Five Lectures About Hegel¹

Anton Friedrich Koch, Heidelberg

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First lecture. From Kant to Hegel

Preliminary remarks

Georg Wilhelm Friedrich Hegel was born in Stuttgart on 27 August 1770. After attending the Stuttgart Gymnasium (i.e. a high school with focus on classical languages), he studied theology at the University of Tübingen as a scholarship holder of the Protestant Seminary (Tübinger Stift) from 1788. There, after the obligatory basic studies of philosophy (and the liberal arts) with a magister's degree in 1790, he had to focus on theology for three years until his church examination in 1793. But then he did not become a pastor or theologian in Württemberg, but a private tutor first in Bern in Switzerland and then in Frankfurt am Main. In 1801 he became a private lecturer at the University of Jena, in 1807 editor-in-chief of a journal in Bamberg, in 1808 professor and rector at the Gymnasium in Nuremberg, finally from 1816 to 1818 professor of philosophy in Heidelberg and then since 1818 in Berlin, where he died on 14 November 1831. Reference books and biographies give information about the details of his life.²

Here, in these lectures, his mature philosophising is to be dealt with, the early form of which becomes visible for the first time in the *Phänomenologie des Geistes* (*Phenomenology of Spirit*, in short *Phenomenology*) written in Jena and published in Bamberg and Jena in 1807. The *Phenomenology* was followed in the Nuremberg years by his main work, the *Science of Logic* (in short *Logic*) in two parts and at the same time three books: The Doctrine of Being (1812) and the Doctrine of Essence (1813) as the first part: the objective logic, and the Doctrine of the Concept (1816) as the second part, the subjective logic.

The doctrine of being was published in a revised version posthumously in a second edition in 1832. Hegel did no longer have the time and opportunity to revise the doctrine of essence and the doctrine of the concept. However, he published the whole of his *Logic* in short form as the first of three parts of the *Encyclopaedia of the Philosophical Sciences in Basic Outline* (in short *Encyklopaedia*, Enz), which appeared in Heidelberg in 1817 as a guide for his listeners, i.e. a textbook for his students. The *Encyclopaedia* contains in broad outlines Hegel's complete philosophical system, first the *Logic* and then, in the second and third parts of that book, the philosophy of nature and the philosophy of spirit, which are somewhat misleadingly called

² Just in time before Hegel's 250th birthday, the henceforth definitive biography was published, the 824 pages of which have even been validated by (re)research in all of Hegel's places of residence: Vieweg, Klaus, *Hegel. Der Philosoph der Freiheit*, Munich 2019. On the occasion of his birthday some compact, easy-to-read presentations of Hegel's philosophy were published, notably by Ostritsch, Sebastian, *Hegel. Der Weltphilosoph*, Berlin 2020, and Zöller, Günter, *Hegels Philosophie. Eine Einführung*, Munich 2020. An older comprehensive presentation is that of Fulda, Hans Friedrich, *Georg Wilhelm Friedrich Hegel*, Munich 2003.

Hegel's *Realphilosophie*, philosophy of the real – misleadingly, because the *Logic* already investigates the real in its own, purely logical way. In 1827 and 1830 he published the *Encyclopaedia* in extended second and third editions respectively, in Berlin. The encyclopaedic *Logic* (or small *Logic*) in the third edition of 1830 is thus Hegel's last published word on the doctrine of essence and the doctrine of the concept.

Finally, there is one more book to be mentioned: Hegel's *Philosophy of Right* (Grundlinien der Philosophie des Rechts oder Naturrecht und Staatswissenschaft im Grundrisse), published in Berlin in 1821. Those *Grundlinien* ("groundlines") contain the middle section of the philosophy of spirit, i.e. the doctrine of the *objective* spirit, encompassing abstract right, morality and ethical life, in more detail than in the *Encyclopaedia*, but again only in outline and as a guide for the listeners of the lectures. These are all the books belonging to the system of philosophy, the publication of which was arranged by Hegel himself. Several of his lectures – on the philosophy of history, the philosophy of religion, aesthetics and the history of philosophy – were edited posthumously by friends and students.

In the following, Hegel's philosophical system will be explored from its logical basis, the *Science of Logic*. The second edition of 1832 is decisive for the doctrine of being, and with regard to the doctrines of essence and of the concept, the later summaries in the Berlin *Encyclopaedia* of 1830 are to be considered in addition to the early versions of 1813 and 1816. However, we shall first look at some aspects of the path from Kant to Hegel, before dealing in detail with the *Science of Logic* in later lectures and taking a brief look at the entire philosophical system in the final lecture.

1. The twenty-five years of philosophy

This title quotes Eckhart Förster's well-known book title and refers to the 25 years between the publication of Kant's *Critique of Pure Reason* in 1781 and the completion of Hegel's manuscript of the *Phenomenology of Spirit* in 1806.³ During that period, of course, not philosophy in general, but classical German philosophy in particular gained its definite shape, i.e. its competing forms. Then, in the following 25 years until Hegel's death in 1831, it had its Hegelian continuation and elaboration. The fact that there are other continuations, a short and intensive one by Johann Gottlieb Fichte (1762-1814) and a long one by Friedrich Wilhelm Joseph Schelling (1775-1854), should not be underestimated, though, nor should the work of Friedrich Heinrich Jacobi (1743-1819). Jacobi had brought Spinoza's philosophy into public

³ Förster, Eckart, Die 25 Jahre der Philosophie. Eine systematische Rekonstruktion, Frankfurt am Main 2011.

debate as an alternative to Kant's philosophy in 1785 and later influenced the theory formation of Fichte, Schelling and Hegel as a critic, initiator and keyword giver.⁴

1.1 Kant's Critique of Pure Reason

Kant opened the *Critique of Pure Reason* (Riga 1781, 2nd ed. 1787, henceforth: CPR, A and B) with a short transcendental aesthetic followed by a long transcendental logic. In the transcendental aesthetic, space and time are treated as the general and pure, i.e. completely non-empirically known, forms of our sensuous intuition and, at the same time, as the general forms of the extra-logical manifold. In transcendental logic, then, the pure concepts of the understanding and associated pure judgments as well as the pure concepts of reason, called ideas, and associated purely rational (mis-)inferences, i.e. fallacies of pure reason, are treated.

The medieval scholastic philosophers regarded as transcendental the doctrine of the highest, trans-generic (thus also trans-categorial) generalities. Kant refers to the scholastics as "die Alten" (the ancients) and quotes their mnemonic: "quodlibet ens est unum, verum, bonum" (CPR, B 113), i.e. "any entity is one, true [or real] and good". The scholastic's transcendental philosophy thus was but a short appendix to their metaphysics in general. In contrast, the modern, pre-Kantian philosophers in Germany such as Christian Wolff and Alexander Gottlieb Baumgarten, had a broader, more comprehensive view of transcendental philosophy. They took it to be metaphysics as such, i.e. the epistemically pure, non-empirical but nevertheless categorematic theory of things, in contrast to logic and mathematics, which are both pure but syncategorematic in their different ways.

Let me explain. The distinction between categorematic and syncategorematic expressions goes back to William of Ockham. Terms, i.e. expressions that can be predicated of things like for example categories, common names, adjectives, verbs etc. are categorematic. Logical particles on the other hand, like "or", "and", "if – then" etc., are syncategorematic expressions. They do not stand for objects and are not true of anything. Kant calls what they express the "functions of the understanding". Hence, in this sense, general logic is a doctrine of certain syncategorematic aspects of thinking. Of course, one may deny that mathematics as well tends to this side. Plato, Frege, and Quine would definitely do so, and would insist that mathematical terms are categorematic after all. Aristotle, Wittgenstein and Sellars on the other hand tend to believe that mathematics is in the last analysis a science of the syncategorematic. But let us

⁴ Cf. Vgl. Jacobi, Friedrich Heinrich, *Über die Lehre des Spinoza in Briefen an den Herrn Moses Mendelssohn*, Breslau 1785. Jacobi praises Spinoza's philosophy as the only consistent philosophical system, which however, simply as a system, is incompatible with with the assumption of freedom and must therefore be rejected.

skip this topic and go back to transcendental philosophy and to Kant (who associates mathematics with the pure forms of sensibility, thus with pure intuition, not with logic).

Although Kant adheres to the modern double definition of "transcendental" as pure and categorematic, he concludes, in contrast to his rationalist predecessors, that a pure and categorematic, i.e. transcendental philosophy cannot be a science of objects, cannot be metaphysics, neither general nor special metaphysics, i.e. neither ontology nor rational psychology, cosmology or theology. It is rather the doctrine of the pure categorematic features of our cognition of objects. Next to *pure* and *categorematic*, *epistemic* is thus the third characteristic of the transcendental. For Kant, transcendental philosophy then turns out to be the doctrine of the pure and categorematic features of the a priori ways in which objects can be known by us.

Transcendental aesthetics traces the epistemic basis of mathematics back to the pure forms of sensible intuition (*sinnliche Anschauung*), space and time. The main branch of transcendental philosophy, however, is transcendental logic. It is the objective branch of logic, i.e. the logic of the categorematic logical form in which objects are present to our knowledge. Traits of objects that are categorematic and at the same time purely logical are called *categories* by Kant. Categories, according to this terminology, are categorematic logical terms. General logic on the other hand is what Hegel would call subjective logic. This is not to say that it is valid only subjectively or privately, but that it is valid for the thinking activity of all rational subjects. It is the doctrine of the logical form as the form of thinking as such, thus as syncategorematic, propositional form, while the objective logical form of things is categorial form.

Kant makes use of this duality of logical form as categorial and as propositional when he uses the latter – the propositional form – as an undisputed guideline for the derivation of the former, the categorial form (CPR, A 76-83/B 102-109). Undisputed, namely a mature science ever since Aristotle, was the doctrine of syllogistic inferences (and has remained so until today, even if it can now be embedded in our modern predicate logic oriented on Frege).

In light of this, Kant first argues briefly from the bottom up: Concepts are predicates for possible judgements and judgements are premises and conclusions for possible syllogisms, and then in detail top-down: There are categorical (this time not "categorial"), hypothetical and disjunctive syllogisms. This concerns the relationship between the poles of the major premise in a syllogism. These poles are related either as subject and predicate ("S is P") or as antecedent and consequent ("If p, then q") or as subject and a disjunction of n predicates ("S is P_0 or P_1 or ... or P_{n-1} "). So, we have three types of relationships within judgments: All judgments

(i.e. all propositions suitable for syllogisms) are either *categorical* or *hypothetical* or *disjunctive*. (This statement, by the way, is an example of a disjunctive judgment.)

Secondly, judgments in syllogisms are made in different modes of validity: Premises are asserted in the *assertoric* mode; conclusions are demonstrated, given the premises, in the *apodictic* mode; and antecedents of hypothetical judgments are considered in the *problematic* mode, which carries over to the consequents.

Thirdly, the logical subject of a categorical judgement has a certain quantity: it is *universal*, *particular* or *singular*: "All humans are mortal", "Some humans are wise", "Socrates is wise". And fourthly, the predicate-with-copula has a certain quality: it is *positive*, *negative* or *indefinite* (in Kant's expression: "infinite"): "This person is loyal", "It is not the case that this person is loyal", "That person is disloyal".

The result is a complete table of *four times three* logical acts (or "functions", as Kant says) of the understanding in judgements (CPR, A 70/B 95). Remarkably, Hegel feels bound to this table in his subjective logic, although, due to its quadruple pattern, it deviates disturbingly from the triple classifications otherwise cultivated by him.

So much for *propositional logical form*, the basis of general or subjective logic. Kant derived *categorial logical form*, the basis of transcendental or objective logic, from it. The syncategorematic acts of thought in judgments correspond one-to-one to categorematic logical contents: the categories or pure concepts of the understanding. Since these not only necessarily and validly shape our thinking, but are also meant to apply as terms to objects, the claimed objective validity must, however, still be proven. Kant undertakes this in his famous (or infamous) transcendental deduction.

To call Hegel's *Logic* transcendental would be misleading to say the least. For firstly, it also is an heir to general logic, and secondly, it does not abstract from the real as such, but only from the spatiotemporal form of what is real. Hegel's problem is not how thinking and being come together, but how they come apart in the first place. His *Logic* is therefore transcendental at best in a pre-Kantian, non-epistemological sense. In Hegel, the categorial form precedes the predicative and propositional form; the objective logic as saturated with reality precedes the subjective logic, and if it does so rightly, Hegel does not need a separate transcendental deduction of the pure categorematic contents. The pure contents of the categories of quality and quantity are treated in the logic of being, those of modality and relation in the logic of essence; only then does the logic of the concept follow as the subjective logic.

However, what Hegel offers is anything but a mere regrouping of traditional materials. The categorematic contents of objective logic are not categories in the narrow sense, i.e. no predicates, no unsaturated terms, which require logical subjects to complete them. Predicates in general and (Aristotelian and Kantian) categories in particular are incomplete thought contents and, considered in isolation, neither true nor false. *Substance* or "is a substance", for example, is neither true nor false, but "Socrates is a substance" is true or false. The various categorial contents of Hegel's *Logic*, on the other hand, are self-contained thought contents, thus candidates for truth, even if not yet proposition-like or predication-like (more on this in due course). And Hegel's subjective logic by no means only botanises our judgements and syllogisms, it does not botanise at all and, as can be seen from its division into the three sections of (1) subjectivity, (2) objectivity and (3) *idea*, it contains a surprising regression into the sphere of objectivity and thus back again into the logical neighbourhood of the objective logic.

Finally, as far as Kant's transcendental aesthetic is concerned, it takes its place in Hegel's work, albeit not under its Kantian name and not as an unchanged doctrine, as an immediate follow-up to the *Logic*. Space and time as the general forms of the extra-logical multiplicity of real things are, in other words, the first topics of Hegel's philosophy of nature. Only then does the realm of individual logical subjects and general predicates and thus the realm of real judgements and syllogisms open up for Hegel. His *Logic* portrays a qualitative logical space in a qualitative logical succession (or logical "time"). It is only with the extra-logical multiplicity in a quantitative physical space-time continuum that the so-called, though in fact purely logical 'concepts', 'judgements' and 'syllogisms' as they are treated in Hegel's *Logic* become what we usually understand by concepts, judgements and syllogisms and what Hegel somewhat pejoratively calls mere *representations* ("Vorstellungen"). We will have to come back to this.

1.2 After Kant

Logic and mathematics had been textbook sciences, i.e. "mature" sciences in Thomas Kuhn's sense, capable of paradigms and of paradigm change, from time immemorial – and physics since its modern conversion to mathematical formulation and experimental verification by Galileo Galilei, Johannes Kepler and then Isaac Newton. The successful coupling of physics and mathematics, however, had the consequence that metaphysics was discredited, which since then has led to ever new attempts to elevate metaphysics somehow to the rank of a ma-

ture science as well. Kant looked back on a series of unsuccessful attempts of this kind, without realising that a substantive doctrine can only become a mature science through mathematisation (plus appeal to experiments), which was not an option, though, for metaphysics, i.e. for the first of all sciences. Thus, Kant's revolutionary intertwining of philosophy with logic undoubtedly produced a wealth of new insights, but not this one particularly coveted result. Rather, the philosophical controversy went on as before – and will continue to do so in the future, for philosophy cannot, in principle, be transformed into an aperspectival, mathematical science, but is, as Heidegger first brought to general awareness, an essentially perspective-bound, hermeneutic discipline such as the theories of law, history, art and literature; but, unlike all these, philosophy is the first and basic hermeneutic science a priori.

This remained hidden from Kant and his time. Thus, Karl Leonhard Reinhold (1757-1823) in Jena attempted to rescue Kant's teachings from the ongoing controversy by deriving them from a new theory of human representation, which for its part was to be based on an undeniable grounding fact, the fact of consciousness, which he regarded as a foundation immune to scepticism. He formulated his so-called *Theorem of Consciousness* ("Satz des Bewusstseins"), designed to express this basic fact, in several variants, for example in the following:

By no syllogism of reason, but by mere *reflection* on the fact of consciousness [...] we know: *that in consciousness the representation is distinguished by the subject from the object and the subject and related to both.*⁵

But scepticism could not be silenced in this way either. In particular, it was unclear how a whole philosophy could be spun out of the unique Theorem of Consciousness: certainly not by simple logical deductions, but at best, as some people realised, by a logical archaeology of a special kind – a kind that Kant had already envisaged, namely the targeted exploration of the conditions of the possibility of a given fact, in this case of the fact of consciousness. This, by the way, is how we obtain the fourth and today most prominent characteristic of the transcendental: Transcendental teachings and arguments are (1) pure, (2) categorematic, (3) epistemological and (4) archaeological in the outlined sense. However, only the first two features belong in the classical definition of the transcendental, the last two being Kantian corollaries.

Hegel later modified the theorem of consciousness into the methodological principle of the *Phenomenology of Spirit*. But on the way to Hegel there are still some intermediate stops to

⁵ Durch keinen Vernunftschluss, sondern durch blosse *Reflexion* über die Thatsache des Bewusstseyns [...] wissen wir: dass die Vorstellung im Bewusstseyn durch das Subjekt vom Subjekt und Objekt unterschieden und auf beyde bezogen werde. (Reinhold, Karl Leonhard, Über das Fundament des philosophischen Wissens, 1791, Hamburg 1978, p. 78. Reinhold had presented his position for the first time in his Versuch einer neuen Theorie des menschlichen Vorstellungsvermögens, Prag and Jena 1789.)

mention before. Particularly noteworthy is the revived interest in classical Pyrrhonian scepticism in the wake of Reinhold's antisceptical attempts at foundation. Scepticism struck back against Reinhold, under the guidance of the Göttingen professor Gottlob Ernst Schulze (1761-1833), who in 1792 published his book *Aenesidemus or on the foundations of the elementary philosophy delivered by Professor Reinhold in Jena. Along with a defence of scepticism against the presumptions of the criticism of reason.* In this state of debate, it soon became part of the aspiration of sophisticated philosophy, and it was indeed part of Hegel's ambition, to take the sceptics into account in the formation of theory, the sceptics who make it their business to prove the contradictory antithesis of any given proposition, and who for their part no longer want to say what is the case, but only what seems to be the case. However, one can certainly anticipate that the taking along of scepticism into the boat of theory building had to lead to the brink of philosophical shipwreck.

