The Science of Logic

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The Science of Logic

by

Georg Wilhelm Friedrich Hegel

VOLUME ONE

The Objective Logic Book One The Doctrine of Being

PREFACE TO THE FIRST EDITION

The complete transformation that the ways of philosophical thought have undergone among us in the past twenty-five odd years, the higher standpoint in self-awareness that spirit has attained in this period of time, has so far had little influence on the shape of the *logic*.

What was hitherto called "metaphysics" has been, so to speak, extirpated root and branch, and has vanished from the ranks of the sciences. Where are the voices still to be heard of the ontology of former times, of the rational psychology, the cosmology, or indeed, even of the natural theology of the past, or where are they allowed to be heard? Inquiries, for instance, into the immateriality of the soul, into mechanical and final causes – where is interest in them still to be found? Even the former proofs of God's existence are cited only out of historical interest, or for the purpose of edification and the uplifting of the mind. The fact is that interest, whether in the content or in the form of the former metaphysics, or in both together, has been lost. Remarkable as it is if a people has become indifferent, for instance, to its constitutional law, to its convictions, its moral customs and virtues, just as remarkable it is when a people loses its metaphysics – when the spirit engaged with its pure essence no longer has any real presence in its life.

The exoteric teaching of the Kantian philosophy – that the *understanding ought not to be allowed to soar above experience*, lest the cognitive faculty become a *theoretical reason* that by itself would beget nothing but *mental fancies* – this was the justification coming from the scientific camp for

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renouncing speculative thought. In support of this popular doctrine there was added the cry of alarm of modern pedagogy, that the pressing situation of the time called for attention to immediate needs - that just as in the ways of knowledge experience is first, so for skill in public and private life, exercise and practical education are the essential, they alone what is required, while theoretical insight is even harmful. - With science and common sense thus working hand in hand to cause the downfall of metaphysics, the singular spectacle came into view of a cultivated people without metaphysics - like a temple richly ornamented in other respects but without a holy of holies. - Theology, which in former times was the custodian of the speculative mysteries and of the albeit subordinate metaphysics, had relinquished this last science in exchange for feelings, popular practicality, and erudite historiography. And it was in keeping with this change that, for their part, those solitary individuals, whom their people had exiled from the world and dedicated to the contemplation of the eternal, also disappeared. Theirs was a life devoted exclusively to the service of contemplation, without practical gain but only for the sake of blessedness, and their disappearance can be regarded as essentially the same phenomenon, though in a different context, as the one just mentioned. - And so this darkness, this colorless self-preoccupation of spirit bent upon itself, having been dispelled, existence shone transformed into the bright world of flowers - of which, as is well known, none is black.

Logic did not fare quite as badly as metaphysics. That from logic one learns how to think, which for lack of anything else was considered its usefulness and therefore its purpose - just as if one were to learn how to digest or to move first from the study of anatomy and physiology - this is a prejudice that has long been put to rest, and in this respect the spirit of practicality certainly did not intend any better fate for logic than it did for its sister science. Nevertheless, probably for the sake of a certain formal utility, a place was still allowed for it among the sciences; it was even retained as a subject of public instruction. However, this better lot concerns only the outer fate of logic, for its shape and content have remained the same throughout a long inherited tradition, though progressively more diluted and emaciated in the course of the transmission; no trace is so far to be detected in it of the new spirit that has awakened in the sciences no less than in the world of actuality. However, once the substantial form of the spirit has reconstituted itself, it is of no avail to want to retain the forms of an earlier culture. These are like withered leaves pushed aside by the new buds already being generated at their roots.

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Also in the scientific realm this *ignoring* of the universal change is gradually beginning to lose ground. The new ideas have imperceptibly become the accepted currency even to those opposed to them. And if these continue to fuss about their sources and principles and to dispute them, they have nevertheless surrendered to their consequences, unable to fend off their influence. They have no other way of giving a positive importance, and some content, to their increasingly irrelevant negative attitude, except by falling in with the new ways of thinking.

