

Hegel's Science of Logic

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[Warnung: Der Text ist unkorrigiert und enthält Tippfehler und sprachliche Fehler.]

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Hello [Today is inauguration day, not only of your new president, but also my personal inauguration day as an academic teacher in the US etc.]

Subject matter: Hegel's Science of Logic, a fascinating theory, but not well understood.

Today: Some preliminaries. We're going to start with a short look on Hegel's immediate predecessors **Kant**, **Fichte** and **Schelling** and on Hegel's own earlier project in his *Phenomenology of Spirit*. (We're going to have a short break around 4:30, possibly after Kant, Fichte and Schelling.)

But first of all let me say something about the **overall character** of Hegel's philosophical project, by way of a very short **introduction**.

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Short Introduction: The overall character of Hegel's philosophical project

In the opening section of 'Empiricism and the Philosophy of Mind', Wilfrid Sellars writes that the **framework of givenness**

has been a common feature of most of the major systems of philosophy [...]. It has, indeed, been so pervasive that few, if any, philosophers have been altogether free of it; certainly not Kant, and, I would argue, not even Hegel, that great foe of 'immediacy'. (Sellars 1963: 127)

Now, what is the **framework of givenness**? It is a certain philosophical mood of thinking that has generated a whole lot of different philosophical theories throughout the history of philosophy.

For example, according to Bertrand **Russell**, what is **given** is known "by **acquaintance**", and the rest is only known "by **description**". Sense data, e.g., are given, i.e. known by acquaintance, but not only sense data; Russell thinks (or thought at one point in his long philosophical career) that all kinds of universals are given as well. You just grasp them in a kind of intellectual intuition.

This is a well-known Platonic theme. **Plato** thought that **ideas** were **given to reason** and that reason was passive in receiving them. But he also thought that this knowledge by acquaintance, of the ideas, could and should be transformed into knowledge by description in philosophy by the **dialectical method**. If an idea is grasped by reason (in a kind of intellectual intuition), then it may be **discursively articulated** in a dialectical process which leads to the definition of the idea. And conversely: if you are offered a definition of a certain idea, you will be in a privileged position to grasp it in an act of knowledge by acquaintance.

So, for **Plato**, givenness is only a **beginning**, not the **end**. And in this sense he is not a whole-hearted champion of givenness. What is **given** is there **immediately**. But only what is discursively articulated and conceptually mediated, is really **understood** and thus fully known.

If you are looking for a real champion of givenness, **Hume** will be a better example than Plato. Hume's **sense impressions** are paradigmatic entities to be given, and I will take opportunity more than once in the course of this seminar to explain what is going on in Hegel's *Logic* by relating it to the **ontology** and the **epistemology** of Humean sense impressions.

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Now, **Sellars** said that "not even Hegel, that great foe of 'immediacy'" has been altogether free of the **framework of givenness**. And indeed, **Hegel** opens his *Logic* with

'being, pure being – without any further determination',

and says of it that 'in its undetermined immediacy it is equal only to itself and also not unequal to something other, has no difference within it nor towards the outside' (WdL I 66).

So, the *Logic* starts with **pure being** in its **undetermined immediacy** (whatever that may mean).

But – let me hasten to add – if Hegel **begins** with undetermined immediacy, he does by no means want to **end up** there. So, in his relationship towards immediacy and givenness he is more like Plato (or Sellars) than like Hume (or Russell).

What is unique to Hegel's approach is that he **acknowledges** the framework of immediacy and the whole framework of **competing metaphysical theories** that go along with that immediacy as in some sense **true** without endorsing it as **really true**. Very sketchily, one might present his overall view as follows.

Our pre-philosophical and pre-scientific everyday framework of perceiving, thinking and acting, which Sellars calls the **manifest image of man-in-the-world**, is unstable in at least two respects.

(1) It is **explanatorily unstable** in that it has us ask more questions than can be answered using its conceptual resources. This is why we start developing scientific **theories** and postulating unobservable, purely theoretical entities like molecules, atoms, positrons, electrons etc. Sellars has a lot of things to say about that process which, he thinks, will eventually lead us to a conceptual stage in which we give up the manifest image and start thinking about the world directly in terms of scientific theories. But of course, we are still very far from that.

(2) But the manifest image is **logically** (or categorially) **unstable** as well. It has us ask philosophical questions which it does not seem to give us the conceptual resources to answer. On the contrary it leads us into paradoxes and antinomies of all kinds, like e.g. the paradoxes of Zeno.

Nevertheless the manifest image is there to stay and cannot (I believe) be superseded with some other – be it scientific or metaphysical – image. Its logical instability manifests itself in our tendency to engage in (what Peter Strawson called) **revisionary metaphysics**.

Manifest image: our actual though incomplete conceptual structure, roughly Aristotelian/Strawsonian: the world consists of things and persons, changing in the course of time.

Scientific image: our future complete conceptual structure: the world consists of what future physics will then tell us it consists of. (Or so Sellars says.)

Metaphysical images: the various re-categorizations of reality offered by metaphysical theories ("revisionary metaphysics"). (E.g. Spinoza: Reality is one singular in-

finite substance. Or Plato: Reality is the realm of super-sensible, eternal ideas. Or Leibniz: Reality consists of indenumerably many non-spatial, absolutely simple substances called “monads”.)

But, if our manifest image is not only incomplete (inviting more “Why”-questions than it can answer), but also **logically unstable** (inviting more “What”-questions, i.e. categorial questions than it can answer), **revisionary metaphysics** is logically unstable as well, and much more so than the manifest image.

Revisionary metaphysics is a complex framework of competing **categorial conceptions** of how things are in themselves and of how things are epistemically accessible to us, i.e. a framework of **competing ontologies** and **competing epistemologies**.

Ideally, each metaphysical theory is centred on some basic categorial conception, e.g. the conception of things as bare particulars or the conception of things as bundles of universals or the conception of reality as one singular infinite substance, etc. Those basic categorial conceptions turn out, in Hegel’s philosophy, to form a **logical succession**, starting from **pure being (pure immediacy)** and leading on to more sophisticated categories.

In this series, each successor category **negates**, i.e. falsifies and in a sense annihilates, its predecessor – the perishing predecessor taking revenge, so to speak, by determining its successor. (Determination is thus the **inverse of negation** and, under the specific conditions of symmetry, the same as negation, e.g. in the case of *Etwas* and *Anderes*, the Something and the Other.) We will talk about that in due course.

The logical succession finally comes to a **halt**, or reaches a **fixed point**, but – and this is the nub of Hegel’s philosophy – the fixed point turns out to be not one particular last and triumphant category, but gives way to the acknowledgment of **the whole series** which is, as Hegel would say, sublated in the fixed point: in **absolute knowing** according to the *Phenomenology of Spirit*, in the **absolute idea** according to the *Science of Logic*, and in **absolute spirit** according to the *Encyclopedia of the Philosophical Sciences*.

Absolute knowing	PhenSp
the absolute idea	SoL
absolute spirit	EncPhil

(We’ll talk about the differences between theses fixed points; but not now.)

Hegel thus does not endorse one last and triumphant revisionary metaphysics!

He endorses the whole game of metaphysical or categorial forms in which **no one particular form** is the final **winner**. When he says, in the preface to the *Phenomenology*, that **the truth is the whole**, this is not a commitment to some queer **ontological totalitarianism** (as e.g. Russell seems to have thought), it just means that the logical process – **the evolution of logical space** – does not privilege one particular metaphysical standpoint over the others.

Each metaphysical standpoint has to give way to a successor standpoint, thus **paying the fine** for annihilating its own predecessor, as **Anaximander** taught; with the last giving way to and sublating the whole logical process.

What is specific about the game of metaphysical forms, is that according to Hegel it is **played by reality itself** and then **replayed and completed** by the various **metaphysicians** (who are, of course, themselves part of that very same reality). Thus, the basic theorems of a metaphysical theory may well be **true** in the sense of **corresponding** to a certain stage in the development of logical space. But they should be treated as **logically indexical sentences**, accordingly, **true at one point** in the logical succession and **false at others**. If they are propounded

as logically **eternal** sentences, as they typically are in metaphysics, they turn out wrong, because the stage in the logical process they correctly depict is transitory.

Personally indexical sentences: true in the mouth of one speaker and false in the mouths of others [“I am Josef Ratzinger.”]

Spatially indexical sentences: true at one place and false at others [“There’s only rocks and sand around.”]

Temporally indexical sentences: true at one time and false at others [“Caesar is dead.”]

Logically indexical sentences: true at one stage in the logical process (the evolution of logical space) and false at others [“The real is (at a given logical stage) one infinite substance.”]

[Metaphysical theorems are false as offered by metaphysics, i.e. as logically eternal sentences, but may be true as logically indexical sentences.]

Hegel wants us to see through the game of metaphysical forms and to become aware of the strength of the manifest image and the weakness of revisionary metaphysics.

The manifest image is, so to speak, our **zero conceptual scheme**: what is left over from the logical construction and deconstruction of metaphysical forms. It is the **corpus of mostly true beliefs** Donald Davidson had in mind, when he criticized the **very idea of a (non-zero) conceptual scheme**.

But in its logical instability the manifest image is inevitably under attack by revisionary metaphysics. **Purely descriptive metaphysics** therefore, as envisaged by Peter Strawson, **will not do**. The manifest image has to be **justified**, i.e. defended against the revisionary attacks and eo ipso purified from all the remains of (non-zero) conceptual schemes and embedded into a new kind of philosophical thinking.

Hegel wants to do all of this by deliberately playing the metaphysical game till the end, **re-constructing** and **deconstructing** it at the same time. If in the end we see through the metaphysical process of competing conceptual schemes and competing forms of reality, we get free to acquiesce in the zero structure we learned at our mother’s knee – a structure now safely embedded into a stabilizing post-metaphysical philosophical theory (Hegel’s). Or that’s what Hegel wants to show.

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[Questions? Expectations? – Common theoretical ground? My “analytic” heroes in the seventies and eighties were Quine, Sellars, Davidson, Strawson (also Rorty, Kripke, David Lewis, Gareth Evans, and Carnap and Wittgenstein). And my “continental” heroes were first and foremost Kant, then Plato, Aristotle, Hegel and Heidegger and Fichte. Is that enough common ground for us?]

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Remarks on the theoretical setting

1781	Kant, CPR		
1794/95	Fichte, Grundlage der gesamten Wissenschaftslehre		
1795ff.	Schelling’s various publications		
1806/07	Hegel, Phenomenology of Spirit		
1812, ² 1832	SoL I:	Sein (Being)	Objective
1813	SoL II:	Wesen (Essence)	Logic

1816 SoL III: Begriff (Concept, Notion) Subjective Logic

1817, 27, 30 Encyclopaedia of the Philosophical Sciences in Outline, 3 editions:

SoL (Being, Essence, Notion)

Philosophy of Nature (mechanics, physics/chemistry, organic physics/biology)

Philosophy of Spirit (subjective Spirit, objective Spirit, absolute Spirit)

1. Kant

Aristotle taught that the fundamental determinations of being were **designated** by the **forms of predication**, the *schēmata tês katêgorias* (Met. D 7, 1017a23). The predications “is a horse” and “is a man” have **different contents** by which they designate different things (different concepts, different extensions, or what have you). But they have a **common form**: both are sortal predications. And according to this common form they both designate **substance**. And the predications “is white” and “is musical”, according to their common form, designate **quality**. Etc.

ta\ sxh/mata th=j kathgori/aj

The forms of predication designate the fundamental modes of being.

Kant criticizes that this procedure of finding the fundamental modes of being, i.e. the categories, is rather **botanizing**. And then: How shall one **count** forms of predication? Not surprisingly, according to Kant, Aristotle’s procedure turned out to be not very reliable and lead to a mistaken list of the categories which included items that didn’t belong there like **place** and **time** and which lacked items which really do belong there like **reality**, **negation**, **causality** and others.

So Kant proposes a new procedure, according to a **principle**. And his actual choice of principle turns out to be a **coup** by which he surpasses not only Aristotle but also, in a different respect, **Hume**.

Hume had shown that the concepts of **substance** and **causality** could not be explained and justified empirically and he had concluded that they owed their respective contents to **imagination** and **habit**. Kant, by contrast, wants to justify them by deducing (or gaining) their contents from a sphere of knowledge that is as solid and secure as mathematics, viz. **formal logic**.

It is an irony of the history of philosophy that it was Aristotle who had developed logic into the system of **sylogistics**. Kant thus wants to surpass Aristotle (on the categories) by using an Aristotelian achievement. One only needs – that was Kant’s thought – to transpose the **sylogistically relevant thought contents** into another key and one will get the fundamental concepts of pure understanding or, ontologically speaking, the categories.