Philosophising in the shadow of scepticism or in the face of contradiction is one of three innovations that Hegel could learn from Fichte. The other two fit under the keywords "intertwining of categories" and "non-well-foundedness". This can be briefly explained by means of the three principles (or axioms) with which Fichte opened up the Foundation of the Entire Wissenschaftslehre (Doctrine of Science) in 1794. The first, absolutely unconditional principle ("Grundsatz") states (§ 1): "The I originally posits its own being", and, since the positing I is the quintessence of all real determinations, this encompassing I provides the category of reality that belongs in the Kantian rubric of the three categories of quality (together with negation and limitation). According to the second principle, which is unconditional in terms of form, but conditioned in terms of content, "to the I a non-I is counter-posited in an absolute way". From this second principle Fichte gains the category of negation (§ 2). The Doctrine of Science thus begins in inconsistency, since the I as the quintessence of the real is contradictorily opposed by a non-I. The third principle, which is unconditional in terms of content (i.e. introduces a new primitive content), but conditioned in terms of form (§ 3), has the task of eliminating the inconsistency. It reads: "I counter-posit in the I to the divisible I a divisible non-I', 10 which provides "the category of determination (boundary, in Kant: limitation)". 11 Without going into details, it should only be noted that this third principle only provisionally

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⁶ Aenesidemus oder über die Fundamente der von dem Herrn Professor Reinhold in Jena gelieferten Elementar-Philosophie. Nebst einer Vertheidigung des Skepticismus gegen die Anmassungen der Vernunftkritik, 1792.

⁷ Fichte, I. H. (ed.), *Johann Gottlieb Fichtes sämmtliche Werke*, Berlin 1845/1846, Volume I, p. 98 f.

⁸ It introduces a new kind of logical form or operation, namely negation (counter-positing), given the I as operand or content, and states a new content as a result: the non-I.

⁹ Ibid. p. 104-105.

¹⁰ Ibid. p. 110.

¹¹ Ibid. p. 122.

resolves the contradiction between the first two, so that Fichte has to stage a very special archaeological excavation art in a continued logical disaster management, and in doing so has to find ever new theorems that suspend contradictions, thus being able to derive further categories. At the end, i.e. at the fixed point of the *Doctrine of Science*, the self-positing of the I reveals itself to have been a positing of an infinite "ought" or obligation, which on the one hand has always already been accomplished, because the "ought" is in force as a demand of reason, but on the other hand still has to be accomplished, because the "ought" is not an "is".

Hegel will criticise this proposal to resolve the initial contradiction as, on the contrary, a way of perpetuating it. But Fichte's method of logical disaster management by means of logical archaeology, which exposes the categories in a systematic order, will be adopted by Hegel in the *Science of Logic*. Inconsistency must not be suppressed, he believes, but must be faced. Of course, a contradiction cannot be true, so what it expresses cannot remain as stated; but therein lies its theoretical blessing: Inconsistency compels us to go further, it forces us to constantly uncover new conceptual structures, new categories, which thereby prove to be intertwined in an internal logical succession, whereas in Kant's work they were only taken one by one from the acts of thinking in judgements.

So much for inconsistency and category intertwining. What remains to be addressed is non-well-foundedness. This term, which Fichte and Hegel do not use, comes from set theory. Sets are called non-well-founded when they themselves occur in their own \in -descendancy, that is, among their own members or among members of (members of ...) their own members. The simplest case of a non-well-founded set is the *unit set of itself*, Ω , for which the following identities hold:

$$\Omega = \{\Omega\} = \{\{\Omega\}\} = \{\{\{\Omega\}\}\}\} = \dots = \{\{\{\{\dots\}\}\}\}$$

If one wanted to understand the operation of set formation (or unit set formation, for that matter) as a concrete construction, the idea of Ω would amount to the idea of an impossible circularly constituted object. But mathematical objects are abstractions, and for the set Ω and its ilk it can be proved that we can accept them without inconsistency, provided that the usual axiomatisation of set theory is consistent. Of course, the foundation axiom must then be replaced by a suitable anti-foundation axiom.¹²

The phrase "unit set-of-itself" shows how Fichte and Hegel would put cases of non-well-foundedness into language: as self-relationships. Thus, Fichte speaks of the self-positing I,

¹² Cf. Aczel, Peter, Non-Well-Founded Sets, CSLI Lecture Notes 14, Stanford 1988.

Hegel of the *other of itself*, of the difference related as difference to itself, of the self-relationship of the negative (etc.). *Positing* (or "to posit"), in German *setzen*, in Latin *ponere*, is a logical working concept, whose logical counter-concept could perhaps be expressed as *depositing*, if "depositing" did not already mean something quite different, and is therefore better expressed by the artificial term of art "sublating", in German "aufheben" in Latin "tollere" (cf. modus ponens and modus tollens). Whatever posits itself (or sets itself, in German *sich selbst setzt*), sets itself into force, gives itself validity or authority, such as, according to Fichte, the absolute I or reason. But how could something give itself validity that was not already valid, i.e. authorised to do so?

Fichte already had this problem in mind early on, in his 1794 review of Schulze's *Aenesidemus*, when he defended Reinhold against the criticism of the sceptic (i.e. Schulze),

who now, as soon as the word: "representation" hits his ear, can think of nothing else but some (round or square?) thing that exists independently of its [or *his*, in German grammatically undecidable] representing, i.e. as a thing in itself, more precisely as a representing thing. [...] – The power of representation (P.R.) exists *for* the P.R. and *through* [or *by*] the P.R.; this is the necessary circle in which every finite understanding, and that is, every understanding conceivable to us, is enclosed. Whoever wants to go beyond this circle do not understand themselves, and do not know what they want.¹⁴

The circle of the power of representation (or of the I) is therefore not vicious, but rather it provides Fichte's philosophical basic point and punch line. The fact that we must and may acknowledge it was most likely his original insight. However, what exists only *for itself* and not independently of its representational activity, i.e. not also *in itself*, exists strictly speaking only as something that is sublated (and is, more precisely, self-sublating) and thus only as something ideal. In terms of Sartre's pointed distinction between the in-itself and the foritself, one could say: What originally posits itself and thus gives itself being-for-itself, ipso facto sublates itself qua something which was in itself and annihilates itself, turns itself into a

¹³ Literally, by way of etymology, "aufheben" means to heave up (and store on a higher level) and/or, according to the double-sense cherished by Hegel: to heave off (and away).

¹⁴ Fichte talks about the sceptic "der jetzt, sowie das Wort: ,Vorstellungs-Vermögen' sein Ohr trifft, sich dabei nichts Anderes denken kann, als irgend ein (rundes oder vierecktes?) Ding, das *unabhängig von seinem Vorstellen* als Ding an sich, und zwar als *vorstellendes* Ding existirt. [...] – Das V. V. existirt *für* das V. V. und *durch* das V. V.; diess ist der nothwendige Zirkel, in welchem jeder endliche, und das heisst, jeder uns denkbare, Verstand eingeschlossen ist. Wer über diesen Zirkel hinaus will, versteht sich selbst nicht, und weiss nicht, was er will." (Fichte, I.H. (ed.), loc. cit., p. 11.)

¹⁵ Cf. the corresponding book title of Dieter Henrich, 1966. The text of this little treatise was re-edited without changes and embedded in a much broader context in Henrich, Dieter, *Das Ich, das viel besagt. Fichtes Einsicht nachdenken*, Frankfurt am Main 2019.

void, de-ontologised quasi-causa sui. In the limiting case, therefore, the case of non-well-foundedness or circular self-relatedness, positing and sublating, *setzen* and *aufheben*, converge; self-positing and self-sublating become one – and end up in a void being-for-itself.

Fichte, of course, did not mean the absolute I in this way (rather, on the contrary, as the quintessence of all real determinations, as all reality), but this is how he was read, notably by Jacobi, who denounced Fichte's *Doctrine of Science* as nihilistic along such lines. Schelling and Hegel, with a similar tendency, attested it an empty, purely subjective idealism. In 1800, Fichte reacted to the accusation of nihilism or subjectivism in his The Vocation of Man (Die Bestimmung des Menschen), and in later lectures on the doctrine of science, he defended himself against this charge on strong philosophical grounds. In his later works he conceived the absolute I as a completely transparent, unveiled image of the Absolute, an image that does not reflect itself emptily within itself, but points out of itself and beyond itself into the truly real, i.e. the Absolute. But Fichte's various versions of the doctrine of science are not our concern. Hegel was probably unable and unwilling to take note of them either. Through his close collaboration with Schelling in Jena, he was strengthened in a position that fits under the label of objective idealism. According to this position, subject and object, thinking and being are logically entangled up to the point of identity, be it a tension-filled ("dialectic") one as in Hegel or an indifferent one as in Schelling; and by no means one can be reduced to the other, neither thinking to being, as materialism teaches, nor being to thinking, as subjective idealism teaches. As we shall see, Hegel remained steadfastly true to this position later on.

Second lecture. From the *Phenomenology of Spirit* to the *Science of Logic*

We are currently, since the previous lecture, looking at the "25 years of philosophy" between the publication of Kant's *Critique of Pure Reason* in 1781 and the completion of Hegel's manuscript of the *Phenomenology of Spirit* in 1806. Now we arrive at the third and last section of these reflections. Then we will move on to the *Science of Logic*.

1.3 Remarks on the Phenomenology of Spirit

While the 25 years of philosophy were slowly coming to an end, Hegel planned a system of philosophical science in two parts, a science of the experience of consciousness and a logic, and worked on the first part, which was to appear in the spring of 1806. However, through discoveries made in writing, the science of the experience of consciousness grew into a veritable phenomenology of spirit, which was not published until more than a year later in 1807.¹⁶ According to Hegel's diagnosis, natural consciousness, after thousands of years of work, had now reached the point where scientific philosophy had appeared and had articulated itself in some individuals. Kant and Fichte had provided all the essentials, and in Schelling's philosophy of identity, suitably modified by Hegel, philosophical science had become a real phenomenon. Its lingual representations existed in Schelling's books and in the articles by Schelling and Hegel, and its content existed in the thinking consciousness of these authors and that of their thoughtful readers. The more productive of the two authors was Schelling for the time being, but Hegel may have already considered himself the more insightful of the two, given his nascent system. Anyway, philosophical science had appeared in nuce and could now be elaborated and hopefully be raised from the de facto status of a science pretender among many to the rank of a generally accepted science, thus completing the evolution of natural consciousness into science.

Part I of Hegel's system was intended to reconstruct in an ideal-typical way the path of natural consciousness from its earliest beginnings to absolute knowledge, the starting point of speculative logic and philosophy. This had to be done without dogmatism, i.e. in such a way that the sceptic could agree in principle. Hegel keeps the spatiotemporal field of conscious-

¹⁶ Cf. Förster, Eckart, "Hegels 'Entdeckungsreisen". Entstehung und Aufbau der *Phänomenologie des Geistes*", in: Vieweg, Klaus und Wolfgang Welsch (eds.), *Hegels Phänomenologie des Geistes. Ein kooperativer Kommentar zu einem Schlüsselwerk der Moderne*, Frankfurt am Main 2008, pp. 37-57.

ness fixed as a constant scenario, but tacitly does so in a sceptical *epoché*, a bracketing of claims to objective truth, i.e. in the mode of appearance or "shine" (in German "Schein"). ¹⁷ Natural consciousness itself is not satisfied with this, of course, but claims objective knowledge of what is real on the basis of an implicit conception of the categorial form of real objects. Its many individual knowledge claims are empirical, to be sure, and as such not a subject of an a priori philosophical *Phenomenology*. What the *Phenomenology* investigates is the proto-ontology of consciousness, i.e. the general, a priori and categorial knowledge claim that permeates and informs the empirical knowledge claims at each major step in the evolution of consciousness throughout human history.

If, as Hegel believes, the historical evolution of the proto-ontology of natural consciousness is based on a hidden conceptual necessity which must be discovered and scientifically presented with the participation of the sceptic, then botanising is not permitted. Rather, the beginning of the examination must be made with a proto-ontology that is devised as the simplest and most immediate among all possible candidates. The initial consciousness must accordingly conceive the spatiotemporal scenery as a sheer multiplicity of distinct individual items, which are simply there. And as exactly such independent individuals, they should then be epistemically accessible to consciousness, hence presumably as individual sense impressions. The first chapter of the *Phenomenology* shows, however, that a multitude of immediate, distinct individuals could not possibly be accessible to consciousness as such, i.e. as many individuals, but, on the contrary, only in the form of various very general traits. Thus, the proto-ontology of the logically first shape of consciousness generates a proto-epistemology that is diametrically opposed to it. The conception of the categorial form in which the real is "in itself" and the conception of the categorial form in which it is "for it", i.e. for consciousness, fall apart without any relation. The initial shape of consciousness – Hegel calls it sense certainty – is structurally false consciousness, or rather not yet an actual consciousness at all, because its proto-ontology and its proto-epistemology not only do not coincide, but also do not have any points of contact in the first place. The super-Platonist (sit venia verbo) proto-epistemology totally misses the super-nominalist proto-ontology.

The argumentation leading to this result will not be reconstructed here, ¹⁸ instead the method of the *Phenomenology* will now be illustrated in a short outline of the relevant Hegelian

 $^{^{17}}$ Unexpectedly, an affinity to *transcendental epoché* as the methodological principle of Husserl's very different and rather botanising phenomenology shows itself here.

¹⁸ Cf. the author's "Sinnliche Gewißheit und Wahrnehmung. Die beiden ersten Kapitel der *Phänomenologie des Geistes*", in: Koch, Anton Friedrich, *Die Evolution des logischen Raumes. Aufsätze zu Hegels Nichtstandard-Metaphysik*, Tübingen 2014, pp. 29-44.

points. Of course, if one does not want to lose the sceptic, the method cannot be sufficiently justified in advance, i.e. before the content of the work is developed, but it can only be read off afterwards from the actual course of the development. Hegel, however, gives the readers in the introduction a sketch of the method in advance, based on his knowledge of the progression. He thereby formulates his variant of the Theorem of Consciousness. Consciousness, he says,

distinguishes something from itself to which it *relates* itself at the same time; or, as this is expressed: there is something *for it* [i.e. *for consciousness*]; and the determined [not just: determinate] side [or term] of this *relating* or of the *being* of something *for a consciousness*, is *knowledge*. From this being for an other, however, we distinguish the *being-in-itself*; that which is related to knowledge is as well distinguished from it and posited as being [being the case or existing, a difference is not yet made] also outside this relationship; the side of this in-itself is called *truth*.¹⁹

Consciousness is introduced here as the duality of a *for-it* and an *in-itself*, thus of an implicit conception of the categorial form of the real as it is present to consciousness and an implicit conception of the real as it is in itself, i.e. a proto-epistemology and a proto-ontology. The epistemic side (the knowing, the for-it) is to be determined by the ontic side (the truth, the initself) as the determining one. Consciousness thus claims, in the spirit of moderate everyday realism, to have its knowledge be determined by the "in itself", not only with regard to empirical knowledge claims but first and foremost with regard to categorial form. When Hegel says that from the for-it, "however, we distinguish the *being-in-itself*", the adversative "however" is to be drawn to "the *being-in-itself*", not to "we". It is not we qua theorists as opposed to natural consciousness, but it is we qua, or at least on behalf of, natural consciousness who distinguish from the for-it the being-in-itself. For we as theorists must not commit ourselves to a true "in-itself". That would be illegitimate dogmatism. We may only take note of the naive dogmatism of natural consciousness without signing it.

The in-itself is the categorial conception that consciousness possesses of the real, and the forit is the categorial conception that consciousness possesses of the epistemic accessibility of

¹⁹ In the original German: "[Das Bewusstsein] *unterscheidet* nämlich etwas von sich, worauf es sich zugleich *bezieht*; oder wie dies ausgedrückt wird: es ist etwas *für dasselbe*; und die bestimmte Seite dieses *Beziehens* oder des *Seins* von etwas *für ein Bewuβtsein* ist das *Wissen*. Von diesem Sein für ein Anderes unterscheiden wir aber das *Ansichsein*; das auf das Wissen Bezogene wird ebenso von ihm unterschieden und gesetzt als *seiend* auch außer dieser Beziehung; die Seite dieses Ansich heißt *Wahrheit*." (*Theorie-Werkausgabe*, hence: TW, i.e. G.F.W. Hegel, *Werke in 20 Bänden*, Frankfurt am Main 1969-71, volume 3, p. 76. Also: Georg Wilhelm Friedrich Hegel, *Gesammelte Werke*, in Verbindung mit der Deutschen Forschungsgemeinschaft herausgegeben von der Nordrhein-Westfälischen Akademie der Wissenschaften und der Künste, Hamburg 1968ff., hence: GW, volume 5, p. 58.

the real. According to the general categorial knowledge claim of consciousness, both conceptions ought to be identical in categorial coinage and differ only in their role as ontic or epistemic logical form respectively. This is what the knowledge claim of consciousness amounts to. If, for example, the real, according to its categorial form, is a multiplicity of simple, distinct individuals, then it should also be epistemically accessible under this same categorial form. But the examination in the first chapter has shown the opposite: If the real consists of distinct individuals, then it is accessible in the form of highly general features. This means that firstly this particular for-it is discredited as the determined side or dependent variable in the duality of consciousness. The in-itself as the determining side or independent variable, on the other hand, is the yardstick or standard for the truth evaluation of the for-it. But the negative truth evaluation falls back on the standard, because this particular standard was adopted by consciousness in the course of its general categorial claim to knowledge-and-truth as an attempt to conceive the in-itself in a superlatively primitive und presuppositionless way. Thus, consciousness in its initial shape or form posited that the real in itself consisted of distinct individual entities, to be referred to without general concepts by pure indexicals alone, and experienced to its own surprise and frustration that these entities would then only be accessible as a multiplicity of very general traits. Positing that the real consists of primitive individuals is an act that is not verifiable in principle, but on the contrary falsifies itself, i.e. falsifies the positing consciousness. Consciousness would therefore have to change its for-it, but it cannot do so without further ado, because the for-it is the dependent variable, which only changes when the independent variable, the in-itself or the object, is changed. Therefore, as Hegel puts it, in the examination of a given categorial knowledge claim, not only that claim, but also the object itself, as conceived under the adopted in-itself,

does not withstand; or the standard of the examination changes if that for which it was supposed to be the standard does not stand the examination; and the examination is not only an examination of the knowledge [claim] but also of the standard of the examination [i.e. of the in-itself].²⁰

But where would a new standard come from if the examination turned out negative?