However, the period of fermentation that goes with the beginning of every new creation seems to be past. In its first manifestation, a new creation usually behaves towards the entrenched systematization of the earlier principle with fanatical hostility; in fear of losing itself in the expansion of the particular, it also shuns the labor that goes with scientific cultivation and, nevertheless in need of it, it grasps at first at an empty formalism. The demand for the elaboration and cultivation of the material becomes at that point all the more pressing. There is a period in the formation of an epoch in which, just as in the formation of the individual, the foremost concern is the acquisition and reinforcement of the principle in its undeveloped intensity. But the higher demand is that such a principle should be made into science.

Now, whatever might already have happened to the substance and form of science in other respects, the science of logic that makes up metaphysics proper or pure speculative philosophy has to date been much neglected. What I more precisely understand by this science and its standpoint, I have provisorily stated in the Introduction. The fact that it was necessary to make a completely fresh start with this science, the nature itself of its subject matter, and the lack of any previous work that could have been used for the undertaken reform of it, may be taken into account by the fair-minded critic if even a labor of many years was unable to give this effort a greater perfection. - The essential point to be kept in mind is that an altogether new concept of scientific procedure is at work here. As I have remarked elsewhere,^a inasmuch as philosophy is to be science, it cannot borrow its method from a subordinate science, such as mathematics, any more than it can remain satisfied with categorical assurances of inner intuition, or can make use of argumentation based on external reflection. On the contrary, it can only be the nature of the content which is responsible for movement 21.7

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^a *Phenomenology of Spirit*, Preface to the first edition. [GW 9, pp. 31, 33–36] – The actual demonstration is the cognition of the method, such as has its place in the logic itself.

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in scientific knowledge, for it is the content's own reflection that first posits 21.8 and generates what that content is.

The understanding determines, and holds the determination fixed. Reason is negative and *dialectical*, since it dissolves the determinations of the understanding into nothing; it is *positive*, since it generates the *universal*, and comprehends the particular therein. Just as the understanding is usually taken as something separate from reason in general, so also dialectical reason is taken as something separate from positive reason. In its truth reason is however spirit, which is higher than both reason bound to the understanding and understanding bound to reason. It is the negative, that which constitutes the quality of both the dialectical reason and the understanding: it negates the simple, thereby posits the determinate difference of the understanding; but it equally dissolves this difference, and so it is dialectical. But spirit does not stay at the nothing of this result but is in it rather equally positive, and thereby restores the first simplicity, but as universal, such as it is concrete in itself; a given particular is not subsumed under this universal but, on the contrary, it has already been determined together with the determining of the difference and the dissolution of this determining. This spiritual movement, which in its simplicity gives itself its determinateness, and in this determinateness gives itself its self-equality this movement, which is thus the immanent development of the concept, is the absolute method of the concept, the absolute method of cognition and at the same time the immanent soul of the content. - On this selfconstructing path alone, I say, is philosophy capable of being objective, demonstrative science. - In this fashion have I tried to portray consciousness in the Phenomenology of Spirit. Consciousness is spirit as concrete, self-aware knowledge - to be sure, a knowledge bound to externality, but the progression of this subject matter, like the development of all natural and spiritual life, rests exclusively on the nature of the pure essentialities that constitute the content of the logic. Consciousness, as spirit which on the way of manifesting itself frees itself from its immediacy and external concretion, attains to the pure knowledge that takes these same pure essentialities for its subject matter as they are in and for themselves. They are pure thoughts, spirit that thinks its essence. Their self-movement is their spiritual life and is that through which science constitutes itself, and of which it is the exposition.