The relevant logical contents are expressed by certain **syncategorematic** expressions which are essential for evaluating the formal correctness of syllogisms, like “all” and “some”, “is” and “not”, “if ..., then ..” etc. Now **Kant’s recipe** for finding the categories is just this: Take the syncategorematic logical contents and squeeze them into **categorematic** size, in other words: take the logical constants, isolate their purely logical thought contents, and bring those contents into **conceptual** form, i.e. into the form of (general) **terms** – and you will have got what you wanted: a set of concepts which you may call **categories** because they are (or purport to be) fundamental with respect to everything there is, and which you may as well call **concepts of pure understanding** because their contents are purely logical.

Of course, this transposition of contents from the syncategorematic to the categorematic key – the **metaphysical deduction** of the categories – is by no means a simple affair. But it turns out simple in relation to what is yet to come, the so-called **transcendental deduction**.

For, even if the categories are but logical contents in the shape of **terms**, their **objective validity** isn't thereby vindicated yet.

Sure, it is true that we have to **conceive** of reality according to the **categories** (if the metaphysical deduction is right). And sure, what makes us conceive of reality in this way, is not the brute power of habit, as Hume had thought, but the **soft power of reason**. Still, the soft power of reason is one thing, and reality may quite well be another. We do not have any guarantee that reality behaves rationally and will continue to do so. All we have justified, up to now (i.e. in the metaphysical deduction), is a **rational faith** that the real be well-behaved, according to our lights. (Like, according to Kant, in **practical philosophy** one can justify a rational faith in the existence of God and in the immortality of our souls.)

“But wait a minute”, a Strawsonian-minded philosopher might expostulate. We have shown that we must conceive of reality by way of the **categories**. Call this a rational faith if you like. But then look: reality does **in fact** behave as it should according to our rational faith. It offers lots of cases of causality and substantiality; and whenever it seems to someone that it doesn't do so on a particular occasion, we might as well tell that person: Try harder looking. – But **nothing** of that sort can be appealed to, regarding the questions of **god** and **soul**.

Well, that may be true, but Kant is rather demanding and exacting. And above all, he thinks he has in fact **found** a way to prove the objective validity of the categories, a way i.e. to show that our application of the categories to things and events in space and time isn't mere rational **faith** enhanced empirically by the contingent behaviour of things and events, but that the real is **guaranteed** to behave according to our categories. (We have a legal right, so to speak, of expecting the real to behave according to our categories.)

Hume was completely right, Kant thinks, that one cannot detect categorial determinations of things by **sensuous** receptivity. But on the other hand, our **understanding** does not **intuit** any objects. Therefore we have to **project** (or **read**) the pure concepts of understanding into the objects. And of course one must ask: Are we justified to do so?

Kant wants to answer this question in the **affirmative**. He wants to show in a **transcendental deduction** that we project or read into the objects **just as much** as really lies in them – just as much as **really and necessarily** lies in all spatiotemporal objects, even though it is not perceivable by the senses. Everything spatiotemporal, of and by itself, has already adjusted itself to our pure concepts of the understanding.

This is Kant's **Copernican turn**. We don't need to adjust ourselves to the things in our knowledge of their categorial determinations nor do we need to adjust things to our knowledge and thereby to distort them; but all things (in space and time) have by themselves adjusted themselves to our pure concepts. So we by no means do have to truncate or gerrymander things, as **Nietzsche** and **Adorno** suspected, when we subsume them under our concepts.ⁱ

Hegel didn't see this Kantian subtlety. He has Kant say that the categories are our addition to the big cake of reality. Hegel's Kant is, as he calls it, an adherent of **subjective idealism**. The historical Kant however is not a subjective idealist, as I see it, even though he talks as if he were one from time to time. But we may set questions of Kantian exegesis to one side and just stress one point: that Hegel thought that Kant's transcendental deduction was insufficient.

2. Fichte

Hegel thought that the **metaphysical deduction** was not sufficient either. Kant had reproached Aristotle that he was **botanizing** in giving his list of the categories. Now, Hegel turns exactly this reproach critically against Kant himself.

The way for this critique had been prepared by **Fichte**, more precisely by Fichte's claim that his *Wissenschaftslehre* (doctrine of knowledge or science) provided a foundation of **logic** – of the very logic Kant had taken for granted in giving his list of the categories. We might easily think that this Fichtean claim is crazy. How can logic be in **need** of a foundation? What kind of knowledge could be firmer than logic? And, secondly, how could it be **possible** to provide a foundation for logic? Would not logic have to be presupposed as valid in giving a theoretical foundation for whatever type of knowledge?

But on closer inspection logic shows itself endangered by paradox. There are well-known antinomies in **set theory** and in **semantics** which can be traced back to purely **logical** roots. I am particularly thinking of the so-called **Liar Paradox**: “What I say right now is not true”, or: “This sentence is not true”, or:

(1) (1) is not true.ⁱⁱ

Normally, of course, people would deny that this was a **logical** antinomy. Formerly, one would have put the blame on the **self-referential subject term** of the sentence, claiming (like **Wittgenstein** in the *Tractatus*) that no sentence could be its own subject. But, of course, there is nothing wrong with the sentence:

This sentence has five words;

and, apart from that, **Gödel** has shown that any theory as strong as arithmetic is strong enough to contain its own syntax. So, a sentence may very well have itself as its own subject matter.

Nowadays therefore people tend to put the blame on the **predicate** of the Liar: “**is true**”. But the truth predicate is quite innocent as well, being nothing more, here, than part of a technical device, which **Quine** once dubbed “**semantic ascent**”. [How do you accentuate “ascent”?]

In semantic ascent we talk about **language**, but that is pure lip service. In predicating truth (or denying truth) of sentences we show that our heart is not with language, but with the **world**, after all. When we say: “**The sentence ‘snow is white’ is true**”, we are “officially” speaking about an English sentence, but in reality we are saying something logically equivalent to the simple sentence: “Snow is white”, which is a sentence about the world.

In cases like “‘Snow is white’ is true”, where we are predicating truth of single sentences, semantic ascent is a trivial and superfluous manoeuvre; for we might as well simply say: “Snow is white”. But there are cases, where semantic ascent becomes mandatory or necessary. Think for example of **arithmetic**, i.e. the infinite set of all arithmetical truths. You believe they all arithmetical theorems are true, but it would take you too much time, in fact an **infinite** amount of time, to state them all one by one.

So you just say: “Arithmetic is true”, or you state the axioms of arithmetic and say something like: “These sentences and all sentences that logically follow from them are true”. Here semantic ascent is mandatory.

Now, I claim that in the Liar the truth predicate occurs only as a technical device for the sake of semantic ascent. The **essence of the Liar** is just that it is a sentence which is logically equivalent to its own negation. And in this sense it just **is** its own negation:

n iff not- n

You cannot write down n in a finite language, because you would have to write down an infinite amount of negation signs (and brackets):

$\sim(\sim(\sim(\dots)))$

But there is no infinitely long sentence in a finite language. So, you use semantic ascent and say “This sentence is not true” instead.

Now, if neither the self-referential **subject** term of the Liar nor its semantic **predicate** term is the source of the antinomy, where does that source lie and where is it to be found?

There are **three possible sources** of paradox or antinomy in the Liar:

(1) $\sim ((1) \text{ is true}),$

(i) the subject term “(1)” which is self-referential in that it refers to the sentence of which it is part,

(ii) the predicate “is true”, which is a semantic predicate, in fact the truth predicate, and

(iii) the negation sign “ \sim ”.

The subject term is harmless, as Gödel has shown. The predicate term is harmless too, just a device of semantic ascent (or so I claim). So, the damage done rests with **negation**.

Parmenides said so, 2500 years ago, and I think he was right. If a language is strong enough to include **negation** (and it wouldn't be a language otherwise), then it is strong enough to create paradoxical contents like the content of the Liar.

Discursive thinking as such, I would conclude with Parmenides, is **inconsistent**. (And Hegel would applaud.) We'll come back to that point in the course of our seminar over and over again. For the time being suffice it to say that discursive thinking and with it logic is in trouble.

Fichte – to return to his project – set out to solve the problem in his *Wissenschaftslehre*. He wanted to tell an encompassing story, based on logic of course, designed to justify logic **from within**. With logic, we run into the inconsistency of the Liar, but with logic we can also think of the **principle of non-contradiction** as a **regulative ideal**, still. Reason constitutes itself as the norm of all thinking in an original act that Fichte calls the “Tathandlung”, i.e. an action which is its own result.

I won't go into the details of Fichte's story. Its thrust is (as I said) that reason constitutes itself as a norm of (and on) thinking by creating and then clinging to the principle of non-contradiction as a regulative principle: Wherever you run into a contradiction, don't remain there, shy away from it, don't draw any consequences from it, put it into logical quarantine. In this way, reason (or the “**absolute I**”) enforces itself, in the face of non-reason and contradiction.

Within that programme Fichte, generated the principles of logic like the sentence of identity (“(x) (x=x)”), the principle of non-contradiction and the principle of sufficient reason, as well as the categories quite systematically; and **Hegel** praised his procedure as truly “**speculative**”.

This is one side of Fichte's enterprise, the side of the **metaphysical deduction**. But there is also the side of the **transcendental deduction**, which has to be taken care of; and Hegel thinks that here Fichte is still far from a satisfactory solution. For Hegel, Fichte as well as Kant counts as a supporter of “**subjective idealism**”; and this verdict seemed to be justified by Fichte himself who claimed that his philosophy was but a **doctrine of science** (or knowledge), not a doctrine of reality as it was in itself.

Nevertheless, I think that Fichte's theory is grossly **misinterpreted**, if taken as a variety of subjective idealism. The knowledge which is its subject matter is not the knowledge **in our heads**, but the “knowledge” **out there** in the things, i.e. the phenomenality of things: that through which they are epistemically accessible to us in perception, experience, and theory building. And beyond their epistemic accessibility **nothing determinate** remains of things. Fichte's doctrine of science thus does not allow for any hidden variables or parameters; it only makes a conceptual distinction between the phenomenality of the real and the real itself. It does not state or imply that the real is in some way hidden to us.

3. Schelling

According to **realism**, the real is **independent** of our beliefs about it. But then our most well-considered theories and beliefs could all be wrong. This is the well-known fundamental predicament of realism. Realism, if not counterbalanced by **pragmatism** or some other variety of non-realism, leads to **scepticism**. If scepticism is to be avoided, if, that is, the real is to be epistemically accessible, then it must be (and must be conceived as) essentially related to our beliefs and as being in some sense belief-dependent.

But the belief-dependence of what is real must not be treated as **total** or absolute either. Otherwise the real would be turned into a mere **subjective content** of our beliefs. So we have to beware not to get into the **dilemma** of unknowable **things in themselves** on the one hand and purely **subjective representational contents** on the other.

This is a real **dilemma** for philosophy even today, the dilemma between **metaphysical realism** and **pragmatist antirealism**. Metaphysical realism postulates a belief-independent thing in itself and thus turns the **practice of truth claims** (and of giving and asking for reasons for truth claims) into a game of **betting** without the possibility to find out if one has betted correctly. **Antirealism** on the other hand loses reality as something objective and independent of our cognitive practices.

One obvious way out of the dilemma would be to just **fuse** the **objective** and the **subjective** and to say that what is real in the last analysis – call it *the Absolute*, if you like – is beyond the divide of the subjective and the objective and thus beyond the divide of idealism and realism. Of course, the Absolute, so conceived, must not be restricted to the status of **posit** of a philosophical theory. It must be epistemically accessible independently of philosophical theory building, in a kind of **intellectual intuition** or, more precisely, an **intellectual self-intuition**. Philosophy may help bring a person to the vantage point where this intellectual self-intuition of the Absolute actualizes itself; but the possibility of such actualization must be there as something independent of philosophical theory building, or else the identity of subject and object would remain a theoretical posit.

Now, **Hegel** thinks that this desideratum is fulfilled in the philosophy of his friend **Schelling**. **Kant** had taught that our understanding was **discursive** and that we could not intuit objects intellectually. **Fichte** had assented to these teachings and **added** that nevertheless reason constitutes itself in an act of original self-intuition. So, according to Fichte, we do not have any intellectual intuition of **objects** (just as Kant had taught), but we do have intellectual self-intuition of the rational I. But Hegel suspects that what is independently real, the **Absolute**, is left out of the act of Fichtean **intellectual self-intuition**. He suspects that Fichte's absolute I is just **subjectivity** writ large. **Schelling** does correct this "mistake" (or what Hegel thinks is a mistake). For Schelling teaches that the other part of reality over and above human reason, the ontological partner or playmate of reason, so to speak, the **Object** (with capital "O"), is included in the act of original intellectual self-intuition. Thus, the **real and absolute self** is the original **identity** of subject and object. Therefore, Schelling calls his philosophy *the philosophy of identity*.

In other words, the Absolute exists as well *in itself* as *for itself*, exists both as the **object** which is intuited intellectually and as the intuiting **subject**.