There is exactly one possible candidate for a new in-itself in the place where we stand: the former for-it, because no other categorial conception has so far been found or deduced. The spatiotemporal scenery must therefore now be conceived by consciousness as consisting of highly general phenomenal qualities. Hegel calls this new form of consciousness *perception*

 $^{^{20}}$ TW 3, p. 78 = GW 5, p. 60.

(*Phenomenology*, chapter II) and in the introduction speaks of a "reversal of consciousness" with regard to the method.²¹ Consciousness has experienced that the former in-itself was an in-itself only for it, for consciousness, and now puts the for-it that resulted from the in-itself in the position of the new in-itself. This leads to a new examination in order to find out whether the new in-itself generates a categorially congruent for-it (it would only have to reproduce itself in the role of the new for-it). Unfortunately, or rather fortunately, this is not the case; unfortunately, because consciousness thus does not achieve its self-coherence; fortunately, because the science of the experience of consciousness must continue and can uncover more categorial structure.

Consciousness can be imagined as the phenomenal spatiotemporal field (bracketed in *epoché*) in the role of an input-output apparatus: we enter the simplest conceivable in-itself (or object), and the apparatus outputs a de facto incongruent for-it (or knowledge). We enter this for-it as a new in-itself and again receive an incongruent for-it, which we then enter as a third in-itself, etc., until hopefully a fixed point is reached where input and output come to coincide and a categorially adequate, "absolute" knowledge emerges. On the way to this point, consciousness experiences a continuous self-correction in its categorial thinking, which we as theorists recognise as necessary. Hegel had originally assumed that with the conceptual journey through the forms of consciousness in the narrower sense in chapters I-III (sense-certainty, perception, understanding) and of self-consciousness (chapter IV) as well as of reason (chapter V), the investigation would be completed and the fixed point reached. In fact, however, this part of the journey only fills the first half of the text of the *Phenomenology*. The experience of consciousness obviously has not yet come to a halt at a fixed point, where input and output coincide. As Eckart Förster convincingly showed, 22 Hegel had to correct himself and, under great time pressure, enrich the investigation with materials that actually (as turned out later) belong in the philosophy of objective and absolute spirit. In consequence, two long chapters on spirit (VI) and religion (VII) follow, before absolute knowledge can be addressed in the short final chapter VIII. Thus, the planned science of the experience of consciousness had grown under work into a veritable *Phenomenology of Spirit*.

The fixed point, absolute knowledge, is double-edged and must be so, so that from it a progression into logic becomes possible and necessary. On the one hand, the general categorial knowledge claim of consciousness is now fulfilled, i.e. filled with truth. The fallibility of finite consciousness, which claims to know about an independent object, is overcome in the

 $^{^{21}}$ TW 3, p. 79 = GW 5, p. 61.

²² Cf. above, loc. cit.

identity of the for-it and the in-itself. We no longer merely claim to know, but find ourselves in categorial knowledge, even if we remain fallible in our empirical truth claims; and in this categorial, genuinely philosophical knowledge, truth is revealed ex post as the process of the successive alternate shapes or forms of consciousness, none of which is in itself the truth about of consciousness, just as neither the bud nor the bloom nor the fruit is in itself the truth about the plant.²³

On the other hand, when the for-it and the in-itself come together in one single categorial shape, there is nothing left that could still account for their difference in logical roles. Thus, consciousness itself collapses, together with its defining duality, and absolute knowledge becomes, as Hegel puts it, a "going into itself" of spirit, in which it, spirit, "is sunken in the night [!] of its self-consciousness"; "but its disappeared existence is kept in it", and so spirit has "to start anew [...] unbiased and to raise itself [...] again, as if everything that went before was lost for it". This is to happen in the *Science of Logic* and to be continued in the *Realphilosophie*, the philosophy of nature and of spirit.

2. The Science of Logic

With the expansion of the science of consciousness to the *Phenomenology of Spirit*, Hegel had malgré lui thrown his Jena conception of the system of sciences overboard without gaining another. Rather, the *Phenomenology* represents a phase of productive disorder in his plans, which only comes to an end in the *Science of Logic* (1812-1816). The new and stable conception of the system is bindingly revealed from 1817 onwards in the *Encyclopaedia*, the third edition of which, in 1830, will be used as a textual basis in the following. The first five chapters of the *Phenomenology* of 1807, which formed the science of the experience of consciousness, are condensed in the *Encyclopaedia* under the now too broad heading "*The Phenomenology of Spirit*" to form the middle part of the first section ("Subjective Spirit") of the Philosophy of Spirit. The materials from the second half of the *Phenomenology of Spirit*, concerning objective spirit and religion, are now located in the remaining sections and parts of the philosophy of spirit. The place of absolute knowledge, which was supposed to provide the progression into logic in 1807, is now taken by absolute spirit, the final destination of the

²³ See Hegel's reference to the life process of a plant in the preface to the system preceding the introduction to the *Phenomenology*: TW 3, p. 12 = GW 5, p. 10.

²⁴ Phenomenology: TW 3, p. 590 f. = GW 5, p. 433.

²⁵ But Hegel correctly adds: "Consciousness".

whole system, notably by its highest form – after art and religion –, which is philosophical science.

Back in 1807, Hegel had announced the experience of consciousness as a "path of despair" (not just Zweifel, doubt, but Verzweiflung, despair) and "self-consummating scepticism" 26 and as "the detailed history of the forming [Bildung] of consciousness itself into science", 27 now it is said (*Encyclopaedia*, § 78), in the hypothetical subjunctive (the irrealis):

Scepticism, as a negative science carried out through all forms of knowing, would [!] present itself as an introduction [...]. But it would [...] also be a superfluous way because the dialectical [i.e. the negatively rational, see *Encyclopaedia*, § 79, sceptical] [side] itself is an essential moment of affirmative science. [...] The demand for such a consummate [vollbracht: literally brought to its full] scepticism is the same as the demand that science ought to be preceded by doubting everything, i.e. the complete presuppositionlessness with respect to everything. It is in fact the resolution to want to think purely [rein denken zu wollen], achieved through freedom that abstracts from everything and grasps its pure abstraction, the simplicity of thinking.

Science, then, by virtue of the free resolution to want to think purely, can now begin directly with the *Logic*, which is preceded by nothing but "complete presuppositionlessness". Thus, the *Logic* is the singular strictly presuppositionless theory or science, and as such it shall now be considered.

2.1 The beginning of the presuppositionless theory

The *Logic*, of course, deals, as does the complete Hegelian system, with precisely those themes and problems with which Kant and Spinoza, Reinhold and Aenesidemus/Schulze, Fichte and Jacobi, Schelling and the Jena Hegel had dealt. But for the time being we may, indeed we should forget that. In order to be able to begin without presuppositions, we have to play dumb and abstract from everything we believe or know.

So we do not presuppose anything, no doctrine, no terminology, no method, no topic. In all these respects – doctrinally, terminologically, methodologically and thematically – the theory we are looking for must be presuppositionless. In a certain sense we are looking for something impossible then, because a scientific theory is a lingually and argumentatively articulated and controlled holding true of various theorems. How should we be able to abstract from

 $^{^{26}}$ A scepticism that "vollbringt" itself: *brings* itself to the *full*. 27 PhG: TW 3, p. 72 f. = GW 5, p. 56.

this minimum of conceptual content and method and at the same time do science? We immediately see that we have to proceed on two tracks and divide our thinking into two levels, the basic level of pure, strictly presuppositionless thinking we are searching for and the higher level of our background thinking through which we carry out this search. In Hegelian terminology, the thinking being sought would be the relevant subject-matter itself, and the seeking thinking is our external reflection. From now on we shall speak of foreground and background theory, foreground and background logic. The foreground theory is pure, presuppositionless thinking, i.e. the relevant subject-matter, and the background theory is Hegel's and our science of logic, which we want to approach in external reflection with as few presuppositions as possible and in a philosophically neutral way.

We do not yet know the topic of the sought foreground logic (short FL, in German Vordergrundlogik, VL); but our background logic (short BL, in German Hintergrundlogik, HL) in fact already has a topic, namely FL including what the topic of FL will turn out to be. In BL we also have beginnings of a terminology and a method. For we speak a natural language and talk in particular about the fact that we are looking for a presuppositionless theory, so we need to have a prior understanding of what we mean by "presupposition" and by "theory". As far as our method is concerned, it is the unspecific scientific one of a justified holding true and more specifically that of reducing presuppositions. The aim is to radically and completely reduce presuppositions for FL and, as far as possible, also for BL. We want to keep BL as free as possible from substantial preliminary decisions of a terminological, methodological and doctrinal nature and only tentatively set up the working hypothesis that there is a strictly presuppositionless pure foreground thinking, which we want to examine together with the sceptic for its truth. In comparison, this absolutely presuppositionless FL may at first seem like something completely out of the ordinary that has nothing to do with our thinking. After all, FL would have to be wordless if no terminology whatsoever is to be assumed. But on the way to the end of the Hegelian enterprise, if all goes well, the distance between us (our BL) and pure thinking (FL) should become smaller and smaller and finally disappear, so that we would be able to recognise our BL as the fully developed FL. Within logic, however, this will not yet be possible for the simple reason that we humans are spatiotemporal beings and must therefore wait with our performance until the *Realphilosophie* that considers the spatiotemporal. At the end of the philosophy of spirit, however, as the crowning glory of the Hegelian system, the cultural achievements of art, religion and, finally, philosophy will be considered under the heading of "absolute spirit", and there we should be able to recognise ourselves and our BL as

the final theme of Hegelian philosophy. But these are, at the beginning of the *Logic*, the most distant dreams of the future.

According to what has been said, we must therefore always distinguish between our external reflection (BL) and pure thinking (FL). But it is just as important to consider a difference of levels within BL. Let us imagine Hegel as a carny artist who builds a roller coaster and ghost train on a fairground, a train that eventually leads its users to the absolute "ghost" or spirit – in a loop of three loops, a circle of three circles, an encyclopaedia of three cyclical sciences.

FL is the track on which pure thought travels, and Hegel is the designer of the track. Firstly, he knows the construction principles and knows how the ghost train is built, and secondly, he has already completed test rides and knows what is in store for pure thinking at the various stations or what the users will experience there while thinking. He could therefore take up two different perspectives within BL, a designer perspective and a user perspective, and accordingly write two versions of BL, a long, complicated construction manual for potential designers who, like him, want to build a logical ghost train, and a shorter one for potential users to whom he wants to describe and explain the journey of pure thinking in advance. In the following we therefore want to distinguish not only between FL and BL, but also within BL between the designer perspective BL_D and the user perspective BL_U, if necessary. And one more thing: FL is the fixed track of pure thinking, but just as a bird draws its circles without tracks, a virtuoso of thinking could possibly do without the tracks of FL and move in free thinking movements along the same path as a FL user along his fixed track. Hegel envisions such virtuosity as an ideal, and in BL_U he likes to describe the free flight of pure thinking. In this respect, BL_D is more the background theory of FL and BL_U more the background theory of pure thinking itself.

Since FL is wordless, the execution of pure thinking cannot be articulated lingually, but can at most be indicated externally by one-word-sentences ("being!", "nothing!", "becoming!" etc.) or their logical modifications ("not-being" etc.). BL, on the other hand, uses ordinary philosophical colloquial language in both perspectives. In BL_D, the path of pure thinking is built up argumentatively, i.e. constructed in detail, and in BL_U, the thoughts that pure thinking thinks at the different stations are named ("Being", "Nothing", "Becoming" etc.) and described ("Being is indeterminate and immediate" etc.) in external reflection, and the transitions from one station to the next are motivated. For smart virtuosi of pure thinking, who are sufficiently emancipated from the logical path, the Hegelian motivations may be as convincing as a sketchy proof given by an experienced mathematician for his advanced colleagues. But the

astonished freshmen would be lost without the intermediate steps in the proof. As far as the *Logic* is concerned, these would have to be delivered in BL_D, while Hegel, in order to get ahead with the work, which in the end will nevertheless grow to three volumes, almost always prefers the shorter BL_U. In this way he makes faster progress, but encourages incomprehension and half-baked interpretations, which in fact deserve the ridicule to which Hegel himself was often subjected by smart-aleck philosophisers.

By way of illustration, and because it is in line with our agenda anyway, let us now quote the beginning of the main text of the Logic, the first subsection, "A. [Being]", of the first chapter, "Being", of the first section, "Determinateness (Quality)", of the doctrine of being:

Being, pure being, — without any further determination. In its indeterminate immediacy it is only equal to itself and also not unequal to another, has no difference within itself or to the outside. [...] It is pure indeterminateness and emptiness. — There is *nothing* [in small letters: "nichts"] to intuit in it, if one can speak of intuiting here; or it is only this pure, empty intuiting itself. There is also nothing to think in it, or it is equally only this empty thinking. Being, the indeterminate immediate, is indeed *Nothing* [capitalised: "Nichts"] and no more or less than Nothing.

This is directly followed by the next subsection, which is not much longer: "B. Nothing", and then the longer subsection "C. Becoming", which extends to the end of the first chapter.

Hegel first lends wordless pure thinking a word, an incomplete sentence, a kind of exclamation: "Being", and then, obviously to be a little more precise, "pure being". The addition "without any further determination" then clarifies purity. Usually, different senses of being are distinguished, as first in Aristotle (cf. Metaphysics Δ 7) and later in other ways up to the present day (being the case, existence, copula, identity). In our text, however, something more general, something simpler is obviously meant, a being still beyond all distinctions. Second, Hegel tells us that this indeterminate being is something immediate, and third, something singular and incomparable. It is immediate, insofar as it must be accepted in FL, that is, by pure thinking, as it is; it cannot be explained or derived from anything else. It is incomparable because it cannot be profiled in FL by comparison with anything else. It is also, fourthly, empty, has no content of intuition or content of thought. If we are to speak of intuiting or thinking at all, pure being would be, fifthly, the empty, pure (a) intuiting or (b) thinking itself. Hegel thus expects us to be confronted with an astonishing sequence of equations: Pure being = the empty content of intuiting or thinking = pure intuiting = pure thinking. Finally, we learn that this pure being or intuiting or thinking is Nothing, capitalised; i.e. Hegel nominalises the indefi-

nite pronoun "nothing" into (*the*) *Nothing*. But we do not receive any instruction as to what is to be thought under the capitalised and nominalised "Nothing".

For an understanding through text exegesis the matter is hopeless, here as in Hegel's Logic in general. In not much else, but in this respect the Science of Logic resembles a mathematical textbook, which likewise cannot be philologically and exegetically grasped and studied, but only through subject-related argumentation or calculation. The problem with the BL_U level, however, is that at this level only sketchy and superficial arguments are given. Anyone who wants to understand Hegel's Logic must therefore – according to Hegel's rules, of course – develop their own background theory BLD and compare it step by step with Hegel's background theory (mostly BL_U). Essentially, Hegel's singular basic rule of play must suffice for this: Build up a presuppositionless FL – or rather the presuppositionsless FL, because in it everything must be singular and without any alternatives. There can only be one possible beginning and only one possible continuation to the next theorem or next theory station in FL. In our steps of constructing the path of pure thinking, which we carry out in BL_D, we are freer and can choose for pragmatic reasons either one or the other procedure, can for example, construct the stations all strictly in sequence, or first leave a gap between two stations and close it afterwards by one or more intermediate stations (or the like). In the end, however, all construction variants must result in the same alternativeless path of pure thinking.

By doing science, we claim knowledge and hold this and that to be true. With which knowledge claim (or truth) could FL start qua pure thinking? The act and content to start with would have to be a singular, excessive and alternativeless knowing or thinking, which for logical reasons nobody could effectively contest or deny. So, we postulate on the basis of our working hypothesis something minimal and common, simple and general, which is stereotypically included and co-claimed in any claim to knowledge or truth that anyone can ever make, i.e. not any particular and determinate being the case (like the being white of snow or the being older than Plato of Socrates etc.), but universal, indeterminate being that permeates all these cases. About particular truth claims one can in principle always argue, but pure being itself is co-claimed in all particular and determinate claims and thus beyond possible dispute, by definition. That we call it "being" is arbitrary; we could give it any name we like, "Gustav" or "Frieda" or whatever; but "being" seems to suggest itself and fulfils a mnemotechnical function: It reminds us of what remains when we abstract from all determinacies of different truth claims: namely nothing but the unmodified truth claim purely as such and the corresponding indeterminate being-the-case purely as such.