The connection of the science that I call Phenomenology of Spirit to the Logic is thereby stated. - As regards the way it stands to it externally, a second part was intended to follow the first part of the System 21.9

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of Science^b that contains the Phenomenology. This second part would have contained the Logic and both the two real sciences of philosophy, the Philosophy of Nature and the Philosophy of Spirit, and would have brought the system of science to completion. However, the necessary expansion which the Logic demanded by itself has led me to have this particular part published separately. It therefore constitutes the first sequel to the *Phenomenology of Spirit* in an expanded plan of the system of science. I shall later follow up with a treatment of both the two mentioned real sciences of philosophy. – This first volume of the Logic contains the Doctrine of Being, as Book One; Book Two, the second section of the same volume which contains the Doctrine of Essence is already in the presses; finally, the second volume will contain the Subjective Logic, or the Doctrine of the Concept.

Nürnberg, March 22, 1812 **21.10**

II

PREFACE TO THE SECOND EDITION

I undertook this revision of the Science of Logic, of which the first volume is hereby being published, in full consciousness not only of the difficulty of its subject matter and of its exposition besides, but equally of the imperfection from which its treatment in the first edition suffers. As earnestly as I have striven after many years of further occupation with this science to remedy this imperfection, I still feel that I have cause enough to appeal to the reader's indulgence. One title to such appeal in the first instance may well be based on the circumstance that for the most part only external material was available for its content in the earlier metaphysics and logic. Although the practice of these disciplines had been universal and customary, in the case of logic down to our own time, its interest in their speculative side has been just as universally and customarily restricted. It is the same material which is repeated over and over again, whether it is thinned out to the point of trivial superficiality, or whether the ancient ballast is freshly trotted out and dragged to new lengths, so that, through these habitually only mechanical efforts, no gain could be had for the philosophical content. To display

^b (Bamberg and Würzburg: at Göbbard's, 1807). This title [i.e. "First Part of the System of Science"] will no longer be added to the second edition to be published this coming Easter. – In place of the intended second part here mentioned, which was to contain the complement of the other philosophical sciences, I have since brought out the *Encyclopedia of the Philosophical Sciences*, in its third edition last year. [1832]

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the realm of thought philosophically, that is, in its own immanent activity or, what is the same, in its necessary development, had to be, therefore, a new undertaking, one that had to be started right from the beginning. Nevertheless, the received material, the known thought-forms, must be regarded as an extremely important fund, even a necessary condition, a presupposition to be gratefully acknowledged even though what it offers here and there is only a bare thread, the dead bones of a skeleton thrown together in a disorderly heap.

The forms of thought are first set out and stored in human language, and one can hardly be reminded often enough nowadays that thought is what differentiates the human being from the beast. In everything that the human being has interiorized, in everything that in some way or other has become for him a representation, in whatever he has made his own, there has language penetrated, and everything that he transforms into language and expresses in it contains a category, whether concealed, mixed, or well defined. So much is logic natural to the human being, is indeed his very *nature*. If we however contrast nature as such, as the realm of the physical, with the realm of the spiritual, then we must say that logic is the supernatural element that permeates all his natural behavior, his ways of sensing, intuiting, desiring, his needs and impulses; and it thereby makes them into something truly human, even though only formally human makes them into representations and purposes. It is to the advantage of a language when it possesses a wealth of logical expressions, that is, distinctive expressions specifically set aside for thought determinations. Many of the prepositions and articles already pertain to relations based on thought (in this the Chinese language has apparently not advanced that far culturally, or at least not far enough), but such particles play a totally subordinate role, only slightly more independent than that of prefixes and suffixes, inflections, and the like. Much more important is that in a language the categories should be expressed as substantives and verbs, and thus be stamped into objective form. In this respect, the German language has many advantages over other modern languages, for many of its words also have the further peculiarity of carrying, not just different meanings, but opposite ones, and in this one cannot fail to recognize the language's speculative spirit. It can delight thought to come across such words, and to discover in naïve form, already in the lexicon as one word of opposite meanings, that union of opposites which is the result of speculation but to the understanding is nonsensical. Philosophy, therefore, stands in no