But if this approach manages to overcome, both subjective idealism and metaphysical realism, and thus is **the true philosophy in a nutshell**, nevertheless we do now face the **methodological problem** to turn the intellectual self-intuition of the Absolute into a well-articulated philosophical theory. In other words, we must (Hegel thinks) leave the **framework of givenness**, in which Schelling got stuck.

Of course, a philosopher such like Schelling may just **dogmatically** claim and assure us that he, as the spokesperson of the Absolute, so to speak, is capable of diving into the intellectual self-intuition of the Absolute and then inform us other people how it is like to be part of the self-intuition of the Absolute. But what reasons could we other people have to believe him? Schelling's general claim would just be one among several competing basic philosophical claims, and we could as well opt for one of those other claims (dogmatic realism for example).

In the *Phenomenology of Spirit* Hegel wants to do better than his friend (and then ex-friend, because of this very fact). The true philosophy must acquire its adequate discursive form, it must not be presented dogmatically and in the form of a report or narration of a philosophically privileged hero. Philosophical truth is in need of (and capable of) a scientific, discursive, reason-giving exposition. But to this end (and for this sake) the fundamental intellectual self-intuition would itself have to become discursively articulated. I.e. the framework of givenness would have to be overcome and left behind.

Plato's philosophy could serve as a paradigm here. On the one hand, Plato believes in a kind of intellectual intuition he calls *noêsis*: a grasping of the Forms by reason. On the other hand, what is grasped in *noêsis*, the forms or ideas (*ideai*), is definable, which means that it can be articulated discursively, albeit in a very specific form of discourse which Plato calls **dialectic**.

Hegel goes one step further still by postulating that *noêsis* (or **intellectual intuition**) and **dialectical articulation** are one and the same thing. Hegelian dialectic thus is nothing but the way in which the intellectual self-intuition of the Absolute is accomplished. So, we have here a **synthesis** of intuition and discourse, one that Hegel calls "**speculation**" (which is the Latin word for the Greek *theôria*).

qewri/a, speculatio

In this sense then Hegel's philosophy is **speculative philosophy**.

He wants to bring the basic **insight**, on which Schelling had founded his philosophy of identity without being able to give it an adequate inferential articulation, into its adequate **discursive form of actualization**.

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Hegel's Programme in the *Phenomenology of Spirit*ⁱⁱⁱ

But it would be the wrong idea to try to mend the **dogmatism** of Schelling's philosophy of identity by a **dogmatism of the dialectical method**. Why that? Well, you could draw totally different consequences from the ones Hegel drew, given his **diagnosis** that Kant and Fichte had been teaching varieties of subjective idealism and that Schelling did rely on an insight that he could not spell out.

Instead of favouring some new **dialectical method** in order to overcome the respective shortcomings of Kant, Fichte and Schelling, one could, for example, conclude with **Friedrich Heinrich Jacobi** that philosophy as such is not in a position to make *the real* epistemically accessible to us. Jacobi himself had chosen to practice what he called an intellectual "salto mortale" and wind up in religious faith. But you could as well choose to become a philosophical **sceptic** instead.

Thus, Hegel has to face the problematic of **philosophical scepticism** and thus has the task to develop the dialectical method together with the philosophical contents to be exposed dialectically in a way which is **immune to scepticism**. In fact, Hegel boasts that his philosophy is

nothing but **scepticism** brought to its full **accomplishment**. – We always have to remain aware of this fact in order to understand what is going on in Hegel’s philosophy.

So, for the time being, let us forget everything we ever heard about **dialectic** and let us understand by “Hegel’s method” something quite **elementary** and **simple**: the way he proceeds in his theory building in the face of philosophical scepticism. – Hegel **proposes** to the sceptic to join him in a thoroughgoing examination of our knowledge claims or, more precisely, an examination of our **philosophical** knowledge claims or, still *more* precisely, of our **basic claim** that in our **states of consciousness** (our mental acts and states) we are related to an objective reality. This claim is **made explicit** in philosophy, but of course it is implicit in our pre-philosophical daily ways of thinking and acting.

Traditional philosophy has made explicit and tried to work out and justify this basic claim to objectivity in various **competing** categorial forms. (Aristotle thought that the real was a plurality of finite substances, while Spinoza thought that it was the unique infinite substance, to mention but two examples of traditional metaphysical conceptions, two examples of competing ontologies.)

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Let us now take a closer look on **Hegel’s** philosophical theory, first as developed in the *Phenomenology of Spirit* in 1806/07. In this work Hegel examines our claims to knowledge or, more precisely, the various categorial forms our general claim can take that in our states of consciousness we are related to what is real.

So the examination is not directed at **ordinary** truth claims of the kind **Descartes** was trying to put into doubt, e.g. that we are presently feeling the warmth of the room we are sitting in and or seeing a table right in front of us, etc.. But it is directed at **philosophical** or **categorial truth claims**, which need not be put into doubt artificially and held in doubt by some mental gymnastics like the Cartesian fiction of an evil **demon**, but which have in fact been moot ever since antiquity and which are still moot – and more so than ever – after **Kant’s** attempt to set metaphysics on the secure path of a science.

What Hegel means by ‘consciousness’ is, very roughly speaking, perceptually informed intentionality as organized by our general claim to objective knowledge. That claim expresses our pre-theoretical (but implicitly philosophical) conviction that the passing show is objectively real, and it has, in metaphysical theory building, taken on different categorial forms. Metaphysics set itself the task of making explicit and evaluating candidate categorial forms of the real, but it did not come up with a unique picture. Aristotle, for instance, thought that what was real in the passing show was a manifold of finite substances, Spinoza thought that the real was the one and only infinite substance, to mention but two examples of conflicting ontologies.

Now, Hegel does not want to do any botanizing with respect to the history of philosophy; what he wants to do is to systematically deduce all categorial conceptions from next to nothing so that the sceptic may go along with him. For that reason he proposes the following procedure to the sceptic. First, look for a superlatively simple categorial conception of the passing show to start with, i.e. in Hegel’s terminology, look for a superlatively simple *Ansich*, or in-itself. Hegel, in the first chapter of the *Phenomenology*, starts supernominalistically, with the passing show conceived as a manifold of distinct individual entities as such.

Next, think of the general structure of consciousness. In our knowledge claims we hold that the real is epistemically accessible to us. That means we all pre-theoretically hold the following implicitly philosophical view (which Hegel does not endorse, but wants to examine): What is objectively real and thus independent of our various beliefs is nonetheless essentially related to our beliefs and thus in a way dependent upon them. This view, which is close to

inconsistency, is the kernel of consciousness. Consciousness thus is essentially a (proto-philosophical) view or a theory, and a latently inconsistent one at that. Its general, abstract structure might therefore as well be called the *contrast* or *opposition* of consciousness (der Gegensatz des Bewußtseins). In the introduction to the *Phenomenology* Hegel characterizes it in the following way:

[Consciousness as the subject] *distinguishes* [...] something from itself [the object] to which it *refers* [or *relates* itself] at the same time, or, as this is usually expressed, something is *for it* [for consciousness]; and the determined [i.e. dependent, co-variable] aspect of the *referring* or of the being of something *for a consciousness* is *knowledge* [or, in the case of failure, the mere claim to knowledge]. But from this being for something other [the being of an object for consciousness, the epistemic accessibility of the object] we do distinguish the *being in itself*; what is [essentially] related to knowledge is at the same time distinguished from knowledge and is posited as *being* as well apart from the relation [to knowledge]. The side [or aspect] of this in-itself is called *truth* [or we could say *reality*, if we preferred to reserve the word ‘truth’ for statements and beliefs; reality is so to speak truth in rebus].^{iv}

Dressed in philosophical jargon this statement might look fraught with moot presuppositions. But in fact Hegel here is trying to get rid of philosophical presuppositions and to ally with the sceptic in saying something quite elementary. He just mentions and describes, but does not endorse, the basic claim of consciousness, according to which the *Ansich* (the in-itself) of what is real determines the *Für-es* (the for-consciousness) of what is real. The *Ansich* is a categorial conception of *the real as it is in itself*, thus an implicit proto-ontology produced by consciousness. The *Für-es* is a categorial conception of *the real as it is epistemically accessible*, thus an implicit proto-epistemology produced by consciousness. And consciousness, at its most basic, is the claim that the *Für-es* is (or at least ought to be) fully determined by the *Ansich*. Should, for example, the real *in itself* consist of many distinct particulars but be present *for consciousness* as a plurality of universals, then consciousness – in that specific form – would be categorially false, i.e. a piece of false philosophy. But if that is so, then poor consciousness! Its full success is bound to be its end, for as soon as the *Für-es* takes on the categorial conception of the *Ansich*, there will be nothing left to ground the difference of role between the *Ansich* and the *Für-es* which is of the essence of consciousness. Consciousness, we begin to see, in its self-opposition or inconsistency, will have to sublimate itself into some epistemic state beyond itself, a state which Hegel calls absolute knowing. But I am getting ahead of my story and must now come back to the testing procedure that Hegel proposes to the sceptic.

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27-Jan-09

We are presently talking about Hegel's programme in the *Phenomenology of Spirit*, i.e. about his method (in a very elementary sense of the word "method"), as it is sketched by him in the **introduction**. Afterwards we will take a look into the first chapter, on **sense-certainty**, in order to see how the method is supposed to work. (Then we'll turn to the Science of Logic, at last.)

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I. Method according to the Introduction of the PhSp

Up to now, Hegel has offered us a superlatively simple

starting ontology: (the passing show as) distinct individuals

plus the

abstract structure of consciousness,

i.e. the difference of role between the *Ansich* and the *Für-es*. That abstract structure, Hegel thinks, functions like an **input/output device** for ontologies and epistemologies, or like a **recursive function** with the *Ansich* or **proto-ontology** as the **independent** variable and the *Für-es* or **proto-epistemology** as the **dependent** variable.

The structure may thus be put to service as a device for '**computing**' a *Für-es* given a certain *Ansich*. You put in a categorial conception as the *Ansich* (an ontology), and the device puts out a categorial conception as the co-ordinated *Für-es* (an epistemology), a conception which ought to be, but by no means always is, the same categorial conception as the *Ansich*.

?

$$\text{Ansich (proto-ontology)} \quad \Rightarrow \quad \underset{\text{abstract structure of consciousness}}{\text{€}} \quad \Rightarrow \quad \text{Für-es (proto-epistemology)}$$

Thus Hegel (or we) need not evaluate a given proto-ontology from our **external point of view**, by comparing it with our own favourite ontology. That would be **dogmatism**, and the **sceptic** would be right to protest against such a testing procedure.

But instead of that: consciousness itself (as I said last week) is a kind of **theory** or, better still, a kind of **theoretician** and can at least **falsify**, if not verify, its own claims. For consciousness is defined by the claim that the *Ansich* determines the *Für-es* according to its own categorial form.

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I will soon give an **example** of how the 'computing device' works, when I come to talk about the first chapter of the *Phenomenology*. For the time being suffice it to say that in that chapter Hegel shows that if you start the device by putting in a **supernominalistic ontology** of distinct individuals, the device will deliver as output a **platonistic epistemology** of universals – so that this first form or shape of consciousness, *sense-certainty*, is falsified. But how, from there, is the testing procedure to **go on**?

Viewed from the **internal** standpoint of sense-certainty, it is the platonistic *Für-es* which is **discredited** by the nominalistic *Ansich*. But viewed from our **external** standpoint the failure must be blamed on the independent variable, i.e. on the *Ansich*. It was the input of the nominalistic *Ansich* that produced the output of a platonistic *Für-es*. Therefore the nominalistic *Ansich* is **discredited** as well. We need a new *Ansich* as a new source and criterion for a new *Für-es*.

In Hegel's words:

It thus occurs to consciousness that what it formerly took to be the *in-itself* is not in itself, or that it was in itself only *for it* [for consciousness]. So, when consciousness inspects its object and finds that its knowledge does not correspond to the object, the object itself does not stand the test either; or the criterion of the examination changes, when that which was to be tested by it does not stand the examination; and the examination is not only an examination of knowledge, but also of the criterion for testing.^v

Hence, the **testing proceeds** like this.

We let consciousness choose an *Ansich* (an ontology) and then wait and see what *Für-es* (what epistemology) is thereby determined. If the *Für-es* consciousness comes up with differs categorially from the *Ansich*, then the operative shape of consciousness is **falsified**, and consciousness must correct itself.

So, we let it choose a **new *Ansich***. But we have to be careful not to fall into philosophical botanizing at this point. What is needed is a **unique candidate *Ansich***. And a unique candidate *Ansich* is what we have got, for consciousness has produced exactly one deviating categorial conception in the role of the *Für-es*. It can thus try the old *Für-es* as the new *Ansich*.