If pure thinking could speak, it would perhaps raise this initial truth claim, which has no alternative and is completely neutral, by means of the one-word-sentence "Being!", and this is exactly how the *Logic*, as we have seen, actually begins. "Being" is the lingual expression that Hegel lends to the FL. Then he takes the word in BL_U in his own person and describes in external reflection the content of the truth claim that was raised in FL: Because this claim and content was devised by abstraction from all determinacies of ordinary truth claims, it is indeterminate, at least for FL, although of course not for us (in BL), because we, Hegel and the readers, determine it precisely as indeterminate and, in addition, as immediate, incomparable (etc.). Pure thinking, however, if it were not wordless anyway, could not predicate anything of pure being, but could only hold it to be the case in a completely inarticulate way. This is to be hinted at with the one-word-sentence "being!". Secondly, the content claimed with that oneword-sentence – i.e. pure being – is immediate, again for pure thinking that thinks it in its very first thought, without deriving it from anywhere. For us, Hegel and the readers, on the other hand, being is mediated by the thoughtful omission of all determinate differences between possible truth claims, i.e. by an act of negation, omission or abstraction. Thirdly, being is incomparable. If we compare a with b, we have to find determinacies that they have in common (both are e.g. red) and determinacies by which they differ (a is e.g. round and b square). In the case of being, however, we have only this, being, and it has no determinacies for pure thinking. It is therefore in FL an incomparable singularity, while in BL we can of course compare this FL singularity with arbitrary other things.

Normally we have to distinguish between a theory and its object or topic. This would result here in the difference between pure thinking (= FL) and pure being (= topic of FL). Our topic in BL is FL, and the topic of FL is being. These are three levels: background theory, foreground theory, being. But the indeterminate, immediate, incomparable object *being* is fourthly, in its indeterminate immediacy and incomparability, completely neutral in content and empty and is therefore grasped in an intuiting or thinking that no longer has the form of judgement or predication. Consequently, fifthly, pure intuiting or thinking and pure being merge, so that only two levels remain, that of the background theory and that of the foreground theory, which is at the same time that of its topic or object. This coincidence of intuiting, thinking and being must now be justified and explained.

An excursus into the theory or conception of uncompounded (*asyntheta*) or undivided (*adiaireta*) facts would be helpful for this purpose. Such a conception is found in Aristotle (its locus classicus is *Metaphysics* Θ 10), indirectly already in Plato (in *The Sophist*), in another form also in Bertrand Russell's assumption of a knowledge by acquaintance and, by the way,

in all sense data theories. ²⁸ Here, however, hints must suffice. Being was conceived in BL_D as the common core, which is co-stated in all statements and which is free of all conceivable modifications, by which something that is the case could differ from something else that is the case. Regarding such a core, pure thinking is immune to error: thinking cannot miss it. However, along with the possibility of error, the duality of consciousness: of objective in-itself and subjective for-it, ceases to exist. The immediacy of absolute knowledge emerges and with it absolute subject-object-identity. Thus, in BL_D we achieve the result and goal of the long path of the *Phenomenology* in a short way, through the resolution to want to think purely, or through the working hypothesis that there is a presuppositionless theory, but until further notice only as a consequence of our working hypothesis, whereas in the *Phenomenology* it was a (supposedly) assured result. In analogy to sense data, whose admission Wilfrid Sellars rightly castigated as the Myth of the Given, pure being would then have to be described as a thought datum. In grasping a datum, thinking becomes similar to sense perception, insofar as the latter is supposed to grasp sense data, and becomes what has been called intellectual intuition. Hegel disdains this term and is content to say of pure being that, "if one can speak of intuiting here", it is only the "pure, empty intuiting itself" or, which amounts to the same thing, the pure, empty thinking itself. The act of thinking, the thinking subject and what is thought, or the act of intuiting, the intuiting subject and what is intuited fall into one here, at this utterly indeterminate und immediate beginning.

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²⁸ Cf. Aristotle, *Metaphysics* Θ 10, 1051b17ff. (*asyntheta*), *de anima* III 6, 430a26ff. (*adiaireta*), ibid. II 6, 418a7ff. (immunity to error in the case of the *propria sensibilia*, the proper sensibles), Plato, *The Sophist*, 261dff. (susceptibility to error due to the linking of a noun and a verb to form a statement), and Bertrand Russell, *The Problems of Philosophy*, 1912 (Oxford 1967), chapter 5 "Knowledge by Acquaintance and Knowledge by Description".

Third Lecture. Hegel's Logic I. Quality

Last time (in December), we began to look at the *Science of Logic* and first investigated its beginning (2.1). Before going on to consider the first steps within the *Logic* (2.2), which will then lead us into the logic of quality (2.3), let me repeat the concluding point of the second lecture to freshen up our memory.

We are working in our background logic (BL) with nothing more but the simple working hypothesis that pure thought is possible, and we are therefore seeking a presuppositionless foreground logic (FL), i.e. we are seeking pure thinking proper. Last time we found out that the initial insight or initial truth of this FL was a logical singularity with a zero content, which we called *Being*, *Pure Being*, following Hegel. It is a wordless insight, a thought datum, so to speak, comparable to sense data, and we have lent it a one-word sentence as its auxiliary lingual expression: "Being!"

Now Hegel claims, first, that this zero content is identical with the act of thinking it or intuiting it, and therefore, second, that there is no difference here between thinking and intuiting, and we tried to justify and explain these claims.

A decisive hint at justification comes from Plato, from Plato's *Sophist*, where the protagonist, a stranger from Elea and student of Parmenides, wants to define the Sophist as a craftsman in the art of producing deceptive verbal images of things. But the Sophist counters that Parmenides himself has taught that it is impossible to think and say something that is not the case, and thus impossible to say something false and deceptive.

The Stranger therefore tries to explain how false thoughts and statements are nevertheless possible and arrives at the following solution: even the most elementary thoughts and statements are compositional, namely predicative. We can therefore make a mistake if we predicate something of something that does not apply to it. We can refer to Theaetetus and predicate of him that he flies. Theaetetus is real and so are instances of flying, think of birds and bees and flies. But the combination of Theaetetus and flying is false, and so the predicative combination is identified as the source of the possibility of error and deception.

Now pure being is so primitive that it lies beyond or beneath predication. It is something utterly simple, something that can be grasped as a primitive thought datum in a simple, unstructured act of thinking. Thus, the possibility of error disappears and with this possibility the notion of something objective and the notion of a duality of subject and object. In short, what

disappears is the duality of consciousness that was the topic of the *Phenomenology of Spirit*. The identification of thinking and intuiting is justified here, because of the lack of predicative structure, and the identification of thinking or intuiting with what is thought or intuited, i.e. pure being, is justified because of the lack of the duality of consciousness.

Thus – to repeat – in our designer perspective in the background logic (BL_D) we achieve the result and goal of the long path of the *Phenomenology* in a short way, through the resolution to want to think purely, or through the working hypothesis that there is a presuppositionless theory. In analogy to sense data, pure being would therefore have to be described as a thought datum. In grasping a datum, thinking becomes similar to sense perception, insofar as the latter is supposed to grasp sense data. The act of thinking, the thinking subject and what is thought, or the act of intuiting, the intuiting subject and what is intuited fall into one here, at this utterly indeterminate und immediate beginning.

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2.2 Negation as the first step within the background theory

Thus, in BL_D , we have now reconstructed and justified Hegel's BL_U statements about being – except for the last one, that pure being is not only nothing, but *the Nothing*. Hegel's talk of a capitalised and nominalised nothing may at first seem like a nonsensical reification of the existential quantifier with a preceding negation sign. "Nothing is free" can be formalised in terms of quantification theory (or predicate logic) as " $\sim(\exists x)(x \text{ is free})$ "; the colloquial "nothing" is thus replaced by the signs " $\sim(\exists x)(x \dots)$ ", which denote nothing specific. Of course, we are free to rename being as we wish, in Gustav, Frieda or simply the Nothing. We had called it "Being" because it was introduced as the constant remainder of whatever is the case. We can call it "the Nothing" because this core is empty and contains nothing definite. But a mere renaming is not the issue here, as the progress shows. That being is identical to the Nothing is not a terminological point, but a substantial theorem of BL.

To see why we have to look at how Hegel goes on. Sure, in the subsection "B. Nothing", he initially does what one must expect on the basis of the simple identification of Being and Nothing: He says roughly the same about Nothing as he did before about Being. Again, he begins with an introductory sentence lent to FL by him: "Nothing", to which we may add an exclamation mark: "Nothing!", and then states in BL that Nothing is incomparable ("simple equality with itself", "lack of all distinction within"), "complete emptiness, complete absence of determination and content", the empty intuiting or thinking itself, and that it is "thus alto-

gether the same what pure *being* is".²⁹ Only immediacy is missing among the determinations of pure Nothing, probably because Nothing comes second and was introduced in relation to being. In this, however, a difference between Being and Nothing is already hinted at, which is then expressly asserted in the third subsection "C. Becoming":

But the truth [about Being and Nothing] is just as much that they are not without distinction; it is rather that *they are not the same*, that they are absolutely distinct yet equally unseparated and inseparable, and that each immediately vanishes in its opposite.³⁰

So instead of two names for the same thing, we get a direct, substantial contradiction: Being is identical with Nothing and is different from Nothing, i.e. not identical with it.

A contradiction is not true. So, in our BL_D we must not commit ourselves to this contradiction and we do not want to interpret Hegel as if he were committing himself to it in his BL_U . Rather, it must be the case that he catches pure thinking in a contradiction that he cites in BL_U instead of proclaiming it himself. What Hegel wants to say can be interpreted in this way: In FL, pure thinking grasps Being and Nothing as identical and as different, and as *absolutely* different at that, since Being and Nothing have no determinations *in* which they could differ. Consequently, pure thinking is not true at the logical beginning and must not stop at its initial untruth and inconsistency, but must correct itself.

But first we need to understand how the thought datum *Nothing* comes about to begin with, a thought datum which is supposed to be both identical and not identical with the thought datum *Being*. This turns out to be rather tricky. So now it is getting difficult.

It has already been said earlier that although the sequence of stations of pure thinking in FL must be without alternative, there is room for alternative approaches in the construction of the track of pure thinking in BL_D . One can imagine that two fairground companies build type-identical ghost trains, but that the companies differ from each other in the construction steps here and there. One company first builds station 1 and station 3 and then adds station 2 in between, the other one proceeds strictly in sequence. For pure thinking this difference is afterwards irrelevant and invisible; in both cases it goes from station 1 via station 2 to station 3. In this vein, without claiming to be complete, let us now consider three alternative construction methods.

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²⁹ TW 5, p. 83 = GW 21, p. 69.

³⁰ Ibid.

First method: the model-theoretical construction. In order to represent the strict presuppositionlessness of pure thinking in our BL_D as closely as possible, we describe the initial situation of pure thinking (1) without non-logical constants only with individual variables and logical expressions, i.e. without matter-of-factual terminological presuppositions, and (2), in the spirit of classical scepticism, by means of a contradiction. Hans-Peter Falk proposed this method in 1983. Specifically, we use the two variables "x" and "y" and the logical expressions "~" and "=" to form the two open sentences "x=y" and "~(x=y)". Open sentences are in general not true or false simpliciter, but apply to some things and not to others (they are true of certain things and false of others, or they are satisfied by some things and not by others). We therefore do not make any assertions with these two open sentences. Moreover, they are thematically and terminologically neutral, they do not presuppose anything, and methodologically, as a pair, they have the welcome property of accommodating a strict scepticism, which claims the contradictory opposite to any given sentence.

The initial situation of FL would therefore have to be a *structure* (in the mathematical, model-theoretical sense) that would *satisfy* (again in the model-theoretical sense) the set of open sentences {"x=y", " \sim (x=y)"}, i.e. it would have to be a structure that would be a *model* of this set of sentences. The counterfactual subjunctive or grammatical *irrealis* is indispensable here and represents a logical *impossibilis* or counter-logical subjunctive, for there cannot be a model of an inconsistent set of sentences; such a model would be as incoherent – not agreeing with itself, distinct from itself – as the set of sentences is inconsistent. Hegel calls this impossible, counter-logical model "becoming", and the variables "x" and "y" be calls "being" and "nothing". It is perhaps possible to imagine that "being" connotes identity and "Nothing" connotes non-identity: insofar as identity prevails, we have only one item: being (=x), insofar as non-identity prevails, two items: being (=x) and Nothing (=y). But this is more mnemonics than logic. In relation to the counter-logically fictitious structure of becoming, a contradiction-resolving measure must then be taken in BL_D, which leads to a new thought datum, a new logical primitive fact (i.e. pre-predicative fact), de facto to what Hegel calls "Dasein" (being there). But we are not yet that far.

Second method: the construction of *the Nothing*. To the question of why there is something and not rather nothing, the correct answer is: because if there were nothing, there would per impossibile be *the* Nothing as the contradictory opposite of itself. For suppose there were nothing. Then precisely this would be the case, namely that there is nothing. In general, what is the case is a propositional or predicative fact that is the case with respect to something else,

³¹ Hans-Peter Falk, Das Wissen in Hegels "Wissenschaft der Logik", Freiburg i.Br. and Munich 1983, pp. 24-28.

something objective, such as that the earth rotates, is the case with respect to the (rotating) earth. In an exceptional situation like the one assumed, however, in which there is nothing, and especially nothing objective, the fact that there is nothing must be the case in itself. The propositional fact that there is nothing therefore shrinks, in the case of its obtaining, to a primitive, pre-predicative fact, namely to the purely negative and empty primitive fact that we can call *the Nothing*. If there were nothing, there would thus be the Nothing. A contradiction. So there necessarily is something because the assumption that there is nothing leads to a contradiction, namely to the paradoxical existence of the incoherent Nothing.

This little argument would, of course, be a reason to avoid the assumption of the Nothing, precisely because we now understand what is to be thought under this label. The Nothing is nothing but its own contradictory opposite in a completely undeveloped, simple form: absolute negativity compressed into the simple opposite of itself. To accept it, to posit it, is to posit inconsistency instead of avoiding it. Thus, as was said, the argument would be a reason to shun the Nothing, if we had not, in the first step, assumed the primitive fact of pure being, which, in its indeterminate immediacy, forms the contradictory opposite fact of the Nothing. The Nothing, however, is already its own counter-fact, so it is identical with being; and because of the symmetry of identity, being is then in turn identical with the Nothing. The supposedly purely affirmative being is thus drawn into the antinomy of the Nothing, without its own visible participation, so to speak. We might think in BL that we get something purely affirmative when we consider pure being. But the little argument shows us that we get instead one side, the supposedly benign side, of the antinomic Nothing. This primordial basic pattern will run through the further progress of the *Logic* in many other, more developed forms.

Now the third method (and the one that we shall stick to in what follows): the negation-theoretical construction with subsequent interpolation of the Nothing. As the first FL-station, we have set up pure being, which is co-stated in every statement and which therefore cannot be effectively negated; for its negation would in turn be a statement that co-states, i.e. implies, pure being. But we know, because we have constructed pure being in BL_D by negation (omission, abstraction) of all modifications, that there is and must be more than just it. Parmenides and his disciples would, of course, say that this more is mere seeming or shine. But even then, this seeming or shine is not being, but seems to be outside of being. (At the beginning of the doctrine of essence, this situation will explicitly become a problem). So how do we arrive at a further station of FL in a step without alternative?

We were just talking about the operation of negation, which led from colourful, multiply modified reality to indeterminate pure being and which could perhaps lead from being to something new, be it even shine or seeming only. In other words, we have manoeuvred ourselves into the position of Parmenides, a position from which, if the phenomena are to be saved, we must somehow get on. So, we have to carry out an – alternativeless – logical operation on being that delivers something new. Since the thought indicated by "Being!" is a truth claim or a taking-for-true, we need a truth operation, and since only pure being is available as an operandum, a one-place truth operation. Now, in propositional logic there are, in terms of sheer combination, four one-place truth operations, of which, however, only one, the aforementioned negation, leads to a new truth claim, namely to the contradictory counterclaim of the first, which we can indicate with the two-word sentence "Not(being)!" ³². FL thus begins with the initial thought "Being!" and from there arrives at the subsequent thought "Not(Being)!", which is the negation of the first.

In this way, of course, FL would contradict itself – compatibly with scepticism, but incompatibly with truth – unless one assumes that we are dealing here with indexical thoughts such as that the sun is currently shining or that it is raining, the truth value of which varies with time (at a given location): Sometimes the sun shines, sometimes it rains. Such thoughts are expressed in occasion sentences or indexical sentences that contain indexical expressions such as "here", "there", "now", "then", "I", "you" or verb tense (tempus verbi). Therefore, their truth value depends on the occasion of utterance. Non-indexical sentences, on the other hand, have a constant truth value, they are true always and everywhere or never and nowhere. Obviously then, FL needs a logical analogue of spatiotemporal indexicality (which could turn out to be the logical basis of the spatiotemporal indexicality we are familiar with). Fortunately, the problem that makes us look for logical indexicality immediately brings the solution into view, for *first* pure thinking thought being and then *secondly* the contradictory opposite of being. With this, the beginning of a one-dimensional, directed, i.e. time-like, but purely logical manifold of positions is given, namely a positional duality that makes logical indexicality possible: "Being!" is correct at position 1, "Not(being)!" is correct at position 2. Thus, a purely logical "time" (or a logical proto-time) arises before our very eyes, which will prove to be

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³² The identity truth operation leaves everything as it was, the true-maker or verifier operation confirms the truth of the claim on which it operates and therefore also leaves everything as it was. Negation, on the other hand, leads to a new claim, which is the contradictory opposite of the previous one, as does the false-maker or falsifier operation, which, however, cannot be distinguished from negation here, especially since the opposite of truth in the case of primitive facts qua asynthetic thought data is not falsity, but mere ignorance. Negation, by a similar reasoning, in the case of a primitive fact is the annihilation of that fact, since being the case and existence are one and the same thing for primitive facts.

the logical basis of physical time at the beginning of the philosophy of nature; and this prima facie alleviates the contradiction between "Being!" and "Not(Being)!".

