such an axiomatic foundational connection does not apply to the causal relationships investigated by the empirical sciences, unless, as Husserl already asserts in the *Prolegomena,* by way of "idealizing fictions" (e.g., by employing mathematical models in natural science). It goes without saying, however, that the causal judgments of the empirical sciences remain subject to the essential laws of formal logic.

Thus, the difference between the sciences of essences, such as logic, and the empirical sciences, such as psychology, must not make us forget that pure logic applies to all sciences, i.e., that it is a *universal* doctrine of science (*Wissenschaftslehre*). Every science utilizes categories of meaning and objectivity as well as forms of inference (*Schlussformen*) and every science instantiates one form or another of theory. Pure logic owes its regulative relevance to all sciences (including itself) to the fact that it deals exclusively with the forms of possible meanings and possible objects. However, since the logical doctrine of science is itself a science, it strives for a systematic order of its own knowing under the form, for example, of an axiomatic-deductive theory. Yet, the success of this endeavor has less relevance for its function as a regulative doctrine of science than for its own scientific character.

The theoretical core of the logical doctrine of science (in the double sense of a doctrine of all other sciences and of a meta-logic) lies in the fact that pure logic formulates the laws concerning the possible connections between ideal objects. These ideal objects are either simple or complex *forms* of meanings or of objects. The apophantic and formal-ontological categories are ideal objects just as are the logical laws founded upon them. I have already mentioned their relation to subjective lived-experiences of apodictic evidence. That the validity of these ideal logical objects is, however, in no way dependent upon the lived-experiences, in which they are evidently given, is a basic insight of the *Prolegomena.* For according to their doctrine, the validity of logical objects is independent of *any* (evident or non-intuitive) givenness. In this sense, the being-true (as truth in itself) of hitherto undiscovered logical principles is not in principle different from the truth of those principles already known. Further, this also

[5] Findlay translates this as "unity in the whole system of grounded validation" (cf. e.g., p. 62).

means that each factual subjective givenness of the validity in itself of an ideal object is an act of radical subjective *self-transcendence*. For example, the subjective insight into the validity of the principle of non-contradiction brings consciousness into connection with something essentially *alien* to it, i.e., with something that is neither consciousness of any sort nor reducible to something like consciousness. In light of this reflection, logical psychologism is nothing but the attempt to bridge the gap between the being of consciousness and the being of ideal objects by making ideal objects subjective. This subjectivation is a reduction of the transcendence of ideal being, and such a reduction can be interpreted as an appropriation or annexation of the *alien* by one's own consciousness.

Therefore, Husserl's doctrine of the *subjectively evident givenness* of logical laws in the *Prolegomena* (§§ 27, 32, 39, 50-51, 65) stands in the middle between the extreme positions of psychologism, on the one hand, and of a "logical absolutism"—which contests any possible relation of logical objects to consciousness—on the other. With the logical absolutists, Husserl shares the conviction that logical laws, according to their own sense, have nothing to do with subjective lived-experiences of consciousness. The propositions and laws of pure logic refer exclusively to ideal objects that are either forms of meanings or forms of objects. The validity of a logical law, however, can be consciously given in a subjective act of evidence. Conditions of validity of ideal objects are thus *eo ipso* conditions of evidence, and logical laws are thus "equivalent" to propositions regarding possible evidence. According to Husserl, though, one has to pay heed to two points: 1) "equivalence" does not mean "identity"; 2) the equivalent transformation of logical laws exclusively concerns acts of evidence according to their "ideal possibility." Hence, the validity of a logical law implies the "ideal" possibility of the "real" performance of a conscious act, in which either the (analytic) necessity of the law itself is grasped or in which this law is instantiated.

How, then, is one to understand more precisely this "singularization" (*Vereinzelung*), which Husserl calls "application," of logical laws in an individual act of knowing? Husserl writes:

> Obviously, these laws may undergo self-evident transformations through which they acquire an express relation to knowledge and the knowing subject, and now themselves pronounce on real possibilities of knowledge. Here as elsewhere, a priori assertions regarding ideal possibilities arise through the transferred application of ideal relationships ... to empirical instances. (§ 65, p. 233 [Hua XVIII, 239]; cf. also ibid. §§ 29, 50-51)

This transference or application of the logical law onto an act of consciousness, however, is an *exemplary* singularization, which says nothing about the empirical-psychological determination of the act (i.e., the circumstances of its performance by a certain person etc.). Husserl does speak of a "psychological utility" of logical laws but

at the same time denies any dependency on the empirical-psychological determination of consciousness (§ 50). Anticipating his later characterization of eidetic psychology or phenomenology, Husserl insists time and again that this consciousness in which the logical law is applied is a consciousness "as such" (*überhaupt*). The application of logical laws to exemplary acts is not a psychological process. This also becomes clear through the fact that such a possible application entails no psychological-causal necessity of the performance of any act whatsoever. Logical laws, while being applicable to acts, do not cause such acts.

However, this account of the application of logical laws leaves open how precisely one must understand the "singularization" of an ideal object in an individual act of knowing. Does not Husserl himself repeatedly assert that a logical essence can only singularize itself in a subordinate species, but never in an empirical fact (cf. e.g., § 46)? How can he then write at the same time: "Truth is an idea, whose peculiar case is an actual experience in the evident judgment"? (§ 51, p.194 [Hua XVIII, 190]).[6] The solution is surprisingly simple: under the form of a formal apophantic, formal logic deals exclusively with ideal meanings of judgments. As such, none of its assertions refer directly to acts of judgment. Its task consists entirely in the determining of such laws that ideal propositions and their connective forms must follow when logical nonsense or contradiction are to be avoided. Now, when one understands these propositions or ideal meanings, as does Husserl throughout the first edition of the *Logical Investigations*, as act essences (*Aktwesen*), then one understands that the relation of the ideal content of judgment to the respective act of judgment can again be conceived as a process of singularization. More precisely, one would have to distinguish, on the one hand, between an objective-logical singularization of a formal-logical law in ideal propositions or meanings and, on the other, a subjective singularization of ideal meanings of judgments in an act of judgment. With this it becomes clear that the "application" of a logical law to an act of judgment always occurs via the singularization of the law in an ideal content of judgment.

It seems as though the process of "*ideation*" or of "ideational abstraction," in which logical concepts and laws are gained (cf. §§ 29, 46, 67), is essentially nothing but a reversal of the explicated process of application. In the framework of the *Prolegomena*, ideation is dealt with more in details than in application precisely because logical psychologism is especially active in this field. Thus, Husserl takes pains to distinguish ideation, in which logical laws are apprehended, from the process of "induction" or empirical generalization, from which natural laws of physics or psychology stem. As a science of essences, apophantic logic deals with meaning formations as formal essences. Therefore, the connections of meanings that it establishes have the character of super-temporal and absolutely valid analytic necessities, and certainly not, for example, of probabilities of the highest dignity as in the case of the laws of natural science. The ideal meaning formations or "concepts," with which pure

[6] The word "inwardly" has been omitted in the above quotation. Findlay translates "*evidentes Urteil*" as "inwardly evident judgement".