Hegel calls this **change of role** of the previous *Für-es* a '**reversal of consciousness**'.^{vi} Our first input into the abstract structure of consciousness was an ontology of distinct individuals, and the output was an epistemology of general traits. In a second attempt we must therefore put into the structure an **ontology of general traits**, and the structure will yield some new epistemology.

Hegel expects that consciousness will falsify itself in this procedure over and over again and will thereby systematically **generate and reject** all possible ontologies and epistemologies, until in the end it reaches a **fixed point** where input and output are **identical**. This fixed point Hegel calls *absolute knowing*.

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Suppose that Hegel is right and that the input/output procedure does lead to a fixed point in the event. Still, there might be launched at least **two sceptical objections**.

First, the testing procedure could have left out some categorial forms, and, **second**, the fixed point as a shape of consciousness would still not be verified, but only not falsified. The first problem is the **problem of completeness**, the second one is the **problem of verification**.

Ad (1). The problem of **completeness** will lose much of its bite, if in the course of the examination of consciousness it turns out that all categorial conceptions of the real which have been developed in the history of philosophy are taken care of, up to the latest philosophy of Hegel's (or our) day, viz. **Schelling's** system of identity, whose standpoint ought to be reached in the fixed point. Hence, the exposition of the successive self-correction of consciousness should turn out as an idealized reconstruction of the **history of thought**; and Hegel thinks that indeed it does.

The burden of proof then lies with the **sceptic** who would have to come up with some categorial conception, either from the history of philosophy or of his own making, and show that it was not taken care of in Hegel's theory. (Perhaps we from our present day vantage point could cite **Frege** and the methodological idea propagated by some of those who profited from his work: to let a priori semantics play the role of a first philosophy, as something utterly new that Hegel did not foresee.)

Ad (2). The **second** problem, the one of **verification**, may be posed thus. The exact correspondence of the *Für-es* and the *Ansich* in the fixed point is only a **necessary**, not a **sufficient**

condition of the **truth** of consciousness. For even the last *Ansich* in the series is but a categorical conception devised by consciousness. And how are we to find out, whether it is the **objectively correct** conception? Wouldn't we have to know quite independently what the true *Ansich* was?

Hegel answers that the process of consciousness is **self-fulfilling** or, as Hegel's German has it, '**self-fulbringing**' scepticism ('**vollbringen**' in German means *to accomplish*).^{vii} This holds in **two respects**.

(a) First, each shape of consciousness occasions a specific sceptical doubt which forces the process to go on and leave that shape behind. In this way philosophy-directed scepticism is embedded in the *Phenomenology of Spirit*.

(b) Second, the categorical base of scepticism as such (i.e. as directed against knowledge claims whatsoever, including ordinary ones) is itself generated, criticised and left behind as one particular shape of consciousness in the process of examination.^{viii} So at the fixed point our knowledge will have to be informed by **reality**, if only for lack of viable alternatives. (And again the burden of proof would lie with the **sceptic**.)

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But what now about the **fixed point**: what categorical conception could be its content? Since the input/output game of consciousness is supposed to offer an idealized reconstruction of the **history** of consciousness, Hegel must expect the fixed point to be reached historically in his own time. It was reached, he thinks, in **Schelling's** philosophy of identity. What then is most **characteristic** of Schelling?

As Hegel sees it, Schelling has overcome **subjective idealism** and conceived the identity of thinking subject and objective reality as an inarticulate and immediate **intellectual intuition** in which the real is present to itself. In its total lack of structure, however, this intellectual self-intuition resembles, as Hegel mockingly says, 'the night in which all cows are black'.^{ix}

But then the **fixed point** of the process of consciousness too must resemble the **night** in which all cows are black. – And this is the result we get, if we now ask in a more **systematic** vein what the content of the fixed point must be.

In the fixed point being-in-itself and being-for-consciousness take on the **same categorial form**. So they do not differ intrinsically any longer; only the abstract difference of their **roles** is meant to last.

But this is **impossible**, an untenable postulate from the external standpoint of the theoretician. Viewed from the **inside**, i.e. from the standpoint of consciousness, there is nothing left to ground any difference of role. The duality of the *Ansich* and the *Für-es* just **collapses** at the fixed point, and so does the related duality of that which was to be in itself, viz. the **object**, and that **for which** it was to be, viz. consciousness or the **subject**.

In-itself and **for-consciousness**, **object** and **subject**, all **collapse** into indifference. The structure of consciousness itself is lost in indifference and immediacy.

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So far, then, Schelling seems to be **vindicated**. But, of course, Hegel does not want to wind up in complete **immediacy**, the **night** in which all cows are black. So he must claim that something is different between his and Schelling's philosophy and that the difference has to do with the conceptual **articulation** of absolute knowing.

The fixed point, as was already said, does **not** give rise to some **new form of scepticism**. This is so, because the fixed point is no **particular** shape of consciousness any more. As soon as

Für-es and *Ansich* are congruent, consciousness is transformed into **intellectual self-intuition**. But this transformation can be looked upon in **two different ways**.

- (a) On the **one hand**, absolute knowing is intellectual self-intuition, an inarticulate extensionless point which marks the boundary between the *Phenomenology* and the *Science of Logic*.
- (b) But if, on the **other hand**, absolute knowing marks this boundary, it will receive a rich content from what is **separated** and at the same time **linked** by it. In this new perspective absolute knowing isn't just a limiting **point**, but the encompassing **unity** of (at least) all previous shapes of consciousness and (perhaps also) all logical determinations which are still to come in the *Logic*.

All categorial forms are in it **degraded** to **fluid** moments of an evolving and ongoing totality. Hegel tries to illustrate this by comparison with the **organic** process of a plant **whose** successive forms – bud, blossom, fruit – as he says

do not only differ, but also displace each other as incompatible with one another. But their fluid nature at the same time turns them into moments of the organic unity in which they not only do not militate against each other, but are one as necessary as the other; and only this equal necessity constitutes the life of the whole.^x

The **actual whole**, we read some lines later, is 'the result together with its coming about'; while 'the bare result is the corpse which has left the guiding tendency behind it'.^{xi}

Hegel, that means, does not want to supplant **traditional metaphysics** with a new one; his new metaphysics – if it can be called that – consists in acknowledging the **game** of competing metaphysical theories as the nature of our consciousness as well as of reality.

II. Sense-Certainty

To give an example of how consciousness works as an **input/output device** for categorial forms, let me now make some remarks on the **first chapter** of the *Phenomenology*.

The **simplest ontology**, given the passing show, would seem to be an ontology of distinct **individuals** spread out in space and time, and the **simplest epistemology** an epistemology of **immediate** presence to consciousness. Hence, the **nominalistic ontology** of distinct individuals would go together well with an **empiricist epistemology** of sense impressions; in fact, ontology and epistemology would coincide, for the impressions just *would be* the distinct individuals. That is the opening stage in the process of consciousness. Hegel calls it *sense-certainty*.

nominalistic ontology of distinct individuals
empiricist epistemology of sense impressions

Now, thinking and saying have **propositional form**: We **refer** to something and **predicate** something of it.

Propositional form: reference and predication / truth and falsity

But if the individuals of sense-certainty are really **distinct** and don't have **any common traits** (things with common traits would involve introducing a different ontology), then all we can say about each of them is that **it is or exists**.

Referring to an individual, as Peter Strawson has shown, **presupposes** that we know some individuating fact about it;^{xiii} but in the scenario of sense-certainty there are **no individuating facts**, because each individual just *is* or *exists*, and this is all we can say. So we, acting for

sense-certainty, cannot refer to any one of the many individuals, since we cannot **individuate** them in thought or in speech.

But if we cannot individuate them by **description**, maybe we can do so by **ostension**. Under normal conditions of course we can. But under normal conditions our **indexicals** are suitably backed up by **descriptions** ('*here*, in this room', '*now*, while it is raining', '*I*, the man who is presently raising his hand' etc.).

In the **stage of sense-certainty** on the other hand we would have nothing with which to back up our use of indexicals. Therefore, at that stage, we could not refer to individuals in thought or in speech: we could only '**mean**' them in a very special sense of this word, in which Hegel uses it to signify a cognitive attitude towards **logically private objects**, the very idea of which was attacked by **Wittgenstein** in his **private language argument**.

LW's PLA: There cannot be a "private language", i.e. a language about logically private objects.

The individuals of sense-certainty would indeed be such logically private objects, they would be logically *mine*, if they did exist – an insight Hegel expresses by the pun: What is *mine*, I can only *mean*. ["Was **mein** ist, kann ich nur **meinen**."]

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This, so far, is the scenario of sense-certainty as described from the **external standpoint** of the **philosopher** or **theoretician**. Hegel next asks how the scenario would present itself from the **internal standpoint of sense-certainty**, and then goes on to consider **three variants** of sense-certainty, one realistic, the other idealistic and the last a kind of neutral monism.

three variants of sense-certainty: realism, idealism, neutral monism

He has got **four terms** to work with: the *Ansich*, the *Für-es*, the object, and the subject. These allow for a **combinatorial** approach in which the 'es' of the *Für-es* is always to be identified with the subject, but in which the *Ansich* may be associated either, **realistically** and most naturally, with the **object**, or, if that should fail, again with the **subject**, in the spirit of **idealism**. If that won't work either, the last resort will be to **fuse object and subject** in the spirit of **neutral monism**.

Four terms: *Ansich*, *Für-es*, subject (= es), object

- | | |
|---------------|----|
| (1) A = O | R |
| (2) A = S | I |
| (3) A = S = O | NM |

But let us proceed step by step.

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First then let us put the object into the position of what is in itself, and let us ask, whether it can occur in the subject's knowledge just like it is in itself.

It is posited to be one distinct individual among many in space and time, immediately given to the subject. So it must be referred to by **pure indexicals** like '**here**' and '**now**'.

Therefore, it will exist for the subject as *something here and now*. But what are the **senses** associated with these indexicals? Hegel antedates **Castañeda**, **Perry** and others by claiming that the sense of an indexical **cannot be reduced** to a description.^{xiii}

To show this he invites us to perform a little **experiment**. Take any old candidate reduction for the sense of the indexical 'now'. Maybe it is night at the moment and you come up with the candidate '**at night**'. But you might as well have offered any other description you liked.

Next, **write down** your reduction thesis. If the thesis is true, it won't lose its truth by being written down.

But notice that this holds only for **eternal, non-indexical** sentences. If you write down an **indexical** sentence, that sentence may well **change** its truth value in the course of things. So make sure you don't write down an indexical sentence like

'Now it is night'.

Write down a **semantical or conceptual thesis** instead, something like

The indexical 'now' means *at night*. – Or

The sense of 'now' is the night. – Or, as Hegel briefly puts it,

The now is the night.

This **eternal sentence** cannot change its truth value. But some hours later the night has gone, the day has dawned, the sun also rises, and eventually it is high noon.

Now look at your sentence again: 'The indexical "now" means *at night*' – Are you still willing to believe it in the glittering sun? Of course not. But then, if you now think that the sentence is false, it must have been false all along, being an eternal sentence.

The **point** of this little thought experiment is that, no matter how hard you try, you won't find a **description** which will do the job of the indexical 'now'. If you want to grasp the sense of 'now', you must **abstract away from** night and day, morning and evening, winter and summer etc. You must **negate** all these **determinations**, just to retain something completely **general** or **universal**; and the same holds true, *mutatis mutandis*, of the spatial adverb 'here'.

The sense of a pure indexical involves maximal abstraction, i.e. negation of all concrete determinations, and thus maximal generality.

So the **object of sense-certainty**, which was meant to be a **distinct individual** and nothing but a distinct individual among many, turns out to be *for consciousness* not as an individual, given immediately, but as something **mediated by negation and abstraction** ('not night, not day, ...', 'not in England, not in Norway, ...') and **completely general**.

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But sense certainty has yet another card to play and moves right on to its **second stage**. If the **object fails** in the role of what is in itself, **skip it** and put the **subject** at its place. So, now, what is real is *me*, the subject, the details of the passing show being floating accidents of mine.

But now the problematic of the first stage **reoccurs** in a different shape. For in sense-certainty I am present to myself only through the sense of the **pure indexical 'I'**, whose sense is as much mediated by negation and as general as the senses of 'here' and 'now'.

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This leads to the **third and final stage** of sense-certainty, in which the **whole** of it, not just the object or the subject, is supposed to be what is in itself and given immediately.^{xiv} The difference between subject and object is now well lost, and so are all remnants of **discursiveness, propositionality**, and of the possibility of **falsehood** and **error**.

We finally have arrived at a **pre-propositional level** of thinking or intuiting, where immediacy really reigns. At that level consciousness doesn't **have impressions**, but **is an impression** or a **quale**, and a quale whose cognitive horizon does not extend beyond itself. So there is no room for any form of generality any more. Immediacy and individuality seem to be reached at last.

But if this scenario is still to count as a form of **consciousness**, the **difference of role** of the *Ansich* and the *Für-es* and thus the semantic duality of reference and predication must somehow be preserved even in this meagre context.