At least prima facie, but not really. Our problem is not really solved yet, because the thought "Not(Being)!" not only contradicts the thought "Being!" but also contradicts itself. This is so because being is defined by the fact that it is co-stated in every possible statement. So "Not (Being)!" inevitably also co-states "Being!" and contradicts itself in this. Indexicality in general does not help here, but fortunately there is an interesting special case of indexical statements and thoughts that offers itself as the basis of a possible solution. In the genus of temporally indexical thoughts, we find a species that can be called instantaneous thoughts. A common temporally indexical thought is, for example, "The sun is shining" or "The goalkeeper has the ball". The sun, when it shines, usually shines a little longer than a goalkeeper in a football match has the ball at any one time, for he has it only for a few seconds, and if he wants to delay play, perhaps for a few minutes (until the referee intervenes); then he puts it back into play. But both sentences are true for a while and then false again. On the other hand, the sentence "The goalkeeper catches the ball" is not simply a temporally indexical sentence, but more specifically one that, because of its own content, can only be true for a moment. As soon as it is true, it must become false again by virtue of its meaning, because catching is an instantaneous becoming, a turning from not having the ball to having it, and there is this one moment in which the ball just does not yet touch the surfaces of the goalkeeper's gloves and yet already does: the moment of turnover (the moment of change). A contradiction applies to this very moment. And because a contradiction cannot be true, the moment of its applying to something must be vanishing or infinitesimal, an impossible limiting case.

The two-word sentence "Not(being)!" is thus a logical (not temporal) instantaneous sentence that, due to its internal self-contradiction, expresses a logically infinitesimal becoming and falsifies itself without further ado, so that *logically immediately* its opposite is valid again: "Being!" The infinitesimal logical becoming is a combination of negativity ("not") and immediacy ("being"), and a completely unstable combination at that, which immediately collapses and gives way to its opposite, being, again. The beginning of FL (or of pure thinking) thus consists of the sequence of thoughts: "Being!" – "Not(being)!" – "Not(not(being))!", i.e. again "Being!".

This allows us to make a number of observations. (1) Because being is co-stated or co-conceived in all truth claims, "Being!" is to be understood as a one-word-sentence with a constant truth value expressing a logically eternal thought. On the eternal basis of being, its contradic-

tory opposite is valid for an instantaneous logical "moment": "Not(being)!", which contradicts being and also contradicts itself and therefore immediately becomes false again: "Not(not(being))!". The turnover at the logical moment, indicated by: "Not(Being)!", Hegel calls *becoming*, and the new form of being that results from the collapse of becoming he calls *Dasein* (being-there).

(2) According to the principle of non-contradiction, there can be no *true* contradictions; but there are *correct* contradictions, i.e. those that apply to a situation, describe it correctly, but apply to a situation that is itself incoherent and insofar untrue. Hegel's *Logic* takes the untrue (inconsistent) into account not only in thinking, but also finds the untrue (incoherent) in being, which of course already follows from the fact that thinking and being coincide at the beginning of FL. Contradiction then proves to be the motor of logical evolution. And we always have to distinguish truth, i.e. first-rate, stable truth, from mere correctness, i.e. the second-rate transitory "truth", which is characteristic of mere becoming (or, in the logic of essence, of mere seeming or shine).

Because thinking cannot come to terms with a contradiction, logical thinking and logical being evolve further and further until, hopefully and eventually, tranquillity, namely consistency, i.e. freedom from contradiction, occurs. In this respect, the *Logic* (BL) is a logical, nontemporal evolutionary theory of thinking and being, or an evolutionary theory of logical space, if one understands by logical space the totality of what can be the case and can be thought. According to Parmenides, logical space is pure being – the One Being, the homogeneous sphere of being – according to Plato it is the cosmos of forms or ideas, according to Aristotle the plurality of substances, according to Spinoza the singular, infinite substance, according to David Lewis the plurality of possible worlds, and so on. The classical metaphysicians each offer static momentary views of logical space as the whole logical space. Hegel, however, teaches that metaphysical truth resides in the evolution of logical space or in the whole process of logical space. Hegel's logical non-standard metaphysics is an evolutionary theory of logical space.

(3) Logical space evolves in logical time. Logical "space-time" is the purely logical structural basis of physical space-time, which, however, is only thematised in the *Realphilosophie*. Logical evolution begins with the logical big bang of becoming; and the thought datum *Dasein* that results from the explosion and ipso facto collapse of becoming is the first relatively stable state of logical space. The pure being aimed at in the beginning of the *Logic*, on the other hand, is the eternal basis of the logical process (at least in the sphere of the logic of being).

There can be no particular logical moment up to which it was purely for itself and from which the negativity of non-being or becoming would then have come into play. Rather, this must always have already happened, in the a priori perfect. Negativity was therefore with us from the beginning. In BLD, therefore, we have to interpolate in retrospect between being and becoming, as co-original with being, the Nothing, which in relationship to being has always already triggered the big bang of becoming. So here we finally see how the third method of introducing the Nothing, namely the negation-theoretical construction with subsequent interpolation, works. In FL, this situation presents itself in such a way that pure thinking wants to begin as pure being, which, however, is absolute negativity, i.e. the Nothing, at the same time, so that thinking really begins with becoming, and indeed therefore with Dasein because of the infinitesimal nature of becoming. Being, Nothing and the infinitesimal big bang of becoming thus form the imaginary prehistory of pure thinking; the first tangible, really realisable thought, however, is that of Dasein. And it is precisely this Dasein that Parmenides mistook for purely affirmative being.

(4) "Not(not(being))!" as the negation of an indexical thought expresses an indexical thought and thus is almost – though not completely – equivalent to the initial "Being!", which was meant to indicate a logically eternal thought. The negation of an instantaneous thought is an indexical, not an eternal thought. However, it is not itself an instantaneous thought. The goalkeeper catches the ball in an instant, but then has it for a while, and no longer catches it. In the same way, Dasein is no longer an instantaneous, infinitesimal being, but relatively stable – yet not an eternal, standing being, for it results from something else, its negative, i.e. becoming. It is mediated by becoming and is, as it were, itself something like a very slow becoming, one that Hegel calls alteration ("Veränderung", literally "othering"). Of course, only we in BL see this. Pure thinking in FL does not see it. To pure thinking, Dasein is something first and immediate, with which thinking seems to begin. But at the same time, Dasein is already determinate being, determined or profiled as the negative of becoming. It has emerged victoriously from becoming; but the defeated becoming takes revenge on the victorious successor by determining and profiling it as it itself perishes: Dasein therefore is, until further notice, nonbecoming. But pure thinking (in FL) cannot distinguish between Dasein and its determinateness, because the determining source, i.e. becoming, has disappeared without a trace. Dasein therefore appears to pure thinking as one with its determinateness. Such determinateness, which is identical with its substrate, is what Hegel terms *quality*.

2.3 Remarks on the logic of quality

The comprehensiveness of argumentation necessary for BL_D can only be maintained in these few lectures by way of example for selected passages of the Logic – as here for its beginning – and must soon give way again to summary reports and leaps. What follows are some very general remarks on the logic of quality.³³

The negation in FL so far took place longitudinally to the logical evolution and was annihilation of a logical fact by its successor, which in return was determined by the predecessor. Transversely to the logical development, there was previously no negation; rather, logical space was so homogeneous that Parmenides could take it for pure, affirmative being. But now, for reasons we will pass over, qualitative being-there (Dasein) comes to a point of being an entity-being-there (Daseiendes) or Something (Etwas) and gives room to another of its kind beside it. Logical space thus divides into two qualitatively identical partial spaces that are only distinguishable from the perspective of the respective space-occupying Something. For us in BL they are indistinguishable and insofar tend to be identical, which, incidentally, they soon become again also from the perspective of the entity-being-there (Daseiendes), insofar as it is a *finite*. Until then, however, in the bipartite space of Dasein, there is now also transverse negation, which is not a time-like annihilation, but a space-like shadowing. Two indistinguishable entities-which-are there in BL are distinguished in FL as a respective Something and a shadowed Other. Since in the *Logic* we are dealing with sentence-valued (truth claiming) but not sentence-like (predicative) thought data, i.e. with logical primitive facts, whose existence and being the case are the same thing, logical relations between them are ipso facto also matter-of-factual relations. Thus, longitudinal negation is annihilation, transverse negation is shadowing. The former is asymmetrical, the latter symmetrical. In the case of the former, determination is the inverse of negation, in the case of the latter determination and negation coincide in symmetry, according to Spinoza's dictum: "omnis determinatio est negatio". The underlying bipartition of the logical space of Dasein can only occur thanks to transverse negation, which we capture terminologically with Hegel as otherness or being-other, and whose longitudinal expression is change (alteration, "othering"). Since otherness is no more inherent in either of the two entities-being-there than in the other and since neither is the in-

³³ For more details cf. the commentary literature, such as Quante, Michael and Nadine Mooren (eds.), *Kommentar zu Hegels Wissenschaft der Logik*., Hamburg 2018, and the volumes by Friedrike Schick et al. (eds.), *G.W.F. Hegel. Wissenschaft der Logik*, Berlin 2002, and *Hegel - 200 Jahre Wissenschaft der Logik*, Hamburg 2014, also, for the logic of being, Stekeler, Pirmin, *Hegels Wissenschaft der Logik. Ein dialogischer Kommentar*. Volume 1: *Die objektive Logik. Die Lehre vom Sein. Qualitative Kontraste, Mengen und Maβe*, Hamburg 2020.

trinsically Other, the otherness that prevails between them must be considered in isolation as the intrinsically Other, which is the source of the bipartition of the logical space of Dasein.

Here, at this very point, the kind of non-well-foundedness that is constitutive of the *Logic* as a whole comes into operation for the first time. Remember that we spoke of non-well-foundedness first in connection with Fichte's self-positing I or ego. The I, as Fichte thinks of it, can be defined precisely as *a positing that posits itself*, that is, as a totally non-well-founded positing. In the *Logic*, however, Hegel digs deeper and goes back behind the I and its self-positing all the way to the logical primordial operation, namely negation, which he first introduced with respect to pure being – "Not(Being)!" – and which he now recognises as a totally non-well-founded operation, i.e. as self-negation. We have distinguished previously between longitudinal and transverse negation. The negation of being and the negation of becoming were longitudinal. But now we have come to know the transverse negation of the Other by the Something, and it is precisely in this form, as transverse shadowing, that negation for the first time, here in the logical space of Dasein, proves to be totally non-well-founded. Sure, condensed to the extreme and totally unarticulated, we already knew the absolute, non-well-founded negation as the Nothing; but in the logic of Dasein self-related negativity now appears for the first time in articulated form as the *Other itself* or the *Other of itself*.

Negation-of-itself in propositional logic would have to be expressed in structural analogy to the unit-set-of-itself, Ω , as a statement, ν (to stay with the Greek alphabet), that is logically equivalent to its own negation. Beneath propositional logic, in the logic of primitive, asynthetic facts, the biconditional becomes indistinguishable from identity because of the indifference of being-the-case and existence in the case of simple thought data. We thus obtain two series of equivalences, initially the following with an eye on propositional logic:

$$v \leftrightarrow \sim(v) \leftrightarrow \sim(\sim(v)) \leftrightarrow \ldots \leftrightarrow \sim(\sim(\sim(\ldots)))$$

In the logic of Dasein, we can then, secondly, conceive negation as otherness or alteration, " α ()", indicate the other-of-itself with "O" and replace the biconditional with identity:

$$O = \alpha(O) = \alpha(\alpha(O)) = \dots = \alpha(\alpha(\alpha(\dots)))$$

The two infinitely long expressions indicated on the right-hand side in each case, firstly " \sim (\sim (\sim (...)))" and secondly " α (α (α (...)))", would not be expressions of a finite language if we were to write them out per impossibile, because they would then be infinitely long. It is all the more remarkable that self-negation can easily be formulated in normal colloquial language, even if only indirectly by means of semantic ascent, i.e. by means of a reference to

self-negation and of the truth predicate, plus negation, of course. This happens in so-called Liar sentences such as this one:

(L) The sentence you are currently reading is not true.

The Liar sentence (L) is an antinomy; it is not simply an inconsistent sentence that one could, after all, negate, but a malignant contradiction that cannot be nullified, cannot be effectively negated, i.e. a logical disaster. (L) consists firstly of an expression referring to (L) ("The sentence you are currently reading"), secondly the truth predicate ("is ... true") and thirdly negation ("not"). The source of the logical mischief is not, as many think, the truth predicate, which here functions only as a technical device of semantic ascent, but negation – negation, that is, in cooperation with the self-reference, which in itself, however, is just as harmless as the truth predicate (cf. "The sentence you are currently reading consists of ten words"). The antinomy of the Liar is thus, in its logical deep structure, not a semantic paradox of truth, but the purely logical antinomy of negation, which Parmenides shied away from with comprehensible reason. One would only get rid of it by ceasing to negate, and this is what Parmenides recommended. However, contrary to Parmenides, one would then stop thinking, because negation is an integral aspect of thinking. It seems, then, that thinking, both in its discursive variant in the Liar and in its prediscursive variant in FL, is afflicted with a logical antinomy that makes thinking possible on the one hand and impossible on the other.

In FL, this antinomy appears initially unarticulated as the Nothing and then articulated for the first time as the *Other of itself*. Of course, in BL Hegel ponders a way out and finds a dual one with an affirmative and a negative flank, which, however, remain enclosed in an aporetic overall perspective in which the dual way out will prove insufficient. We will deal with this in more detail in the next lecture. Here, in conclusion, only this much: Firstly and affirmatively, the *Other of itself* is the *Other of the Other*, i.e. through double otherness, the Something-that-is-identical-with-itself in turn. Secondly and negatively, it is the Other as such, the Platonic form of the Other, so to speak, and thus the Other in its pure shape, in which it has always already divided the logical space of Dasein into a Something-identical-with-itself and the Other. The overarching aporetic perspective, third and last, is that of the antinomic self-relation of the Other, which makes itself felt in FL as alteration and constant coming out of itself. More on this, as said, in the next lecture.

Fourth Lecture. Hegel's Logic II. From finitude to essence

Let us start with a brief recapitulation. In the last lecture we looked at the antinomy of negation: In the foreground logic (FL) it initially appears unarticulated as the Nothing and then articulated for the first time as the Other-of-itself. Of course, in the background logic (BL) Hegel looks for a way out of the antinomy and finds a dual one with (1) an affirmative and (2) a negative flank, which, however, remain enclosed by (3) an aporetic overall perspective in which the dual way out proves insufficient. On the affirmative flank, the other-of-itself is the other of the other, that is, (1') the something that is again identical with itself through double otherness. On the negative flank, the other-of-itself is (2') the other as such, the Platonic idea or form of the other, so to speak, and thus the other in its pure shape, which has always already divided logical space into a something identical with itself and the other. If we look at both flanks in a stereoscopic view, we get the overall aporetic perspective in which the other-of-itself is seen for what it is: the antinomy of negation in the specific shape of the antinomic self-relation of otherness, which makes itself felt in the logic of Dasein as (3') constant alteration and coming-out-of-itself. Let us now go further and conclude our overview of the logic of quality by briefly and summarily treating the finite and the infinite, thereby reaching the end of Hegel's second chapter, and then being-for-itself or Für-sich-Sein, the topic of Hegel's third chapter (2.4). Then we will move on and consider – also quite summarily – the path from being to essence, which leads through the two stations or rather sections on quantity and on measure (2.5).

2.4 The finite, the infinite and being-for-itself. An overview

In the designer's perspective of the background logic, BL_D, the outlined situation can be explicated as follows: If in the infinite formulae that we used last time to indicate self-negation

and, more specifically, to indicate the other-of-itself

$$\alpha(\alpha(\alpha(...)))$$

we put the negation signs together in pairs respectively:

and

$\alpha\alpha(\alpha\alpha(\alpha\alpha(...))),$

then, because double negation is affirmation, we get non-well-founded affirmation instead of non-well-founded negation and, more specifically in the second case, non-well-founded transverse affirmation, i.e. the something-which-is-identical-with-itself. In colloquial language, this corresponds to so-called truth-telling sentences like this one:

(T) The sentence you are currently reading is true.

The sentence (T), i.e. the so-called Truthteller, is true insofar as we assume it to be true, and false insofar as we assume it to be false; it is a bit strange, but not obviously inconsistent. In the logic of Dasein, it becomes the aforementioned something-which-is-identical-with-itself.

But we must immediately concede that infinitely many negation signs are not evenly many. Perhaps, then, one of them will be left over in their pair-wise summation? In order to avoid one-sidedness, we take this alternative possibility into account by recognising not only the case of non-well-founded affirmation, i.e. the Truthteller, but also the case where one negation sign is left over yielding the negation of the Truthteller:

(N) The Truthteller – i.e. sentence (T) – is not true.

In the logic of Dasein, this means that we have to juxtapose to the something-identical-with-itself also the other, its alternative. This was exactly Hegel's dual way out, his recognition of a bipartite logical space. But an infinite number of negation signs are not only not even-numbered, but also not odd-numbered. So far, then, we (and Hegel) have merely corrected one inadmissible one-sidedness with another, but left the core problem untouched: the aporetic overall perspective.

This perspective becomes apparent in the progression of the logic of Dasein in that the *limit* (or border: *Grenze*) that divides logical space between something and the other turns out to be a non-well-founded limit-of-itself, also known as *the finite*. As a result, the something and its other eventually turn out to be one and the same finite. This means that logical space itself at this stage becomes finite and incoherent, eternally annihilating itself and in every act of self-annihilation rising again as a new finite – *and so on to the infinite*.