By *fiat* then let an impression as such have **proto-propositional form** and let it **refer** to what is here and now, where *here* and *now* are defined by the impression itself, and let it **predicate** immediate being of itself. This strange construction is the last resort in the attempt to vindicate sense-certainty.

But it is **all in vain** because of the **continuous** nature of **space** and **time**. There exists nothing logically atomic in space and time; each real bit of spatio-temporal reality is extended and thus a **one in many**. But then the problem of how to individuate each of the many parts of a given bit of space-time, recurs and with it the problematic of the first stage of sense-certainty.

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The **options** for conceiving the real as a manifold of immediately given distinct individuals are **exhausted** then and sense-certainty is definitely **falsified**. Its objects would be epistemically accessible not immediately and not as individuals, but via negation and as universals.

In the **successor shape of consciousness**, which Hegel calls **perception**, therefore the passing show is now conceived as being in itself a manifold of perceptible **universal traits**. This will lead to a dialectic of things as bare particulars and as bundles of properties, in the **second** chapter. (But we shall now leave the PhSp.)

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III. The Science of Logic

So much for the *Phenomenology*, then. Hegel's **programme** in the *Logic* may be viewed either in light of the *Phenomenology* or in its own self-sufficient light.

The *Phenomenology* offers as a **starting point** and as **subject matter** for the *Logic* its bare **result**, i.e. **absolute knowing** in the inarticulate and immediate version. But it does **not** supply a **method**, the phenomenological method with its dependence on the duality of an *Ansich* and a *Für-es* being exhausted, nor any rich results to serve as **axioms** for the logical enterprise.

PhSp offers no method and no axioms for the SoL

So, to come into the *Logic*, we may as well, instead of accomplishing scepticism painstakingly in the manner of the *Phenomenology*, just **postulate** that scepticism be accomplished, i.e. that everything (philosophical) be put into **doubt**. We will thereby achieve complete **pre-suppositionlessness** in the short way, by nothing more than our free decision to get into pure thinking. (For the *decision to think purely* cf. what Hegel says in § 78 of the *Encyclopedia*.)

The *Logic* then may be defined as **the (unique) presuppositionless theory**; and the **working hypothesis** that there is such a thing as the presuppositionless theory is, to put it mildly, so strong – in fact on the very edge of **inconsistency** – that it becomes surprisingly easy to formulate requirements that individuate the theory (step by step).

If we **spurn** the phenomenological **guarantee** that starting with absolute knowing qua immediate identity of thinking and reality will provide us with some worthy subject matter – and we may readily spurn that guarantee, because the *Phenomenology* doesn't tell us how to treat that subject matter anyway – then the *Logic* will have to find or to create its subject matter all on its own.

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Here is a sketch of how that might work.

Obviously, the **first theorem** of the *Logic* must state a logical **singularity** and one that cannot be effectively **denied**. For the sake of our working hypothesis (that pure thinking is possible), we must therefore postulate a common factor which is part of what is stated in any statement whatsoever, viz. **veritative being as such** or pure *being the case*.

A short glance at **Wittgenstein's *Tractatus*** may serve to illustrate the point here. Wittgenstein also postulates 'that which *all* propositions, according to their nature, have in common with one another', 'the general form of proposition' (*Tractatus*, 5.47).

In a way that is quite congenial to the beginning of Hegel's *Logic*, Wittgenstein characterizes this common factor as 'the one logical constant' and says that it 'is the essence of proposition' as well as 'the essence of the world' (5.471, 5.4711). Again, he identifies the *essence of proposition and the world* with the *logical form of picturing* and also with the *form of actuality* (2.18).

Apart from the one logical constant, Wittgenstein postulates **simple objects** (2.02) of various logical forms (2.0233) which 'contain the possibility of all states of affairs' (2.014) and which 'form the substance of the world' (2.021). Viewed in isolation, the objects are not **actual**, they define the range of possibilities, i.e. **logical space**. What actualizes them is the form of actuality, according to which they 'hang one in another like the members of a chain' (i.e. without any logical cement) in the atomic fact (2.03).

Hence, the world – the actual world – 'is the totality of facts, not of things' (1.1). Logical space, the totality of possible worlds, on the other hand is the totality of things, plus the form of actuality considered only in its role as logical form of picturing.

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In Hegel we get a somewhat different picture of the one logical constant and of logical space. To put it bluntly, Hegel gives a **dynamic** picture and offers an **evolution theory of logical space**. The logical constant, which he calls *pure being*, explodes in a kind of **logical big bang**, called *becoming*, and thereby starts a pre-temporal, logical process, eventually culminating in a fixed point called *the absolute idea*.

What triggers the big bang is **pure negativity** which has contaminated pure being right from the start. There are various ways to show this; for the present (preliminary) purpose I prefer to hint at one of them which involves a bit of **botanizing**, but is particularly short and simple. We all know that there is more to the real than pure being; so we need a **logical operation** which leads us from there to something more determinate and articulate. In the context of a presuppositionless theory we therefore need an operation which is the only candidate around, and such is **negation**, being the only non-trivial one-place truth function.

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03-Feb-09

Our (i.e. Hegel's) **working hypothesis** is: There is exactly one **presuppositionless** theory.

A theory is a (non-empty) set of **truth claims**. Now, the working hypothesis itself must show us the way to the first truth claim of the theory. Its content must be (1) **without alternative** and (2) such that it **cannot be effectively denied**. We must therefore postulate a minimal, invariant common factor of all truth claims whatsoever; and exactly that minimal factor will be the content of our first theoretical truth claim.

The content of an arbitrary truth claim is some particular **fact** or **being the case** or "**veritative being**". The content of our presuppositionless truth claim therefore must be "**the fact itself**" (Platonically speaking) or **pure being the case** or **veritative being as such** – (pure) **being**, for short.

An **aside**: We may distinguish at least four senses of the verb "to be": (1) veritative being or being the case, which arguably is the basic sense, (2) existential being (or existence for short), (3) predicative being, and (4) being in the sense of identity:

- (1) veritative being: attached to the whole sentence (it being the case that p)
- (2) existential being: attached to the subject term (there being X, X's existence)
- (3) predicative being: attached to the predicate (being so and so)
- (4) identity: attached to the identity predicate (being *the* so and so)

So, we start with **veritative being** as such (being simpliciter).

But notice: We do **not know** whether there is any such thing like a veritative being common to the contents of all truth claims; we just must **postulate** it for the sake of our programme! So, let's postulate it and see **what it will be like**.

In the best of all possible worlds we'll come up with exactly the same things that **Hegel** says about (pure) being). So let's first have a look on what he says and then check, if we find out those very same things.

Hegel starts with the one word sentence "Being". This seems to be the **formulation** of the **theorem** itself.

- (1) "Being" is designed to state (mean) *being*.

Then, Hegel leans back and says quite a lot of things about being by way of what he later calls "**external reflection**" (p. 110). External reflection comes in different grades, i.e. it can be more or less external: it may concern "the nature of the Notion itself" or be "an external comparison" (ibid.). But either way it is to be contrasted with "that which is posited in a notion" and *belongs in the developmental consideration of that notion, to its content* (ibid. Miller's English is a bit confusing here, at least to me).

Now, it seems that strictly **nothing** is posited yet in **pure being** so that everything we can say about it belongs to our external reflection. Otherwise Hegel would be paradigmatically inconsistent in what he says about being. Let's make a little list:

Being is

- (1) expressed by the one word sentence "Being",
- (2) indeterminate,
- (3) immediate,
- (4) incomparable (equal only to itself, not unequal relatively another), homogeneous
- (5) emptiness
- (6) pure (i.e. empty) intuiting,

- (7) pure (i.e. empty) thinking,
- (8) nothing.

This is an impressive list of strong claims about being, and it is immediately clear that Hegel would be talking rubbish, if what he said, were not meant as **external reflection**. For, if being is indeterminate and empty, you cannot at the same time try to determine it by seven theorems [(2) through (8)].

So, obviously, Hegel makes a distinction between what being is like

- (a) for pure, presuppositionless thinking,
- (b) for us (our background thinking).

Let us call these two levels (a) **object logic** and (b) **background logic**. The object logic is pure thinking itself, the presuppositionless theory that we are after. The background logic is our own theory of how a presuppositionless theory might be possible and how it would have to look like.

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Let us now step back from Hegel's text and see, if we can independently develop and justify what he is doing and saying.

We may begin with the distinction of theoretical **levels** just sketched.

That distinction is an immediate consequence of our **working hypothesis**. As players of the **game** of giving and asking for **reasons** we are just not able to propose a presuppositionless theory, at least not on our own account. Whatever we propose is open to possible doubt or negation. This is quite trivially so: Whatever content we propose is propositional and thus subject to bivalence: It is proposed as true and may ipso facto be false. Such is the way of objective truth claims.

Objectivity – independence of claimed fact from act of claiming – possibility of error
– bivalence (T or F) – propositionality (S-P-structure)

So, all we can do on behalf of a strictly presuppositionsless theory is to devise a **fanciful theoretician** existing in a **non-standard** epistemic context who can entertain such an extreme “theory”. So, within the Hegelian enterprise we have to distinguish an **object theory** from our **background theory**, just as Hegel himself did.

The **object theory** is pure thinking strictly so-called, viz. the strictly presuppositionless theory of our fanciful theoretician. The **background theory** is our (i.e. Hegel's) own logical theory, in which we have to try to lean on nothing (or little) more than our working hypothesis that there is pure thinking. To repeat Hegel's own words, the object theory is the **internal development** of the Notion itself, while the background theory is our “**external reflection**”. But our external reflection must not be too external, if it is to qualify as the logical background theory. It is part of the background theory, only if “it concerns the nature of the Notion itself” and is not just “an external comparison” (SoL 110). (Hegel's “remarks” to the main text are mostly such external comparisons, e.g. with Parmenides, SoL 83, or Kant etc.).

OL: internal development of logical space

BL: our external reflections insofar as they concern the nature of logical space itself
 (“Remarks”: external comparisons and the like)

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Now from here it is a short path to our points (1) through (8), especially to point (1).

If the **object logic** (= the presuppositionless theory) is start with a ‘**theorem**’ that cannot be denied in the strictest possible sense of “can”, then it cannot start with a theorem at all, be-

cause theorems have propositional form and are thus bivalent (true or false) and can be denied, doubted, negated. For any theorem whatsoever the possibility of error has been provided for (to use a Wittgensteinian turn of phrase, from the Blue Book).

Thus the first content of the object logic cannot be propositional but must rather be like a Humean sense **impression**, though of course not **sensuous**, but **intellectual**.

This gives us the **one word sentence** “Being” as an inadequate attempt to say, what cannot be said, but only “intuited” in some way (viz. by intellectual intuition). So, we have justified the Hegelian **point (1)**.

And we have at the same time already made an important step towards the justification of **points (6) and (7)**, where being is equated with pure intuition and pure thinking respectively. But let us proceed in due order.

So, what about **indeterminacy**? Well, sure, being has to be indeterminate (undetermined), because we abstracted away from all determinations of specific truth claims in order to retain nothing but the common factor of all of them, which must be extremely neutral and thus completely indeterminate. As soon as we said something determinate, we would have been making a choice and our saying what we said would not have been strictly without alternative and without presupposition. So this is **point (2)** then.

(3) **Immediacy**. With immediacy we appeal to the **framework of givenness**. And this is just what we should have expected, because what remains after abstracting from all determinations of truth claims – the *One Logical Constant* (to use Wittgenstein’s turn of phrase) – must be taken up by thinking as something **given**. We saw – point (1) – that this content doesn’t have **propositional form** any more. It’s a **pre-propositional thought content**, if such there be, a content we can only know of by Russellian “**acquaintance**”, i.e. immediately.

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Excursus ad pre-propositional thought contents or pre-propositional states of affairs, “**urstates**” for short. Here’s a little theory of urstates, meant as an idealized reconstruction of the framework of givenness, thus as the reconstruction of something untenable.

Theory of urstates (TU):

(TU-0) Urstates are pre-propositional complete contents of perception or thought.

(TU-1) If an urstate is grasped (in perception or in thought), it is known with absolute certainty (infallibility).

(TU-2) If a state of affairs is known with absolute certainty, it is an urstate.

(TU-3) What is known with absolute certainty, lies beyond bivalence and is true in a non-contrastive sense of „true“: *uni-valently* true (so to speak).

(TU-4) Veritative and existential being is the same for urstates.

(TU-5) If an urstate is grasped, it does obtain (i.e. it is a fact: an urfact).

(TU-6) If an urstate obtains, it is grasped (urstates are self-intimating).

(TU-7) Propositional states of affairs exist in that they either obtain or do not obtain, with respect to some object(s), i.e. as dependent entities. Urstates exist in that they obtain, with respect to themselves, i.e. as independent entities.