One would certainly like to be able to take this phrase – "and so on to the infinite" – literally here and understand it affirmatively, namely to the effect that the finite actually progresses beyond itself to a transfinite goal and there rises to the infinite, to a truly infinite logical space. However, it first requires a series of theoretical measures in BL in order to see how this can happen in the end, contrary to initial expectations. One main idea is that in the infinite pro-

gress of the many finites annihilating each other, none of them remains un-negated and unannihilated. Every finite, i.e. every finite shape of logical space, annihilates its predecessor and is in turn annihilated by its successor. Therefore, one does not do them an alien violence, but takes their own negativity seriously when one thinks their whole infinite series negated in one infinite general negation:

$$\sim [\dots f_{n-1} (= \sim f_{n-2}), f_n (= \sim f_{n-1}), f_{n+1} (= \sim f_n), \dots]$$
 = the infinite

The resulting other of the whole series is the non-finite or *the infinite*. This infinite logical space is the opposite of the whole series of the infinitely many finites, which together make up the one collective total finite:

$$[\dots f_{n-1} (= \sim f_{n-2}), f_n (= \sim f_{n-1}), f_{n+1} (= \sim f_n), \dots]$$
 = the collective total finite

Obviously, however, this can only be an interim solution, and an inadequate one at that, for it would lead to conceiving the infinite and the collective finite on the model of something and the other with their limit in between, thus restaging the problem to be solved. The finite must rather be de-actualised and reduced to something merely ideal, so that it can no longer stand opposite the infinite, but is now essentially sublated by and in the infinite.

The new form of negation: "~ [...]", is therefore not a mere annihilation or shadowing anymore, but idealisation. The finite is not annihilated or shadowed by the infinite but sublated and idealised. "Negation is thus determined as ideality", says Hegel. And: "Ideality can be called the *quality* of infinity". Negation was initially longitudinal negation and more specifically annihilation, annihilation without trace. Sublation, on the other hand, is negation that preserves the negated qua negated. In the propositional realm, this is a triviality: that Socrates lives is sublated in "Socrates no longer lives" as a past. In propositional thinking, we can easily think about what has past and no longer exists. But in the realm of pre-propositional thinking, sublation is an extra, and it takes some theoretical measures to reach the point where the Other is not merely shadowed by the Something, but is also sublated in the Something as being *for it* (for the Something). The problem of finitude was that the Other sublated in the Something continued to exist at the same time as a qualitative entity-being-there (Daseiendes) un-sublated. Infinity on the other hand is the total sublation of the finite, i.e. its idealisation.

The standpoint of finitude is that of realism, a standpoint which is characteristic of the duality of consciousness, i.e. of our everyday practice of raising objective claims to knowledge and truth. What we claim to know and what is insofar supposed to be sublated for us, in our

 $^{^{34}}$ TW 5, p. 165 and 166 = GW 21, p. 137.

knowledge, we at the same time presuppose as existing independently of our knowledge in itself and understand ourselves ipso facto as epistemically finite, i.e. fallible. Hegel claims that philosophy as such goes beyond this standpoint of realism and finitude and is essentially idealism and the theory of the infinite. Not only naturalistic and materialistic, but also hermeneutic variants of realism are incompatible with this, including Heidegger's hermeneutic phenomenology (and including my own hermeneutic realism; so I am not a Hegelian).

Ideal in the Hegelian sense is that which is the case or exists only as a sublated entity and not also as an un-sublated one. In this sense, ideality is a form of negation qua negatively stained quality and idealisation is a form of the operation of negating. The finite is negated by and in the affirmative and true infinite to the effect that (a) it has always already been sublated and (b) it can in no way continue to exist as an Other alongside the infinite. The "reality in the higher sense" of the infinite is then at the same time the ideality in the higher sense and the quality of infinity. In the infinite, therefore, a "double side" of ideality is revealed,

namely, that on the one hand that which is ideal is the concrete, the truly existent, but that on the other hand its moments are just as much the ideal, sublated in it; in fact, however, there is only one concrete whole from which the moments are inseparable.³⁶

Ideality in this higher – and highly Janus-faced – sense may have been before Fichte's eyes when he determined the self-positing I that is for itself as the quintessence of all realities. This ideality is a variant of non-well-founded, self-related negation, namely more concretely idealisation-of-itself. This is so because affirmative infinity is the idealisation not only of "finitude as such" but also of "the infinity that is only opposite to finitude, the only negative infinity". By virtue of the latter point, infinity is negatively related to itself, i.e. is "negation relating to itself", or circular negation, self-negation, and therefore "that Dasein (or being-there) which is called Fürsichsein (or being-for-itself)". ³⁷ Which brings us to the next (the third and last) chapter of the logic of quality.

Sublating and positing (*tollere* and *ponere*, *aufheben* and *setzen*) are logical counter-movements. But whatever is the case or exists only as something that is posited (by another) and not also independently of its being posited is ipso facto sublated and more specifically idealised and thus ideal. So here, in the case of idealisation, the counter-movements of sublating and positing converge in their respective effects. What, however, is not posited by something else but posits itself and does not occur independently of its self-positing (like Fichte's I) is

³⁵ Ibid. p. 164 and p. 136 respectively.

³⁶ Ibid. p. 172/142-3.

³⁷ Ibid. p. 166/137.

ideal in the higher, the affirmative sense and is thus being-for-itself (Fürsichsein). This is the special case of self-idealisation or non-well-founded idealisation. Fichte's self-positing I is a case in point and therefore has Hegelian *being-for-itself* as its logical basis, i.e. as its basis in terms of the logic of being. However, the chapter "Being-for-itself", which concludes the logic of quality, also – and most importantly – deals with the Janus-faced instability of the ideality-of-itself (an instability which fits Jacobi's suspicion of nihilism towards Fichte). Ideality-of-itself lacks the hardness of finite reality, so that it cannot keep its aspects or moments – itself as the actively positing being-for-itself and itself as the posited being-for-One – separate. These two moments have therefore always already "collapsed into indistinguishability". "Being-for-itself is thus an entity-which-is-for-itself and, in that its inner meaning disappears in this immediacy, the quite abstract limit of itself – the One." "

The One, then, is self-idealisation collapsed into immediacy, while the initial Nothing at the beginning of the *Logic* was the still unarticulated self-negation in general, i.e. indeterminate absolute negativity, which, moreover, had pure being as its counterpart in an inconsistent way. The One, on the other hand, has only itself and is therefore also in this sense just *for itself* (solitary, so to speak, and separate, in Greek: *chôris*, i.e. entirely on its own like an Aristotelian substance). In its negative self-relation, its formerly soft ideality has "turned into the most solid [hardest], most abstract" reality.⁴⁰

If we stop for a while and consider the career of logical space up to now, we find that logical space began as homogeneous qualitative Dasein, then split into something and an Other and thus became the finite, which, reaching beyond an infinite progression of finites, rose to the infinite and finally became an infinite, self-idealising being-for-itself. Now, however, the infinite logical space of being-for-itself, i.e. of higher ideality, has collapsed into a hard and hostile, negatively self-referential point, which, for lack of an Other that could be the target of its negativity and hostility, cannot stand itself, as it were, and thus repels itself from itself to many of its equals, many Ones, which soon repel each other just as they originally owe themselves to repulsion.

Here again we find, this time in repulsion, the indifference of logical and matter-of-factual relations, the core of which we had before our eyes already right at the beginning in the coincidence of being, intuiting and thinking. Logical space is now, at the present stage of its evolution, the void of classical atomism, in which many ones mutually repel themselves as meta-

³⁸ Its logical basis in terms of essence is most probably absolute seeming or absolute shine qua positing reflection and its logical basis in terms of the concept is the concept.

³⁹ TW 5, p. 182 = GW 21, p. 150-1.

⁴⁰ Ibid. p. 183/151.

physical atoms. To their repulsion in FL corresponds in BL the abstract, punctiform negativity of the One. But in BL the multiplicity of the ones, since the latter are completely indistinguishable, presents itself as a violation of the weak, purely logical law of the identity of indiscernibles: If nothing is true of x that is not also true of y, then x and y are not two items, but one and the same. The multiplicity of the – indiscernible – ones is thus untrue and transitory. In FL, this is expressed by a counter-movement to repulsion, by attraction. The many mutually repelling ones also attract each other, which in the end leads via a temporary equilibrium of repulsion and attraction to the *one One* of attraction and thus to *quantity* as the new logical basic fact, the new overall shape of logical space.

Plato, in his oral, unwritten doctrine declared the One, Greek: *hen*, to be the affirmative and formal principle of the realm of forms. In contrast to this Platonic henological metaphysics, the henology of Hegel's *Logic* is firstly transitory. For here the One must eventually give way to a successor shape of logical space. And secondly, Hegel's transient henology is atomistic, not idea-theoretical in the sense of Plato. Similar to Plato's metaphysical henology, however, Hegel's logical henology paves the way to a metaphysics of mathematics, albeit of course again a transitory one, which grasps logical space in its successor shape as *quantity*.

2.5 From being to essence

Thus, after quality, now quantity. But the logic of quantity and the logic of measure are largely skipped over in these lectures. Briefly, only this much: quantity "is the determinateness which has become indifferent to being [...] – the repulsion of the many ones which is immediately non-repulsion, continuity of them". As pure, not yet limited, it is the logical archetype of "space and time, also [...] matter in general, light etc., even I", i.e. the archetype of the continuous, whereby space as the "absolute *being-outside-itself*" and time as the "absolute *coming-outside-itself*" form probably the most striking extra-logical examples of quantity. Since quantity inherits its two moments from being-for-itself, namely continuity and discreteness as successors to attraction and repulsion, it appears in two forms, as continuous and also as discrete quantity. This duality points to an internal limit between its two sides. Thus, the initially pure quantity is now limited within itself and becomes a *quantum* as limited and a *number* as quantum. Frege famously rejected the classical notion of number as a discrete quantum (Anzahl) of equal units as inconsistent, because equal units would not be distin-

⁴¹ Ibid. p. 209/173.

⁴² Ibid. p. 214-215/178.

guishable and would therefore be numerically identical according to the logical law of the identity of indiscernibles. Hegel, on the other hand, in keeping with his routine, makes a punch line out of the inconsistency and uses this basic contradiction of number as the motor for the development of the logic of quantity. This leads via quantitative infinity and quantitative ratio (proportion, relation), which represent the logical foundations of the differential calculus, back to quality, now a quantitatively underpinned quality of the kind that has become stylistically characteristic of modern physics.

With the regression of quantity into quality, at first glance a logical great circle is closed, which could mean that the *Logic* has already reached its contradiction-solving goal. For in a logical great circle, the contradictions do not affect each other but are drawn safely apart; think, for comparison, of the plant, whose life stages – germ, bud, bloom, fruit, germ again – each drift incoherently beyond themselves, but whose entire circular process is the truth about the plant. However, if nothing else were added, the great circle, at least here in the *Logic*, would be a kind of hamster wheel and an eternal, restless return of the same. Logical truth must therefore also (on the other hand) have been summarised in a final thought and have come to rest in this thought. In the case of the absolute idea at the end of the whole *Logic*, one may expect this. On the one hand, the absolute idea should lead back to the immediate beginning and thus close the great logical circle, and on the other hand, it should be the thought of the logical method, methodos, i.e. of the whole path that has led from pure being to it, the absolute idea. But we are not yet that far here at the end of the logic of quantity. The supposed great circle of the logic of being, although it is closed with quantity going back into quality, is not yet summarised in an articulated thought of the great circle. Instead it collapses into "the simple relation of the quantum to itself", which as a qualitative quantum is an "immediate measure", namely "at first an immediate specific quantum", 43 such as that quantum by which a pasture differs upwards from a vast prairie and downwards from a little dooryard lawn, or the specific size of human beings by which they differ upwards from elephants and downwards from mice.

Even the end of the logic of measure and thus of the logic of being as a whole is not yet a conciliatory one. It is true that at this end, the whole development of the logic of being has ultimately contracted into a final thought, but into an antinomic one. It is the antinomic thought of eternal being, which was to be grasped in the beginning, but could not be grasped purely for itself (but only together with negativity), and which was the hidden basis of the whole logical evolution of being. It has now finally emerged from the logical underground as

⁴³ Ibid. p. 394/329.

a logical fact and thought datum of its own. In the guise of this fact and datum it is now the underlying *substrate* of two alternating *states*. The states, of course, are quality and quantity alternating at eternal being as their substrate. Or rather, they are the logical successors of quality and quantity: two states in inverse ratio or inverse relation to each other, whose alternation at eternal being amounts to an all-round contradiction and makes eternal being pass over into absolute indifference, i.e. into a Spinozian or Schellingian night in which all cows are black.

Ex contradictione quodlibet, from a contradiction there follows anything and insofar absolute indeterminacy, logical chaos, indifference. So far, this always threatening indifference could be avoided by the indexical, transitory character of the individual successive logical facts: Contradiction was what drove forward. But from eternal being as the constant substrate of the evolution, there can no longer be a time-like transition through longitudinal negation to a successor fact. If the Logic is not to fail in the all-round contradiction of absolute indifference, a progression of unknown type must be possible, which is no longer a time-like passing over to successor stages of logical space (or a space-like shadowing of subspaces of it), but would have to reconceptualise logical space as such. What is sought, therefore, is a new kind of negation, one that does not – as negation did in the logic of being – leave the negated behind or beside it, that does not sublate it (and itself) into something idealised and then collapse into the One, which in turn passes into quantity, then into measure and finally into indifference. Perhaps a virtuoso of pure thinking could find it at once and accomplish it with sleepwalking certainty; but we want to construct it argumentatively in BL_D.

Thinking and being have belonged together in the logic of being from the very beginning. Thinking was directly at its thing. Thinking and being were in fact one. But this fact-oriented thinking has proven to be untrue. If further thinking is still to be possible, it must completely abandon the supposed thing, withdraw completely from it and be satisfied with itself as an objectless seeming or shine. If we reinterpret thinking as absolute shine, the antinomy of negation, which is the basic problem, could possibly be stabilised. Of course, the absolute shine that would thus remain as the sole remnant of being is not the affirmative fact and the new logical space that we are looking for and to which the new, unknown, still sought negation is supposed to lead us. For a start, we must rather concede that the new logical space is still entirely hidden behind shine. Thought, which is shining emptily in itself, cannot penetrate to this space, cannot transcend to it; thought remains enclosed in the immanence of its own shining and seeming. But the inaccessibility of the new logical space to immediate comprehension already suggests a name for it: we may call it (the) *essence* in advance, because it is the hidden basis of everything that has so far shown itself in FL, the hidden essence behind being —

behind being which, according to our diagnosis, has regressed to absolute shine. Whatever logical space in its new guise as essence will turn out to be, it is the source that has always already posited shine as shine, that has posited being, regressed to shine, *as shine*.

This gives us an important clue to the general negation of being that we are looking for, which is to lead us to essence. That general negation must be the operation of positing by means of which being has always already been posited as shine by essence. The logic of being began with something seemingly found and given: qualitative being-there (Dasein) that could then at best be sublated in the further logical progression. In the logic of essence, we are now dealing with the counter-movement to sublating, i.e. with *positing*: What seemed ("shone") to be *being-there* or *Dasein* is in fact *being-posited* or *Gesetztsein*. The entity-being-there was only an entity-being-posited, something negated; but in the logic of being it was posited like something affirmative. That was the flaw of being.

Shine, however, as "all that remains of the sphere of being", is now "the negative posited as negative". 44 With the investigation of shine, not with that of essence as such, the logic of essence must begin. But it is clear from the outset that shine is not opposite to essence, like Something is opposite to an Other, but is essence's "own shining", that is, that essence is shining "within itself" or is "reflection within itself". 45 This empty shining within itself is the topic of the logic of reflection, the first out of three sections of the logic of essence.

For the first time we have here a coming apart and a separation, not yet of subjectivity and objectivity, but of thinking, qua shine or reflection, and being, qua essence. Shine is a logical precursor of subjectivity and essence is a logical precursor of objectivity. In the logic of the concept there will then be a section on subjectivity and one on objectivity and a third on their connection or union in the absolute idea. Here, at the beginning of the logic of essence, admittedly, the connection is still missing. We are entirely on one side, on the side of "subjective" thinking, which stands in its own way as shine and closes itself off within itself, as if the allround window of transcendence onto "objective" being or essence had become a mirror in which thinking reflects nothing but itself. Transcending, by the way, is an inappropriate term also for the logical relationship between thinking and being in the logic of being, because there this relationship was still quite immediate (thus no transcending from one side to the other). The term only becomes appropriate in the continuation of the logic of essence, when in its second section ("Appearance") the connection in the relationship between reflection and

⁴⁴ TW 6, p. 1 = GW 11, p. 246.

⁴⁵ Ibid. p. 17/244.

hidden essence begins to build up. For now, what is important is that essence cannot be grasped directly, but only through reflection.

Hegel clarifies these relations in the third subsection, "C. Reflection", of the first chapter, "Shine", of the logic of essence by distinguishing between three types of reflection: positing reflection, external reflection and determining reflection. Insofar as reflection is positing, it does not yet make any claim that goes beyond itself. What is posited is-there (is the case, exists) only by and for reflection. In this way, positing reflection is the basic movement of subjective idealism, which many people (among them Hegel) wrongly attribute to Kant and Fichte, as if Kant and Fichte wanted to say that the world was our subjective make-up. Positing reflection stays at home, so to speak, in its inner room with no windows, but with mirrors only. A reflection with a claim to transcendence and objectivity, on the other hand, is presuppositional, it posits something behind the mirrors as really there outside and thus becomes an external reflection on the presupposed reality. The thought movement of presupposing is characteristic of natural consciousness and its duality of *in-itself* and *for-consciousness*, characteristic of finite and fallible cognition, and thus prepares the ground for the philosophical dogma of metaphysical realism. Presuppositional reflection in its positing cancels out its positing: it is a positing of the posited as not posited, but as being there (being the case, existing) independently of the positing. This is how we proceed in our everyday truth claims, which differ from our everyday performative acts (such as promising) precisely in that they do not make themselves true, but owe their truth, if they are true, to an independent real. But presuppositional reflection is then external to this real and does not touch or grasp it, and so its claim to transcendence to the real remains unsatisfied. What favours metaphysical realism thus simultaneously drives into – metaphysically realistic – scepticism, to which the real becomes a thing in itself that is in principle unknowable.