(TU-8) Two main genera of urstates are conceivable (and have in fact been conceived in the history of philosophy): sensuous urstates and intelligible urstates.

(TU-9) The being – the undifferentiated obtaining and existing – of an urstate is its presence in the logical space of urstates. In the logical space of urstates nothing can be hidden (there is no hidden obtaining-or-existing): In the logical space of sensuous urstates there is nothing unperceived; in the logical space of intelligible urstates there is nothing unconceived (nothing unthought-of).

(TU-10) Sensuous urstates, if such there be, are logically private entities: Only the individual perceiving subject who grasps a sensuous urstate can know of it. (A logical space of sensuous urstates is in each case the logically private sensorium of an individual perceiving subject.)

(TU-11) Intelligible urstates, if such there be, are logically public entities: They are grasped by reason in general, in which the rational faculties of each individual thinking subject “take part“, in some sense to be explained by further theorizing. (The logical space of intelligible urstates is a *singulare-tantum*: the totality of that which can be known *a priori* by reason with absolute certainty.)

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As soon as you try to reconstruct the framework of givenness by an explicit theory, you will realize its logical or conceptual instability which is normally disguised by surrounding theory (think, e.g., of Hume for sensuous and of Plato for intelligible urstates). Hegel takes the framework seriously – he has to, given the working hypothesis – and starts with one singular superlative urstate for (non-discursive, intuitive) thinking, which he calls “(pure) being”. The logical instability and inconsistency of positing such an urstate is what drives his theory to further (ur-)states. So much for the immediacy of being.

(4) Being is **incomparable** (equal only to itself, not unequal relatively another) and **homogeneous**. This is easy enough. The One singular urstate being, in order to be without alternative for thinking, has to be identical to the whole of logical space. But then it is incomparable. And logical space cannot be in any way differentiated at this early stage of thinking. It must be homogeneous (for lack of all determinations).

(5) **Emptiness**. If being is a logical space devoid of determinations, it is an empty logical space: “pure indeterminateness and emptiness”.

There is nothing to be intuited in it and nothing to be thought in it – which brings us to points **(6) and (7)** and their respective identifications:

Being = pure intuiting itself = empty thinking.

With urstates, three important distinctions are undercut:

- (a) the distinction between **intuiting** and **thinking** (because discursive thinking is associated with propositionality),
- (b) the distinction between **object** and **subject** (because objectivity is associated with the possibility of error and therefore also with propositionality), and
- (c) the difference **between** act and **content** (because the act would have to belong to the subject and the content to the object).

Consequence: Our background logic seemed to be one step remote from being, because being seemed to be the subject matter of the object logic, while the object logic seemed to be the subject matter of the background logic. Now it turns out, that being and pure thinking (= the object logic) just coincide. So, our background logic is the theory of both: of pure being and *ipso facto* of pure thinking. Both are one and the same (at least at the beginning of the SoL).

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Ad (8): **Being is nothing**. Taken in isolation, this may come as no surprise, after all that has been said about being. What makes it non-trivial and challenging is that Hegel will go on to say that being and nothing are “absolutely distinct”. But this claim will have to wait.

What is important for the moment is that Hegel wants to convey the thought that pure being is **contaminated** with **negativity** right from the start. Why is that so?

I know of two independent reasons (one a bit an external reflection, which I already adumbrated the other day).

(i) There can be no doubt that there is **more** to logical space than just **pure being** (i.e. emptiness). Even if all there is (all distinctions we make), should turn out to be illusory, then still in the mode of illusion there “are” (or seem to be) a lot of distinctions and determinations. **Parmenides** may be right for the realm of real being, but even he must acknowledge something like a “passing show”, even if only in the mode of illusion (*doxa*).

Therefore it is **trivial** and thus **no** substantive **presupposition** at all to “postulate” (but it’s really no big postulation) a kind of operation on pure being that will lead from there to somewhere else.

We found pure being by reflecting on truth claims: as the minimal neutral ingredient of each and every truth claim, considered itself as a superlative truth claim. So what we need is a truth operation or truth function, and a one-place truth function at that (there being no more than one content “given” as a candidate operandum). By sheer combination (exhaustion of possibilities) we get four one-place truth functions:

p	f(p)	p	g(p)	p	h(p)	p	i(p)
T	T	T	T	T	F	T	F
F	T	F	F	F	T	F	F

If „Being!“ is the first „theorem“ of our OL, we are looking for a second theorem. But a theorem is a **truth claim**. So we cannot work with the truth function “i()”, because it is the **false-maker** and we don’t (and cannot) want to say something false.

And we cannot work with function “g()”, because it is the **identity truth function** which leads us nowhere else and leaves everything as it is.

We cannot work with function “f()” either, because it is the **truth maker**, and we have already claimed “Being!” to be true. In fact, one could view the situation at the start of the SoL as the result of having worked with the truth maker already (for to say something which is beyond possible doubt one has to do exactly this: apply the truth maker to an arbitrary truth claim).

So, the only candidate that survives and is thus without viable alternative is the truth function “h()”, i.e. **negation**.

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But now look what happens, if we apply negation to pure being. **First of all**, it cannot be done, if negation, being made – and known – for propositions (i.e. propositional states of affairs) is not **re-tailored** to suit **urstates**.

But let us ignore this problematic for a while and pretend that we are working with regular propositional **theorems** and regular propositional **negation**.

If we apply negation to our first theorem “Being!”, we get something like “Not (being!)” – and a problem (the **exclamation marks** are just reminders that we are here treating of claims, i.e. sentence-like contents, not of “things”, i.e. term-like contents):

OL (object logic, pure thinking):

(0) Being!

(1) Not (being)!

The problem is this, or, more exactly, the **first** of (at least) two severe problems is this: Theorem (1) is the contradictory opposite of theorem (0); so OL is **inconsistent**.

To which we might **reply**: “So, let OL be inconsistent; it’s not our own theory after all. Our own theory is BL (the background logic) whose theorems state that pure being is indeterminate, immediate, incomparable etc. – the above list. As long as BL is consistent, we are on the (b)right side of life.”

Well, yes and no. **Yes**, we could put the blame on OL and stand free. No, for then our project, hardly begun, would all be in ruins: Pure thinking would be possible, yes, but only to lead into inconsistency (and to remain there) after it’s very first thinking manoeuvre. – So, we better took care of OL, after all, and tried to mend its inconsistency – in order to go on with it for a while.

So, how can a sentence and its negation (its contradictory opposite) both be true? Only if they are **indexical** sentences, i.e. sentences with **varying truth value**. There are, basically, **spatially** indexical sentences and **temporally** indexical sentences. In fact, most indexical sentences are both spatially and temporally indexical like “It is raining” (viz. here and now).

Now, we don’t at the present moment have any analogue of **space** for OL; but trivially we do have an analogue of **time**: the succession of theorems (0) and (1) itself! This is a non- or **pre-temporal succession** like the succession of the natural numbers. So the relevant indexicality here is non temporal, but pre-temporal, purely logical indexicality.

So let us say: At logical point 0 theorem (0) is true: “Being!”. Then (a purely logical “then”), at logical point 1, theorem (1) is true: “Not (being)!”

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Do we have solved our problem? Not yet. Remember: the content of “Being!” is the minimal common content of whatever truth claim, thus even of its supposed contradictory opposite “Not (being)!”. That means, that “Being!” is a **logically eternal sentence** (a sentence with constant truth value) after all and that “Not (being)!” is **self-contradictory** and thus **self-falsifying**. It explicitly says “Not (being)!” and, like any old statement, implicitly says (i.e. entails) “Being!”. Can it nonetheless be true in some sense and for a “while” (at least a very short one)?

Yes, if we conceive it on the analogy of a certain **subclass** of temporally indexical sentences, which might be called *infinitesimally short term indexical sentences* or just **infinitesimal sentences**, for short. An example of a temporally infinitesimal sentence is: “The goal keeper catches the ball”, for as soon as he catches it, he will have caught it and be no longer catching it. By contrast, “The goal keeper holds the ball” is temporally indexical (he won’t hold it forever), but not infinitesimal (he may hold it for quite a while – until the spectators begin to whistle, and even longer).

And not only that; the act of catching is exactly of the **desired logical form**, at least if we idealize a bit and think of the very moment, when the ball hits the skin of the hands (or the surface of the gloves) of the goal keeper. The ball then, for an infinitesimal moment of time, **does and does not** touch the skin of the goal keeper.

The **principle of non-contradiction** can be salvaged here, if we restrict it to (veritative) **being** and give it up for (veritative) **becoming**, i.e. for the very **moment of change**.

So, what we’ve got in OL is the following:

- (0) “Being!” – A logically eternal sentence, expressing (pure) being.
 (1) “Not (being)!” – A logically infinitesimal sentence, turning false instantaneously.

Therefore we get as a third OL-theorem:

- (2) “Not (not (being)!”, equivalent to “Being!”, now as a logically indexical sentence.

What do sentences (1) and (2) express? Sentence (1) implicitly expresses being and explicitly expresses the contradictory opposite thereof. It thus expresses a “mixture” of being and its negative: **becoming**.

Sentence (2) then expresses the contradictory opposite of becoming, and again **being**, but now it does so as a logically indexical sentence, i.e. it explicitly expresses **non-eternal** (but relatively stable) **being**. (Implicitly it expresses, like any old sentence, eternal being.) This relatively stable, but non-eternal being is called “**Dasein**” by Hegel (in Miller’s translation: **determinate being**).

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Now, theorem (0) drops out of the logical series and doesn’t compete with the others any more; it is implicit in all successor theorems, but cannot be stated (as a logically indexical sentence) on its own.

The **first theorem of OL** thus turns out to be (1), the theorem of **becoming**. It expresses the **big logical bang** with which logical space comes into existence and begins its **evolution**. Its first relatively stable state is **Dasein** (determinate being), expressed by theorem (2).

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Further **tasks** for us: (A) to tailor **negation** for **urstates**-of-affairs, (B) to reconstruct **Hegel’s text** (being – becoming – determinate being), (C) to say something about the alternative way – way (ii) – in which **negativity** can be shown to be present in the logic right from the start.

Ad (A). It is of the essence of **propositions** (propositional states of affairs) that their **obtaining** is not the same as their **existence**. Any existing proposition may be grasped, e.g. the proposition that Atlanta is the capital of North Carolina. But not any existing proposition need obtain, as witness our example. If we grasp a proposition that does not obtain, we err. (Cf. Plato’s theory of the possibility of error in the “Sophistes”.)

Now, if a proposition does not obtain there is always a related proposition which does: its negation (contradictory opposite). So, as Aristotle noted, propositions come in **pairs** (in contradictory pairs), **both** members of which will exist and exactly **one** member of which will obtain. This makes it easy, in fact trivial, for non-obtaining states of affairs to be “sublated” or “ideally there”, in the realm of propositions: You can always think, consider, plan, imagine, what is not the case.

This is different with **urstates** (pre-propositional states of affairs). For them obtaining and existence are identical. So there cannot be (at least until further notice; but Hegel will work hard to change this situation) negative urstates (negations of urstates, contradictory opposites of urstates). **To negate an urstate is (until further notice) to annihilate it**, to erase it from **logical space**.

Immediate **consequence**: As soon as we allow for the negation of urstates, **logical space** itself must be conceived of as **subject to change**. So, we can independently see that we need **logically indexical contents**, as soon as negation of urstates is admitted as a logical operation. A logic of urstates will have to be an **evolution theory of logical space**. And so is Hegel’s SoL.

But if **the negation of an urstate is its annihilation**, there will be no sublating, idealizing, positing, let alone mentally representing of urstates, at least not until further notice. This is

what makes **Hegel's theory of sublation** so highly non-trivial. He manages to show how in the evolution of logical space room is made for the sublation of urstates after all so that a negated, i.e. annihilated, urstate can still be present "ideally" (be represented, posited, "sublated") in its successor urstate. (But this is a story for until later.)

Ad (B), Hegel's text. We have hitherto reconstructed what Hegel says about **being**, and we have introduced a second urstate called "**becoming**" (a mixture of being and negativity). But we have so far said nothing about nothing (negativity).

We have introduced negation by way of **external reflection**. External reflection comes in **grades of externality**. Ours has been quite external, at least by comparison with way (ii) of introducing negativity, yet to be considered. So, how do we get to Hegel's text from our comparatively external standpoint of reflection?

Well, from our standpoint pure negativity has to be **interpolated** between *pure being* and *becoming* as that which is responsible for the logical big bang of becoming given pure being. But as the evolution of logical space starts with becoming, negativity cannot have been added to pure being as a second principle at some logical point; it must have been there right from the start, together with and separable from pure being. So pure being itself must have been negativity after all, contrary to what we may have thought and intended, when we first postulated pure being.