The way out of this conundrum is offered by determining reflection, which is logically entangled with the thing or object itself. Logical entanglement is my term for an important discovery by Kant, namely for his discovery of the nature of the relation of our pure concepts to the spatiotemporal real. Logical entanglement, by the way, is the logical archetype of nomological, quantum mechanical entanglement that Einstein denounced as spooky but grudgingly had to accept in the end. What may seem spooky about determining reflection at first glance is that its spontaneous determining exactly captures the determinations of the thing without real interaction, without the flow of information. But a better word for "spooky" here is simply "logical".

A memorable illustration of this non-invasive, softly conservative determining is reading a simple text. Here, the shared written language of author and reader serves as a substitute for logical entanglement insofar as it mediates between the written text and the meaning read. The meaning cannot be taken receptively from the characters – otherwise even illiterates and even animals would see it – but must be spontaneously projected onto the characters in reading, not inventively and invasively, however, but completely conservatively, so that the projection reveals precisely the meaning encoded in the characters by virtue of the author's intention. In this way, by virtue of logical entanglement, we project, according to Kant, categorial form onto the spatiotemporal real, and in this way too, according to Fichte, the structure of the absolute I onto the absolute. Thus, Hegelian *Logic*, in appealing to determining reflection, is closer to these predecessors than Hegel believes, who always secretly or openly suspects them of subjective idealism. Like Hegel, they also placed the logical entanglement of thinking and being and thus determining reflection, not positing reflection, at the centre of their thinking.

In Hegel's *Logic*, determining reflection enters into operation above all in the third book as the activity of the concept. In the first book, on being, as we now see in retrospect from the vantage point of the logic of reflection, positing reflection dominated. In the middle book, the doctrine of essence, external reflection is in the foreground. However, the logic of essence, looked at more closely, is the place where, at first, positing reflection still prevails, in the section on the *determinations of reflection*, and in the end already determining reflection, in the activity of substance. Thus, above all, the middle section of the logic of essence, on appearance and thing-in-itself, remains the natural place of external reflection.

With regard to the *determinations of reflection*, i.e. identity, difference and contradiction (in 1813) or identity, difference and ground (in 1830, see *Enc*. §§ 115-122), it should be noted that in their sequence, the well-known double way out of the antinomy of negation together with the aporetic overall perspective is again striking. The determinations of Dasein – namely the something identical with itself, the other and the finite that rose to the infinite – were ground-floor determinations of being-and-thinking; the determinations of reflection that now take their place are upper-floor determinations of empty thinking that tries to look down on being (which, however, is still invisible here). In the logic of being, non-well-founded negation was contaminated with qualitative Dasein and ran along that Dasein. Now it emptily runs along itself, yielding (1) pure identity in the upper floor instead of the something identical with itself in the qualitative ground floor, (2) pure difference instead of the qualitative other and (3) pure contradiction that goes or falls to the *ground* (geht zu Grunde, i.e. perishes) instead of the contradictory finite that rose to the infinite. From the ground to which contradic-

tion has fallen or gone emerges the determination of *existence* as the essence-logical heir of Dasein, as well as the *existent* and the *thing* as heirs of the entity-being-there (Daseiendes) and the something (Etwas). These are the first traces of something like substantial essence after our exclusive preoccupation with shine and reflection, and with them the sphere of appearance opens up with its characteristic dualities of essence and existence, existent-in-itself and appearance, whole and parts, force and its expression and finally the outer and the inner. These topics are treated in the middle section of the logic of essence.

The identity of the outer and the inner is eventually established in the logical fact of *actuality* (Wirklichkeit), which forms the topic of the last section of the logic of essence. Qua actuality, essence is no longer hidden behind shine or shadowed by appearance, but manifested; and manifested essence is substance. Thus, logical space is now the singular, infinite, more or less Spinozian substance, and qua substance the power over its accidents. This makes it possible to reinterpret the entire evolution of logical space so far from pure being to substance as a continuous change of the accidents (or modifications) of logical space caused by logical space itself in the role of substance. Logical space is thus qua substance the power over its evolution and the cause of the change of its accidental formations.

Friedrich Heinrich Jacobi considered the Spinozian substance to be the last word in philosophical system building and believed that from its inner necessity and causality no theoretically regulated progression to free subjectivity was possible, but at best an intellectual salto mortale into the belief in a free, personal God. So if one did not want to be content with the fatalism of substance and appreciated freedom, one would have to leave philosophy and believe in God. Hegelian logic, however, brings substance into interaction with itself as an active and a passive substance and in this reciprocal self-interaction finally offers a regulated progression from the sphere of essence and its opaque necessity into the sphere of the concept and its transparent freedom. This will be the topic of the next and last lecture.

Fifth Lecture. Hegel's Logic III. The concept and the progression to nature and spirit

Today we conclude the treatment of the *Science of Logic* with a brief look at the logic of the concept (2.6) and then end these lectures with an outlook into Hegel's *Realphilosophie*, i.e. his philosophy of nature and of spirit (3).

2.6 About the logic of the concept

The concept is in nuce already supposed to be the resolution of the antinomy of negation and would be so if it did not immediately fall back below its own level and divide itself into the two poles of judgement. The logic of the concept then deals with the gradual recovery of the concept, which is almost accomplished in the syllogism, but then happily delayed through a relapse from syllogistics into objectivity. The first section, "Subjectivity", has the chapters "Concept", "Judgement", "Syllogism", the second section, "Objectivity", the chapters "Mechanism", "Chemism", "Teleology", and the last section, "Idea", the chapters "Life", "Cognition", "Absolute idea".

It is instructive to remember how, at the beginnings of the logic of being and the logic of essence, we interpreted and alleviated an inconsistent situation of pure thinking in BL_D by using a suitable model. For the inconsistent negation of being ("Not(being)!"), the infinitesimal moment of change or moment of becoming offered itself, as we express it in instantaneous indexical sentences ("The goalkeeper catches the ball"). In the logic of Dasein, we then encountered the antinomy of (self-)negation, a logical syndrome that could not be cured, but only be treated, and was treated by ever new interim measures until becoming and alteration, so typical of the logic of being, came to a standstill in absolute indifference. As standing, the antinomy could not be further treated with the means of the logic of being. Therefore, to avert the impending final catastrophe, we interpreted the absolute indifference according to the model of perceptual seeming or shine as a purely logical, absolute seeming and shine, a shine posited by (what we named) *essence* qua reflection within itself.

At the end of the logic of essence, in the logical fact or thought datum of *reciprocal interaction*, the structure of the antinomy emerges again. But this time the solution, even the final one, i.e. the complete cure of the antinomy, is supposed to be obvious, for what fits as a model here is the "I or pure self-consciousness", ⁴⁶ which, according to Kant, is the analytical unity

⁴⁶ Vgl. TW 6, S. 253 = GW 12, S. 12.

of all my representations and thus in a sense their general concept (CPR, B 133 f.). This general *I* maintains itself in untarnished generality or universality through all of my divergent representations, without thereby entering into incoherent difference from itself. In the same way, the concept as *singulare tantum* and as the whole logical space should maintain itself in untarnished generality or universality through its particularisations and individualisations.

We have talked earlier about the Hegelian triad of the two one-sided variants and the overall perspective of the antinomic self-negation. In the logic of quality, it was the triad of the identical something, its different other and the contradictory finite, in the logic of reflection it was the triad of identity, difference and contradiction. The concept is another form of this triad, but this time, according to its model, i.e. the *I* or pure self-consciousness, a coherent and thus true one, as Hegel believes. In the logic of quality, the triad was contaminated with immediate quality, in the logic of reflection still with its own mere immediacy qua negation (we still understood negation ultimately from propositional logic); in the logic of the concept, the triad is now absolute self-mediation and transparent clarity. The direction of understanding is thus reversed: We now understand propositional negation or the negation of a judgement from the concept and its internal structure. The concept is the absolutely self-mediating and self-determining source of all logical understanding.

The talk of absolute self-determination sounds paradoxical: what is supposed to determine itself in such and such a way would somehow already have to be determined in order to be able to specifically determine itself further – this is the basic riddle of freedom. But the concept must in fact have originally determined itself from nothing given. We learn this with astonished eyes from the retrospective view of the alternativeless logical evolution of logical space through its stages of being and of essence, which has now returned to its principle, precisely to the concept as the original shape of logical space. All the determinations that occurred on the way must therefore have been aspects of conceptual self-determination.

Let us imagine the operation of negation as an input-output apparatus. At the beginning of the Logic, we adopted negation from propositional logic and converted it from the propositional to the pre-propositional for our purposes, so that we could enter into it the pre-propositional being, which we had already previously retrieved as an immediate. Negation, i.e. the apparatus, emitted becoming in response to the input, which then required to be re-entered immediately, whereupon we received Dasein or quality as an output. This solid qualitative unity of being and negativity suited the texture of the apparatus so well that the apparatus retained and absorbed it when it was re-entered. Contaminated with being, the apparatus of negation now

ran empty as the other-of-itself, successively rebuilding itself in its acts of output and re-input, until it collapsed at the end of the logic of being.

The ultimate cause of the collapse was, in the last analysis, the very first input, being, whose absorption the apparatus had not tolerated well. Now the dross or slag of being was removed from its texture, and thereafter the apparatus continued to run in a new, uncontaminated idle, having supplied itself with an output from its own negative materiality as an original input, a mediated immediacy. At the end of the logic of essence, in the absolute reciprocity of the interaction of substance with itself, the materiality of negation, i.e. of the apparatus, liquefied and evaporated, and at the beginning of the logic of the concept there is now no longer an apparatus, but only a free, self-organising entering of inputs and issuing of outputs. Nothing any longer owes itself to external offerings, that is, to the immediate first input of being or to the materiality of the operation of negation. Self-negation, rather, builds itself up freely as the concept out of and in itself, and we recognise that everything that came before owes itself in fact to this self-construction.

A picture like this is of course vague and confusing, sometimes even misleading. So, let's forget it again and just remember that the logic of being needs two alternativeless pre-givens: being and negation, the logic of essence still one: negation, and the logic of the concept none. Ex post, the presuppositionlessness of FL (the foreground logic) is thus fully established. The concept owes everything that it is and does only to itself. The identical something and the reflective determination of identity are transfigured into the untarnished, transparent *universality* of the concept. The differing other and the reflective determination of difference are transfigured into the *particularity* of the concept, and the finite that raises to the infinite and the reflective determination of contradiction that meets the ground are transfigured into *individuality*. These conceptual moments no longer form a hard, incoherent structure, but interpenetrate each other irenically. The general or universal, U, particularises itself into *itself*, U, and *not itself*, P, the particular, both of which are subordinated to it and thus both universal:

$$U$$
 $U_P - P$

In their subordination under U, they are coordinated to each other and therefore also particulars to each other, thus likewise subordinated to P:

$$P$$
 $UP - P$

And further, each is at the same time an individual, I. The concept is insofar each of its moments, U, P and I, and each moment is at the same time the whole concept. Thus, every actual concept that is to be found somewhere in some tree structure of concept classification – for example, *animal* under *living being*, next to *plant* and above *mammal* – is all in one: a universal or generic concept, a particular or more specific concept and an individual concept among many others:

living being animal – plant mammal –

Kant's transcendental aesthetic and Strawson's descriptive metaphysics, ⁴⁷ as well as Hegel's own philosophy of nature, could, however, tell us, if we did not already know, that there is a basic, extra-conceptual individuality or singleness whose general forms are space and time. The concept *horse*, Frege may forgive, is a single concept among other concepts. But a horse is an extra-conceptual thing or individual among other horses and things. This extra-conceptual individuality, realised in space and time, is not a *logical* topic, but it too is logically preformed in the chapter on the concept, and it is precisely in this pre-formation that we see the concept originally dividing itself into the two poles of judgement, with the moment of individuality at the pole of the subject and the moment of universality at the pole of the predicate.

Namely, to be sure, from its self-particularisation, the general, universal concept returns to itself as an individual or single concept on the one hand, but loses itself as an opaque individual or single thing on the other. When Strawson identifies the spatiotemporal individual things as the paradigmatic logical subjects of our judgements, this is in line with the fact that (in Hegel's *Logic*) the opaque individual, as a fragment of the overall concept, requires completion into a judgement by means of copula and predicate. This leads into the chapter on judgement, which traces the re-ascension of the copula from mere being in the value of Dasein via the logic of essence, namely reflection and necessity, into the concept. This is how Hegel obtains his variant of the Kantian table of judgement(s).

But there are significant differences. Firstly, in Kant, every judgement is determined according to quantity, quality, relation and modality, each time in one of three respects. The judgement "Some dogs are black", for instance, is particular in the rubric of quantity, positive in the rubric of quality, categorical in the rubric of relation and assertoric in the rubric of modality.

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⁴⁷ Cf. P.F. Strawson, *Individuals. An Essay in Descriptive Metaphysics*, London 1959.

⁴⁸ Ibid. chapter 6.

According to Hegel, on the other hand, a judgement belongs primarily to only one such rubric at a time, the judgement of Dasein to that of quality, the judgement of reflection to that of quantity, the judgement of necessity to that of relation, and the judgement of the concept to that of modality.

Secondly, Kant thinks of ordinary judgements, which have ordinary concepts, schematised by imagination, and thus the infinite space-time structure as the condition of their possibility, whereas Hegelian *Logic* deals with the logical foundations and archetypes of ordinary judgements, which are themselves pre-propositional logical facts, not discursive representations.

Thirdly, in contrast to Kant, Hegel shows how the copula rises from Dasein via reflection and necessity to the concept and, as concept, becomes the "copula" (so to speak) of the syllogism, i.e. its middle term. (This will later lead into the ensuing chapter, on syllogism.) The kinds of predicates vary with the value of the copula: In the judgement of Dasein, qualitative Dasein (being-there) is divided into a Daseiendes (an *entity being there*) as subject, then a copula in the value of Dasein and finally a *quality being there* (daseiende Qualität, such as redness) as predicate: "This rose is red". In the judgement of reflection, dispositions are predicated, like water solubility, usefulness, etc.: "Salt is water soluble", "Some books are useful", etc. In the judgement of necessity, genera and species are predicated: "Roses are plants", "This flower is a daisy", etc. In the judgement of the concept, last but not least, conceptual adequacies or inadequacies are judged: "This house is good", "This friend is untrue", etc.

Fourthly, the logical form of ordinary judgements as subjective form is syncategorematic and therefore not directly ontologically relevant; only indirectly does subjective, syncategorematic form correspond to an objective, categorial logical form, according to Kant. For Hegel, however, it is true at the level reached that logical space itself has evolved into a judgement; "all things are a judgement" (Enz § 167), all things are judgemental in form and are consequently propositional facts: Logical space or the absolute itself is a propositional, predicatively articulated fact. Thus, subjective logical form itself is interpreted as categorematic, not by Hegel in his own name, but according to Hegel by pure thinking on the level of judgement. The logic of the concept thus continues the critical exposition of metaphysics begun in the objective logic. ⁴⁹ This is at least true for the broad middle of the logic of the concept, between the initial self-loss of the affirmative concept and the final arrival at the absolute idea. Accordingly, also

⁴⁹ Michael Theunissen and, following him, Hans-Peter Falk interpret the objective logic as a critical exposition of metaphysics and the logic of the concept as Hegel's affirmative transmetaphysical alternative, as a theory of communicative freedom (Michael Theunissen, *Schein und Schein. Die kritische Funktion der Hegelschen Logik*, Frankfurt am Main 1978) or as a transcendental philosophical theory of subjectivity (Hans-Peter Falk, *Das Wissen in Hegels "Wissenschaft der Logik*", Freiburg i.Br. and Munich 1983).

the chapter on judgement is a critical exposition, namely of the logical basis of the ontology of facts, which had not yet been prominently advocated at all in Hegel's time. In this respect, the *Logic* even has a prognostic power for possible standard metaphysics that have not yet been propounded. (A standard metaphysics, as has already been said, declares a stage in the development of logical space to be the whole of logical space.)

The first chapter had celebrated and described the free concept in the open, purely logical tree structure of its self-particularisation and had remained affirmative, admittedly also introductory and provisional, until the concept's self-loss at the end of the chapter. One might read this as a sympathetically critical exposition of a dihairetically structured Platonic ontology of forms (or ideas), whose shortcoming is only that it cannot stop the concept's self-loss.

The third chapter, on the syllogism, deals with the almost successful restoration of the concept. In the syllogism, after all, the copula is a concept and, as the middle term, can mediate the subject of the conclusion, i.e. the minor term of the syllogism, with the predicate of the conclusion, i.e. the major term of the syllogism, in such a way that the lost conceptual unity, the lost unity of the three moments of the concept, is provisionally restored.

Logical space, "the absolute", is now a syllogism: "Everything is a syllogism" (Enz § 181, note) – an individual that is united by its particular species with its universal genus.⁵⁰ Perhaps this chapter may therefore be interpreted as an anticipated critique of an inferentialist ontology of facts, which would still have to be developed in the line of Carnap's syntacticism and Sellars's and Brandom's inferentialism. Its shortcoming would be that the unity of the concept in its moments I, P, U is indeed restored at the end, in the disjunctive syllogism, but not yet in a tenable way. Subjective logical form in the role of the structure of logical space lacks objective resistance, lacks friction with the factual. Thus, the result is a frictionless spinning – spindle turning – in a void,⁵¹ which makes itself felt as the complete ideality of the moments of the concept (Enz § 192).

Remember that in being-for-itself, soft ideality had brought about the changeover into the hardest reality, the One. Here, quite comparably, ideality provides the "realisation of the concept [...], which has determined itself as an immediate unity by sublating mediation [of the syllogism], [...] [i.e.] the *object*" (Enz § 193). The *object* is thus the totality of the syllogism,

⁵⁰ The German term for "syllogism": "Schluss", also means *inference*, *conclusion*, *end* and *closure*, and Hegel's term for "unite" in the given context is "zusammenschließen": *to close* or *lock together*. "Ein Schluss schließt zusammen": A syllogism locks together (viz. a major and a minor term by means of a middle term).

⁵¹ Cf. in a related but not Hegelian context McDowell, John, *Mind and World. With a New Introduction*, Cambridge (MA) and London 1996, p. 11: "a frictionless spinning in a void".

compressed into a metaphysical point in the manner of the Leibnizian monad (Enz § 194, note), which, like the One, decays into many of its equals, many objects.

Hegel was sometimes reproached for a section on objectivity being out of place in a science of logic and especially in a logic of the concept. This is based on a misunderstanding of the *Logic* as a whole. Let us remember: right at the beginning, subjective thinking and objective being were indiscriminately amalgamated with each other. Only in the logic of essence did they temporarily separate as shine and essence and then reunite in the ground and later in substance, whose heir the concept turned out to be. With the concept's self-loss and primordial self-division, the subjective logical form gained the upper hand unilaterally; now the pendulum swings back, as it had to, and logical space presents itself unilaterally as an object, i.e. in an objective logical form. It was not to be expected otherwise. If the concept is to be truly heir to substance, it must include objectivity and categorial logical form just as much as subjectivity and propositional logical form. As the latter alone, if its ideality did not bring about objectivity, the concept would regress to mere shine, a fantasy spun in a void.

The chapter on mechanism then deals, roughly speaking, with the logical basis of macrophysics, which does not examine specifically differentiated objects, but objects in general in their mechanical and gravitational relations. With chemism, the second chapter is about the logical basis not only of chemistry with its various chemical compounds and elements, but ipso facto, not foreseeable by Hegel, the logical basis of contemporary microphysics with its "zoo" of specifically different particles. In the third chapter, on teleology, the foundation is laid – prima facie surprisingly – not for biology and the organic realm, i.e. for what Kant called natural ends (*Naturzwecke*), but for external, action-related teleology. Logical space presents itself here as a pre-Heideggerian totality of tools or equipment ("Zeug-Ganzheit"), which is related to the concept that *is for itself* and that has "entered into free existence" as to its "purpose" (Enz § 204). The concept having entered into free existence is the human being or, to speak with Heidegger, *Dasein* (not in Hegel's general, but in Heidegger's specific sense, of course), and the being of *Dasein*, which Heidegger terms *existence* (in his special sense) is the last purpose or final goal (in Greek: *hou heneka*, in German: *Worum-willen*) that gives unity to the totality of tools or equipment.

The logical basis of the organic realm, on the other hand, already belongs to what Hegel calls *the idea* and is treated in the first chapter ("Life") of the last section of the logic of the concept ("The Idea"). Whereas the logical space of the concept had previously evolved diachronically first in a one-sided subjective and then in a one-sided objective form, both forms are now syn-

chronously superimposed on one another, or rather have passed from a serial logical interweaving into a parallel one. The first variant of this interweaving is, as expected, the immediate one: life, the immediate unity of subjective concept and objectivity (cf. Enz §§ 213, 216). Here, too, there were doubts as to whether life as a topic belonged in the Logic, and well-intentioned excuses that life must be spoken of in the Logic in a figurative, purely rational sense. Both, doubts and excuses, are groundless; what is at stake is the logical archetype of what occurs in space and time as natural life, that is, life in the primary sense of the word.

The second chapter of the last section reconstructs intelligent, cognitive life, the logical basis of theoretical and practical cognition. "The death of the merely immediate individual living vitality [...] is the coming forth of spirit", Hegel remarks about the progress to cognition (Enz § 222). This is no consolation; with Hegel we die unconsoled, which is a pity in general and scandalous in particular in view of the millions who died horrible deaths in torture chambers, death camps or natural disasters. But that's how it is, and it also has the less offensive side effect, if not the main effect, that beyond the opaque individuality, the universality of thought and cognition begins. In cognition, subjectivity and objectivity have always already emerged from the immediacy of life and are paralleled. In theoretical cognition, informed by the idea of the true, they are paralleled under the one-sided primacy of objectivity. In practical cognition, informed by the idea of the good, they are paralleled under the equally one-sided primacy of subjectivity. In the speculative or *absolute idea*, these one-sidednesses are finally balanced and the fixed point of the *Logic* is reached. Hegel remarks on this:

All the rest is error, murkiness, opinion, striving, arbitrariness, and transitoriness; the absolute idea alone is *being*, imperishable *life*, *self-knowing truth*, and is *all truth*. [New paragraph] It is the sole subject matter and content of philosophy.⁵²

If it really is, it must have been our exclusive subject in the *Logic* from the beginning, and this is indeed what is meant: it is "the *pure form* of the concept that intuits *its content* as itself. [...] This content is the system of *the logical*. Nothing remains here for the idea qua *form* but the *method* of this content" (Enz § 237). In other words, logical space, in its final form, as the absolute idea, becomes itself its own content, becomes the thinking intuition or contemplation of the path or method of its own evolution. This fulfils one of two requirements for a good ending: The great circle of logical evolution must become the content of a final thought that does not collapse into immediate unity but remains differentiated within itself. This is achieved in the absolute idea. The other requirement points to the opposite: The great circle

⁵² TW 6, p. 549 = GW 12, p. 236.

must close, the final thought must become the initial thought, the absolute idea must become immediate being. Both fulfilments together would result in an unpleasant duality of results like the one in which the concept restored itself from its self-particularisation as an individual concept and lost itself by becoming an individual thing.

As far as the fulfilled first requirement is concerned, the final thought has the winding, "dialectical" method of the whole as its content. Now, then, we may finally speak of dialectic or of the dialectical, which could by no means be our method in the designer perspective of the background logic (BL_D), because as such it would have been a dogmatic presupposition and unacceptable to the sceptic. Rather, the dialectical is the path – the *hodos* or *methodos* – that pure thought has travelled in the foreground logic (FL) in constant alternations of outbursts of the contradiction and provisional overcomings, a path that we can of course only survey and recognise in its patterning at the end.

But what about the second requirement that still has to be fulfilled, according to which, if the great circle is to close, the absolute idea, on the other hand, must also become immediate being? It becomes being indirectly. In that it "takes itself together in the immediacy of being, it is as totality in this form [...] – nature". And nature in its immediacy is not strictly the same as pure being. Thus, although the end of the *Logic* leads back to its immediate beginning as one that is now mediated by the great circle, it does not merge into it, but rather passes through it into the extra-logical and opens – without necessity, out of freedom – a new great circle, that of nature, as Hegel's last word on the *Logic* makes us realise:

The absolute *freedom* of the idea, however, is that it [...] in the absolute truth of itself *resolves* to freely *release from itself* the moment of its particularity or of the first determining and otherness, the *immediate idea* as its *reflex* [or: *counter-shine*, *Wider-schein*], itself as *nature*. (Enz § 244)

3. Outlook into the *Realphilosophie* (of nature and of spirit)

The dual end of the chapter on the concept with the (a) return and (b) self-loss of the concept in nuce anticipates the dual end of the *Logic* with (a) method and (b) nature. But after the chapter on the concept, the *Logic* continued, whereas in the absolute idea it reaches its fixed point. Where does this difference come from? There, with the concept, there was talk of self-loss and primordial division. Here, with the absolute idea, there is talk of freedom, self-unclosing (*ent-schließen*, i.e. resolving) and free releasing of itself. Unclosing (*Ent-Schluss*) can occur when a joining together, a conclusion (*Schluss*), has preceded it, that is, only after the

chapters on judgement and syllogism. Freedom, however, occurs earlier. For freedom is the manner of the activity of the concept as such in contrast to necessity as the manner of the activity of substance. Freedom is necessity that has become transparent and enlightened. Substantial necessity, on the other hand, bears the darkness of contingency and the blindness of fate, as illustrated not only by the matter-of-factness of natural necessity, but also by the subtler matter-of-factness, noted by Quine, of the list of logical expressions underlying logical necessity in propositional and predicate logic. The concept, then, in losing itself, fell back in opaque necessity behind its transparent freedom. The idea, however, persists in its freedom and truth and at the same time resolves to open up the closure (the unifying conclusion) that is its method – the union of general beginning, particular progress and reunified end (cf. Enz §§ 238-242) – to such an extent that it can freely release its middle moment, i.e. particularity, or itself *as* this moment from itself, namely as its other and its reflection, as extralogical nature.

The necessity of progression is opaque for pure thinking, as long as only we in BL see on its behalf what its next due step has to be in each case. Necessity clears up into freedom when thinking in FL itself reaches the height of that awareness. Hegel obviously sees this height reached in the absolute idea as the thought of the method of the whole logic. The next step is thus initiated by pure thinking in FL itself, and we in BL only align ourselves with it and follow suit. It is the step of thinking into the extralogical, into discursive imagining and into dependence on the spatiotemporal manifold of places. The absolute idea thus does not become immediate being within the Logic; there it remains, as method, the form of logical content and is for its part the final content; it becomes immediate being only in space and time, where immediate being is quantitatively extended in three dimensions of space and one of time.

Kant calls the spatiotemporal real: *appearance*, and that aspect of it that is accessible to sensation: its *matter*; space and time, however, he calls its *form* (cf. CPR, A 20/B 34). In the transcendental aesthetic, he abstracts from matter and from the logical and considers only the form of appearance. Then, in the transcendental logic, the logical is added as a topic. But the *matter* of appearance remains alien and external to Kant's transcendental philosophy, relevant only to empirical cognition. The *Science of Logic*, on the other hand, abstracts only from space and time, but not from the matter of appearance. Rather, this matter is, as immediate being, entangled with thinking, and is so entangled – in Hegel's philosophy, in contrast to Kant's – independently of spatiotemporal mediation. The matter of appearance therefore is from the outset part of the logical subject matter. The initial identification of intuiting and thinking testifies to this. If we abstract from space and time, the receptivity of intuiting and the spontaneity of thinking fall into one. In immediate being qua content of intuiting and

thinking, the whole weight of the world, the whole mass of the matter-of-factual, is thus preserved, albeit in abstraction from all conceivable modifications. In this respect, being qua matter is, on the one hand, well-differentiated from Nothing, from which, on the other hand, it is indistinguishable qua unmodified and with which it must therefore also be identical. Logical evolution, as we remember, began with this initial contradiction.

Seen in such a light, it is therefore wrong to say that Hegelian philosophy ignores the weight of factuality. The later Schelling, as is well known, made this accusation and interpreted Hegel's philosophy as a negative, purely rational philosophy, which was to be supplemented by a positive philosophy based on factuality, Schelling's own. One can see what Hegel would have to counter the criticism with: the *Logic* does not deal with the determinations of thought as with predicates – contents in need of supplementation by singular terms, mere "representations" ("Vorstellungen") – but as with primordial facts, against which the distinctions (a) of thinking and intuiting and (b) of act and content bounce off. Thus, factual being has always already been in view, and it is only the *Logic* in the first place which allows act and content to diverge (in the logic of reflection) and come together again in the idea. In this process, content is not lost, but rather the Realphilosophie draws on its abundance and studies it in its spatiotemporal dispersion as manifold material for a discursive, imaginatively informed thinking. Only if Hegel had placed the philosophy of nature at the beginning of his system would one perhaps have to subscribe to Schelling's diagnosis and critique. The *Logic*, however, is both positive and negative philosophy in approach and programme and in its wake the Realphilosophie – as the philosophy of nature and of the spirit – is likewise.

The philosophy of nature begins with space and time in the first section of its first division "Mechanics") and ends with the animal organism in the third section of the third division ("Organics"). The middle section ("Physics") corresponds approximately to the chapter on chemism in the logic of objectivity. As was to be expected, the teleology chapter of the logic of objectivity has no correlate in the philosophy of nature (teleology already points to spirit), and the third section of the philosophy of nature, on the organic realm, has its correlate in the first chapter ("Life") of the logic of the idea. These structural differences make it obvious that Hegel's *Realphilosophie* is not a simple application of the *Logic* to the spatiotemporal, but must be developed according to its own internal necessities.

The enterprise of a philosophy of nature has long since gone out of fashion. Unjustly, because it is overlooked that the natural sciences – macrophysics, microphysics with chemistry, life

⁵³ To the three sections of each of the three sciences in the *Encyclopaedia* correspond the three books of the *Science of Logic*.

sciences – must leave open questions that concern nature itself. The modes of time, for example – future, present, past – do not primarily belong to our subjective imagination, but to nature. It is an objective, natural fact that what is happening now has the character of being present here at the place of the occurrence, a fact that eludes scientific explanations. It would be regrettable if what is happening de facto now already had the character of being a hundred and fifty years in the past, because then we would all be dead. Physics, however, cannot conceptually grasp the nature of the modes of time and, moreover, cannot explain the arrow of time, but can only associate it with the increase in entropy, which it also cannot fundamentally explain. Even the phenomenal qualities of things, the perceptible colours, sounds, scents etc., are not at all found unilaterally only in a respective individual consciousness, but primarily in the extended, spatiotemporal field of consciousness common to all sentient beings, which is only centred differently around each of them.

These so-called qualia are therefore also part of external nature and yet are not possible objects of exact, mathematised natural sciences. Above all, however, the natural sciences cannot prove that the real as such, any arbitrary material space-time system, necessarily includes organisms that develop sometime and somewhere within it, let alone that some of the organisms must develop into intelligent living beings. Hegel's philosophy of nature, on the other hand, not only compellingly demonstrates the necessity of life in any space-time system, but also, by proceeding into the philosophy of spirit, that of intelligent, spiritual life.

Spiritual life is considered in the three divisions of the philosophy of spirit, firstly on subjective, then on objective and thirdly on absolute spirit. Subjective spirit is individual feeling, perceiving and thinking. Objective spirit is the intersubjective spirit, which expresses itself generally as law, then in the respective individuals as morality and finally as substantial ethical life in the family, the civil society and the state. Eventually, absolute spirit crowns the logical-philosophical evolution in the form of the cultural achievements of art, religion and philosophy, i.e. through expositions of logical space or of the absolute in sensuous perception (art), in imaginative-discursive imagination (religion) and in comprehending conceptual thought (philosophy).

In classical Greek art, the Absolute was presented to sensuous intuition in an idealised human form – as Apollo, Athena, etc. – which was entirely appropriate to it. In revealed religion, especially Christian religion, the absolute was imagined and discursively represented as the divine man or human God who had been absent since the end of his life on earth. In philosophy, conclusively in the Hegelian system and there for the first time exhaustively, the absolute

is conceived in thinking, and this is the superlatively appropriate way of its exposition. Here, the great philosophical circle of three great circles finally closes, and now without once again a dual end and on one flank of it a collapse into immediacy. For philosophy is now actually present as a system in the *Encyclopaedia of the Philosophical Sciences*, still very much in need of expansion and improvement, but in principle already in such a way that it makes the linking with its own beginning possible, not by contracting into immediacy, but by thematising and reflecting on itself and this beginning.

It remains to be seen whether all this works out according to the Hegelian programme. The conception and the actual elaborations, although often hardly comprehensible in detail, are admirable and, despite all the obscurities attached to them, represent a challenge for any future philosophy that cannot be ignored. In connection with Kant and Reinhold, it was mentioned earlier that First Philosophy cannot become a mature science, because in order to do so it would have to make itself dependent on mathematics and surrender its proper nature. Hegel intended his system to be a mature, textbook-ready science, without ever even considering paying the due but absurd price of mathematisation. The fact that he wanted the impossible remained hidden from him, and presumably also the monumental one-sidedness in his dictum that the "death of the merely immediate individual living vitality [...] is the coming forth of spirit" (Enz § 222). Certainly, spirit goes beyond the individual into the universal; but it remains bound to living individuals and their personal perspectives. Therefore, the death of an "immediate individual living vitality" is always also a partial destruction of spirit.

Kierkegaard protested against Hegel in this sense, and Heidegger has continued the thread of protest, weaving it backwards through the history of philosophy to Heraclitus and Parmenides (a Heideggerian non-standard Parmenides). He reads Parmenides' Fragment 3: [...] to gar auto noein estin te kai einai, "[...] for the same is thinking as well as being", in the horizon of Heraclitus' Fragment 123: physis kryptesthai philei, "nature loves to conceal itself". In the Heideggerian synopsis of both fragments, their message boils down to the fact that thinking and being belong together in a logical entanglement (Parmenides) that cannot be brought to transparent clarity (Heraclitus), but remains an essentially opaque identity – such as, in a different but comparable way, the identity of a wave and a stream of particles according to quantum mechanics. It is true that being is unconcealed for thinking, but it is precisely in the thinking care for unconcealment and for this thinking care that being also conceals itself in each particular case. It shows itself in hiding and hides itself in showing itself.

All cognition, including and especially philosophical cognition, is therefore necessarily finite and perspectival. If the perspectival is eliminated from thinking and being in mathematical natural science, it is at the price of a shortening abstraction that shades out essential features of the real, including the physical real. Fortunately, not only this abstract universality is attainable, but in the hermeneutic sciences, of which philosophy must see itself as the first and a priori science, also a concrete universality, which, however, must always be renegotiated and is always provisional. Therefore, philosophical science cannot finally close itself into a circle, but remains open to surprises, not only in detail, but also in principle, because *physis*, nature, in showing itself is always also partially hidden. At least, this is what hermeneutic realism teaches.

It is not possible to decide here on sufficient grounds between hermeneutic realism and Hegel's absolute idealism, but this fundamental alternative of philosophical theory building still had to be pointed out at least.

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