This gives us BL-theorem (8): **Being is nothing**. (In the German original, "nothing" is capitalized here: "Nichts", which means that Hegel at the end of "A. Being" is already equating the purported urstate being with a purported urstate nothing and is not just saying "Das Sein ist nichts", Being is nothing, i.e. there is no such thing as being.)

But then we should expect that Hegel says much the same things about *nothing* in "B. Nothing" as he said about *being* in "A. Being". And this is what we find, when looking at the text:

Nothing is [I numerate according to our list of BL-theorems about being]

- (4) equality with itself,
- (5) complete emptiness,
- (2) absence of all determination and content ...
- (6) empty intuiting,
- (7) empty thought
- (8*) pure being

If we compare this list with our list on pure being, according to which being was

- (1) expressed by the one word sentence "Being",
- (2) indeterminate,
- (3) immediate,
- (4) incomparable (equal only to itself, not unequal relatively another), homogeneous
- (5) emptiness
- (6) pure (i.e. empty) intuiting,
- (7) pure (i.e. empty) thinking,
- (8) nothing,

we notice that, not amazingly, (1) is missing and (8) has been supplanted with (8*). But, which seems to be more significant, (3) is missing as well. As pure negativity (or nothing) is the principle of all operation and mediation, Hegel shies away from calling it "immediate".

So far, the reconstruction of Hegel's text from our considerations runs quite smooth. But we may stumble, if we now turn to "C. Becoming". First, Hegel reiterates (8) or (8*):

Pure being and pure nothing are, therefore, the same.

But then it gets difficult, and the difficulties seem to culminate in Hegel's claim

that they [being and nothing] are not the same, that they are absolutely distinct.

Of course, if they are distinct at all, they must be absolutely distinct, because they cannot share any determinations (like, say, a red cube and a red sphere), for want of determinations. But why should they be distinct? And if they were, wouldn't we get a contradiction in our very own theory (BL)? For BL would then seem to say both:

(8) $B = N$

(9) $B \neq N$

Let's start with the first question: **Why $B \neq N$?** Because otherwise, nothing (*nichts*) would have "happened", given pure being. We need *nothing* (das Nichts) as an **explainer** of becoming; so it must be different from *being*.

Second question: What about the **contradiction of (8) and (9)**? These cannot be theorems of BL, otherwise BL would be inconsistent. So, (8) and (9) can only serve in a **reductio ad absurdum** of the existence of such urstates as pure being and pure nothing. But this then affects our whole lists of BL-theorems about pure being and pure nothing: They are true only in the *modus irrealis*, like physical theorems about mass points or punctiform events.

This result **accords with Hegel's text** in so far as Hegel says that the difference of pure being and pure nothing "exists not in themselves, but in a third, in subjective *opinion*" (SoL 92, end of remark 2). This seems to be true as well of being and nothing themselves, because they are but "empty figments of thought" (85, remark 1), which thus cannot be grasped in thought, but only "meant" or "opined".

And it **accords with our own previous findings** in so far as we let the logic, qua evolution theory of logical space, start with **becoming**, thus relegating pure being (and pure nothing) to the logical "pre-history" which cannot be grasped by pure OL-thinking, but only projected by way of BL-theorizing.

Even if we grant logical urstates in general (which we do at least provisionally, for the sake of our working hypothesis), **pure being and pure nothing will not be among them.**

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Ad (C), way (ii) of introducing negativity. We may now finally look at a second way of introducing **negativity**, a very short one, somewhat less external than the first one and closer to what Hegel says himself.

If we abstract away from all distinctions between possible truth claims, then literally **nothing** (*nichts*) will be left over, for every **candidate left-over** could in principle be made the content of a separate truth claim and would then itself have to be subjected to our Grand Abstraction.

So really nothing (*nichts*) is left over. But we treat this zero left-over as something, when we say that it is the logical urstate of **pure being**. We have thus reified nothing to *the nothing* (*nichts* to *das Nichts*) and given it the name "being". But not only the name; that would be too simple, we could then identify being and nothing (" $B = N$ ") and leave it at that and would not get to their difference (" $B \neq N$ "). What really happened is that by reifying nothing (for the sake of our working hypothesis) we decided to prefer a different kind of abstraction which leaves over something neutral and **affirmative**, aptly called "(pure) being", which must be different from the reified "zeroness" called nothing. (Cf. Hegel's remark 3, SoL 99f.)

This way of introducing negativity is more internal and shorter than the first one, but I only accept it, because it is backed up with the first one.

10-Feb-09

Perhaps the second way can still be made a bit more convincing. The total **abstraction** from all determinations **surpasses** its end and leaves literally nothing under the title “(pure) being”. We will see that, if we try to restore the omitted determinations again. For it then will become clear that nothing can be added to being.

As Aristotle saw and taught, being, *to on*, is not a **genus**. A genus is differentiated into sub-genera and, lastly, **species**, by a (specific) **differentia**. This may be illustrated by way of comparison. Pure **blue** can be differentiated by adding, as a differentia, **red** or **green** and will then be **violet** (reddish blue) or **turquoise** (greenish blue) respectively.

Now, trivially (i) only something which is (only an *on*) can be added to something and (ii) nothing can differentiate itself (by being added to itself).

That is quite unproblematic in the case of colours, for (i) red (or green) *is* (exists) and (ii) is not the same as blue. But it is problematic, nay, impossible, in the case of a **purported genus being**. To differentiate being some being would have to be added to being as differentia other than being itself; but that would presuppose the differentiation of being as accomplished which it is the job of the differentia to explain. Put in a slightly different way: If we add being to being, no differentiation will be done; and if we add a non-being no differentiation (in fact nothing) will be done either.

Therefore being is no genus, says **Aristotle**, but possesses a primitive internal multiplicity that lies still beyond the generic/specific distinction (*to on legetai pollachôs*). **Plato** on the other hand thinks that being is only one among several highest genera (*megista genê*), which are all co-original and which may partake one at the other. So being may lend itself (i.e. being) to the others and will receive their respective determinations in turn. **Parmenides** however said that being cannot be differentiated, full stop, thus sacrificing the phenomena (of plurality and becoming), which Plato and Aristotle then tried to save against his verdict.

But we need not decide between Parmenides, Plato and Aristotle here, because **Hegel** offers a different approach: If being is to be differentiated by being (and there is no alternative at the starting-point of pure thinking), then it must at the same time be its **own contradictory opposite**: affirmative **immediacy** waiting to be differentiated on the one hand (therefore being which is absolutely distinct from nothing) and pure differentiating **negativity**, called *nothing*, on the other hand.

(By the way: The **reductio ad absurdum** of separate pure being and separate pure nothing can be turned into a critique of the early Wittgenstein’s metaphysics of the **One Logical Constant** – in the spirit of the later Wittgenstein’s own critique of the idea of general characteristics.)

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Last week, we have reconstructed Hegel’s text of “A. Being”, “B. Nothing” and “C. Becoming. 1. Unity of Being and Nothing”. We have now to look at “2. Moments of Becoming: Coming-to-be and Ceasing-to-be” and “3. Sublation of Becoming”.

Becoming has two “moments”, i.e. “sublated” contents. So, here the story of **sublation** begins. It begins with two contents, being and nothing, which are there **only qua sublated**, never qua **self-subsistent** contents (because becoming is the **first** logical content).

Becoming is (speaking apart from Hegel) something radically new over and against being and cannot be reduced to it: Becoming is **becoming-all-the-way-down**. If becoming is a “**mixture**” of being and nothing, then each ingredient is itself a “mixture” of being and nothing and so on ad infinitum.

In this way, becoming is a **non-well-founded** content. The SoL abounds with non-well-founded contents. So, we'd better take a look at non-well-foundation in time, by way of an excursus.

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Non-well-founded Phenomena

The set theoretic axiom system ZFC leaves it open, whether or not there are non-well-founded sets. If we add the foundation axiom, to get ZFFC, non-well-founded sets are excluded. A set is well-founded, iff it has no infinite chain(s) in its membership ancestry, i.e. no chain like:

$$b \in a, c \in b, d \in c, e \in d, \dots$$

In pure **set theory** (where there are no "Urelemente", original members) each chain of membership ancestry will, in ZFFC, terminate in the **empty set**, 0, after a finite number of steps.

But **Peter Aczel** (in: *Non-Well-Founded Sets*, CSLI Lecture Notes 14, Stanford 1988) has shown that if ZFC is consistent, then ZFC+AFA is consistent as well, where AFA is a certain anti-foundation-axiom.

According to AFA there exists the unique set, Ω , which is its own unit set:

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

Obviously, Ω has an infinite chain of membership ancestry ($\Omega, \Omega, \Omega, \dots$).

There are all sorts of other non-well-founded sets as well, according to AFA, like the set

$$0^* = \{0^*, 0\},$$

but Ω is the one and only set which is its own unit set. So it could be defined by this characteristic. But if you try to define it this way:

$$\Omega =_{df} \{\Omega\}$$

Then the definition gets circular or, if you reiterate the definiens within itself, infinite:

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

So if infinitely long sentences were possible, you could define Ω simply by an infinity of pairs of curly brackets.

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What Aczel has shown, at least to my complete satisfaction, is that nothing is inherently wrong with the idea of **Unfoundedness**.

E.g. **appearances** in the **Kantian** sense are non-well-founded entities (maybe they are "partially founded" like the set 0^*) in at least two respects, (i) mereologically and (ii) causally. (That's what the antinomies of pure reason are about). So (i) Leibniz ought not to have said that spatial entities are *phaenomena bene fundata*, he should rather have said that they are *phaenomena non bene fundata*, because you will never come to an end if you start dividing the continuum, nor if you are looking for a sufficient cause of an event. (Thus the monads, after infinitely many divisions, come essentially too late.) And (ii), *pace* Leibniz, the cosmological argument doesn't work; it only would, if you could start with phenomena which were **causally well-founded**. (Thus the first cause, after infinitely many non-first causes, comes essentially too late.)

The abstract concept of foundation, of which set theoretic concept of foundation is a particularly well-understood species, is extremely important in first philosophy. (If we philosophers had no other reasons for doing some set theory, this by itself would be a very good and sufficient one.)

Now, non-well-foundedness is always linked to some **operation** or other, in set theory to the (multigrade) set forming operation, $\{\dots\}$, in mereology to the operation of forming the mereological sum, in the theory of causality to the operation of causation, and in the SoL to the (as yet one-place) operation of **negation**.

The analogue of the set Ω in negation theory would be the negation-of-itself:

$$\begin{aligned} \Omega &= \{\Omega\} = \{\{\Omega\}\} = \{\{\{\Omega\}\}\} = \dots = \{\{\{\dots\}\}\} \\ v &\leftrightarrow \sim(v) \leftrightarrow \sim(\sim(v)) \leftrightarrow \sim(\sim(\sim(v))) \leftrightarrow \dots \leftrightarrow \sim(\sim(\sim(\dots))) \end{aligned} \text{ [One could drop the brackets]}$$

The state of affairs v here would be its own contradictory opposite, thus self-annihilating qua urstate or self-falsifying qua propositional state.

A well known example of the propositional variant of v is **the Liar**:

(1) (1) is not true.

The deep **problem** with cases of the negation-of-itself is that we can't negate them and be free from their contradiction, as we can with ' $p \wedge \sim p$ ' by saying ' $\sim(p \wedge \sim p)$ '. For then we would be saying what they already, qua self-negations, say themselves, and would thus endorse them and treat them as true after all and be committed to their inconsistency.

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Excursus (within the excursus):

Peter Aczel, *Non-Well-Founded Sets*. CSLI Lecture Notes 14. [Stanford] 1988.

The set theoretic axioms AFA_1 , AFA_2 und AFA were introduced by Peter Aczel in his work on non-well-founded sets. Aczel represents sets by **accessible pointed graphs** (APGs). A **graph** consists of **nodes** and **edges**, where an edge is an ordered pair of nodes:

$$\bullet \rightarrow \bullet$$

The posterior node is called a **child** of the anterior node. A **path** is a finite or infinite sequence of nodes which are related by edges:

$$\bullet \rightarrow \bullet \rightarrow \bullet \rightarrow \bullet \rightarrow \bullet \rightarrow \dots$$

A graph is **pointed**, if it has a special node called its **point** (a first or foremost node, intuitively speaking). A pointed graph is **accessible**, if for each of its nodes there is a path leading to it from its point. A **decoration** is an assignment of sets to nodes such that the children of a node are assigned the members of the set that is assigned to the node. A **picture** of a set is an APG with a decoration in which the point of the APG is assigned the (pictured) set. A **well-founded** graph, finally, has no infinite path.¹

Aczel first shows that each well-founded graph has a unique decoration and that therefore each well-founded APG is the picture of a unique set. The simplest APG, e.g., consists of a node without children and is the picture of the empty set:

$$\bullet \quad \emptyset$$

An APG consisting of a single edge (i.e. two nodes) is the picture of the unit set of the empty set (and so on):

$$\begin{aligned} \bullet \rightarrow \bullet & \quad \{\emptyset\} \\ \bullet \rightarrow \bullet \rightarrow \bullet & \quad \{\{\emptyset\}\} \end{aligned}$$

It can further be shown that every set has a picture (which presupposes, of course, that many paths, in fact infinitely and even non-denumerably many paths may spring from a single node). Since there are non-well-founded graphs, an axiom is motivated by all this which Aczel calls the **anti-foundation axiom**, **AFA** for short:

¹ Aczel, loc. cit., p. 4.

AFA: Every graph has a unique decoration

So, by that axiom, if a graph is an **APG** (i.e. accessible and pointed), then it is the picture of a unique, well-defined set. And if an APG is not well-founded, then so is the set, whose picture it is.² From AFA therefore it follows that there are non-well-founded sets. The simplest example of the picture of a non-well-founded set would be an APG whose sole edge leads from its point back to the point:



This APG is a picture of the set Ω for which the following holds: $\Omega = (\lambda x)(x = \{x\})$, i.e. for which holds: $\Omega = \{\Omega\}$. That this APG has an infinite path is shown by its expansion to an infinite *tree*::



Aczel points out that an analogous expansion of the equation ' $\Omega = \{\Omega\}$ ' would issue in an ill-defined infinite expression:³

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

This is the analogue of the infinite expression ' $\sim(\sim(\sim(\dots)))$ ' which would be an ill-formed formulation of the Liar.

Non-well-founded sets are excluded from the set theoretic universe by the **foundation axiom, FA**, which is usually added to the set theoretic axiom system of **Zermelo and Fraenkel, ZF**, or to this axiom system plus the **axiom of choice (AC)**, **ZFC** (=ZF + AC). This addition provides us with the "regular" axiom system **ZFFC** (ZF + FA + AC).

The foundation axiom says that **all sets are [well-]founded**. (I ignore differences between foundedness and well-foundedness for reasons of simplicity here.) A set is [well-]founded, if each of its non-empty subsets has at least one member such that the intersection of that member with the subset is empty:⁴

$$x \text{ is [well-]founded} \leftrightarrow (\forall y)(y \neq \emptyset \wedge y \subset x \rightarrow (\exists u)(u \in y \wedge y \cap u = \emptyset)).$$

Obviously, Ω is non-[well-]founded, for the only non-empty subset of Ω is Ω itself, and the only member of this subset, i.e. Ω , is such that its intersection with Ω is not empty but is Ω once again.

Since Peter Aczel has given a **relative consistency prove** for AFA, (i.e. has proved that AFA is consistent, if ZFFC is), the question whether there are non-well-founded sets must be decided by other means, e.g. by recourse to our deep set theoretic intuitions (if such there be) or by recourse to the utility of ZFFC or AFA respectively within or without mathematics.

FA privileges certain APGs over some others: those that are well-founded. Only well-founded APGs are to have unique decorations, only they are to be pictures of sets. AFA on the other hand is totally egalitarian in spirit:

Every graph has a unique decoration,

from which it follows that every APG is the unique picture of a set and that there are non-well-founded sets.⁵

² Ibid., p. 5f.

³ Ibid., p. 6.

⁴ Cf. Heinz-Dieter Ebbinghaus, *Einführung in die Mengenlehre*, Darmstadt: Wissenschaftliche Buchgesellschaft, 1979 (second edition), p. 77 and pp. 127f.

⁵ Aczel, loc. cit., pp. 4-6.

We need not bother with questions of the existence of certain sets, for we are not intrinsically interested in set theory here. We may just note that neither the claim that there are unit-sets-of-themselves nor the stronger claim that exactly one such unit-set-of-itself, Ω , exists, is inconsistent or absurd.

The difference between those two claims is important. AFA may be expressed as the conjunction of two claims:

AFA₁: Every graph has at least one decoration.

AFA₂: every graph has at most one decoration.⁶

AFA₁ leaves it open that there might be different unit-sets-of-themselves so that one might have a set x and a set y with: $x=\{x\}$, $y=\{y\}$ und $x\neq y$. AFA, on the other hand, permits us to define: $\Omega =_{df} (\bigcap x)(x=\{x\})$. Given AFA, Ω ist *the* unit-set-of-itself.

Of course, even then Ω cannot be defined as *the* non-well-founded unit set; for the unit set $\{\emptyset^*\}$ is non-well-founded too. Only if we limit our universe to unit sets in the first place (i.e. to graphs whose nodes have at most one child each), will Ω be the only non-well-founded (unit) set.

This is of some interest, because propositional negation is a one-place operation. For if we want to make use of the set theoretic analogy for the SoL, then we may indeed limit our attention to unit sets (at least until further notice). And if we side with AFA, then we may say that the thought content that gets expressed in the Liar is *the* negation-of-itself and *the* unfounded (or not-well-founded) negation.

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In **set theory**, of course, if **AFA** had turned out **inconsistent**, one simply would have denied it, i.e. one would have denied the **existence of Ω** . One can always conceive of some entity and go on to deny its existence. But one cannot conceive of some **thought content** and go on to deny its existence, the *esse* of thought contents being their *concupi posse*. One can, if inconsistency threatens, deny the content's **truth**, its **obtaining** or **being the case**. So, v (or the Liar), as soon as conceived, is there to stay, only the question of its truth is open.

(Those who want to deny its existence qua graspable content betray themselves, by the way, because they would not take any pains to deny its existence, if they hadn't grasped it all too well. Since we understand the Liar, we – some of us at least – would like not to have understood it.)

And if we now go on and say that v (or the Liar) is **not true**, we say what it says and thus endorse it.

From which I draw the conclusion, saying: Yes, we *are* committed to inconsistency. **Thinking by its very nature** (not only contingently, from time to time, if we are careless) **is inconsistent**. (Parmenides had no chance in the first place: even extremely “dulling” down logical space to one singular urstate wouldn't help; pure being already is inconsistent.) But we must not go on now and draw the **sceptical** or cynical or playful conclusion that **anything goes**; for **thinking by its very nature** (by rational fiat, by a Fichtean “Tathandlung”: the self-constitution of reason as a binding norm) **ought to be consistent**. Consistency then or, what comes to the same thing, thinking is an **infinite task** (as Fichte – but not Hegel – would say). And the **law of non-contradiction** (by rational fiat) is valid as a necessary **regulative principle** for thinking: Wherever you get stuck in inconsistency, try to find a way out!

⁶ Ibid. p. 19.

Hegel seems to think that it is more than just a (necessary) regulative principle. It is regulative along the way, but constitutive over there, where the logical saints go marching in: with the **Notion** (or Concept, I don't know why Miller chose to translate "Begriff" as "notion"), especially with the notion having developed into the **absolute idea**. (Hegel is not very fond of Fichtean "oughts" and endless striving; endless striving would be a case of "bad infinity" for him. I'll have to say more on this topic later on.)

Anyway, we as thinking and speaking beings have to cope with **essential inconsistency**. Logical space stands under the rational **norm of non-contradiction**, but it is by no means easy to enforce that norm. Logical space is surrounded by logical **jungle**, a thicket impenetrable and dark, where inconsistency reigns – and not only surrounded by jungle, but internally affected by it, which means that jungle is always ready to take over right in the middle of logical space, if we get unwary. Rational thinking, therefore, is always a struggle.

We built up **mathematics** as a kind of logical clean room, where we may feel comparatively safe against inconsistency. But interestingly enough, we provably cannot prove that mathematics is consistent (Gödel). We may hope so, though. Therefore **science** tends to be formulated mathematically. Insofar as it can, we think we have a good insurance against the destructive influences of inconsistency.

Hegel, as I intimated, tends to think that more can be done and achieved on behalf of our logical safety, that the logical wilderness can be domesticated once and for all. Logical death (self-destructive inconsistency) need not be feared and anxiously evaded, but can be overcome and turned into real life.

But in this all too "Christian" hope he may be wrong. A more "pagan" thinker like **Heidegger** may be closer to the truth with his conception of **clearing**, "Lichtung", where "licht" means *light* in its old Germanic double sense: first, light in the sense of *not heavy* (German "leicht"), and, secondly, light in the sense of *not dark* (German "licht").

At the **Lichtung**, the heavy stuff of the jungle thicket – trees, branches, leaves and all that – is made light (i.e. partly taken away), and then the light can shine in and start the play of light and dark in which things can appear and which we call thinking-and-knowing. But all of a sudden the dark and heavy forces (**inconsistency writ large**) may break through and take over, at least for a while, even at the centre of the clearing (as, perhaps, in Nazi Germany). Or the clearing as such may even get **reabsorbed** by jungle altogether. And then the game of thinking and knowing won't be played any more, though our species may well continue to live, biologically, perhaps even mimicking the game of thinking and knowing in some funny way. (There's hardly any limit here on our fantasy for doing "philosophy fiction".)

The irresolvable **antinomy** is the logical analogue of the biological or, better still, the **anthropological** phenomenon of **death**. But in fact, one should see it the other way round: death is the anthropological **concretization** of the logical antinomy just as temporal succession is the natural concretization of logical succession.

Now we can sort philosophers according to the stance they take towards logical death. **Parmenides** says it's an illusion, in reality there is only "spherical" and homogeneous logical life. **Main stream philosophers** would say that we can safely **avoid** it, if we take pains to lean on **mathematics** and to be **careful** in our thinking quite in general. Both, they and Parmenides exclude logical death from logical space, but Parmenides is more radical in that he excludes negativity as such, which he rightly acknowledges as the source of the problem.

Then there is **Hegel**, who doesn't want death to be excluded from life, nor negativity and inconsistency from logical space. Death is no **taboo** for him, one could say. But his Christian roots let him be over-optimistic. **Good Friday** (which saw the death of God, the death of reason in total antinomy) is to be superseded with **Easter**, with resurrection. So, logical death has

a function: Let it in to logical space and have it do some useful theoretical work. But in the event, when the work is done, it will be become superfluous and be overcome.

According to Hegel, what drives the logical evolution is the **principle of non-contradiction** after all, conceived of (in our background theory) as a **regulative principle** or one which is **constitutive** not of the interim stages of the logical process, but only of its encompassing result, the **absolute idea**. For in fact, inconsistencies occur throughout the logical process, though they ought not to.

When **Graham Priest**, the main advocate of **paraconsistent logic** (which rejects the “*ex contradictione quodlibet*”), reclaims Hegel as an ally in **dialetheism**^{xv} – the even stronger view that there are true contradictions – this holds true only with a considerable grain of salt. The theorems of a **metaphysical theory** may be true in the sense of corresponding to a stage in the development of logical space. Likewise contradictions may be true in the sense of corresponding to an **instability** or a **change** in logical space (as witness the infinitesimal urstate of **becoming**). But their truth is transitory because what they correspond to is transitory as well.

Dialetheism can perhaps be characterized as the view that even (logical) death is still a form of life. But this is not Hegel’s position.

Finally, there is the stance of **Heidegger** and, perhaps, **Heraclitus** before him, which on this particular question, I am very much inclined to take up myself. Logical death is not avoidable (*pace* Parmenides and the main stream), nor can it be overcome in the logical event (*pace* Hegel), nor is it a form of logical life (*pace* dialetheism), nor is it an excuse for letting anything go (*pace* Rorty and Feyerabend): we usually don’t commit suicide just because we know that we must die anyway, some day. So we ought not to commit logical suicide either, though we know that the antinomy will take over in the long run.

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Returning now to Hegelian **becoming** I must start with a confession. The fact that logical **non-well-foundedness** is linked to the operation of **negation** had hitherto blinded me to the non-well-foundedness of **becoming**.

Becoming seemed to be a case of **well-founded negation** after all, being that which would be expressed by the *two word logically indexical (and in fact infinitesimally indexical) sentence* “**Not (being)!**”. Here we seem to have some given, immediate **operandum**, viz. **being**, where negation can operate on. (Cf. the unit set of the empty set in pure set theory: {0}.) Therefore, I always had treated of *the other of itself* (SoL 118) as the first clear-cut case of a non-well-founded logical content (a non-well-founded logical urstate).

But when I prepared this class last week and read Hegel’s text on the moments of becoming, not in the seductive familiarity of my mother tongue this time, but in a foreign language in which humdrum matters may appear in a new and unusual light (or “shine”), all of a sudden it occurred to me (what should have been obvious all the time): **Becoming is non-well-founded** (Hegel comes very close to saying it explicitly!) and therefore a form or variant of the **negation-of-itself**.

Becoming is non-well-founded in that its “ingredients” (non-self-subsistent ingredients, called “moments” by Hegel), being and nothing, are, in it, not simple being and nothing any more, but again cases of becoming, called coming-to-be and ceasing-to-be. So, according to Hegel’s text, **becoming is becoming all the – endless! – way down**, and therefore not well-founded.

But is it, more specifically, a non-well-founded **negation**? Yes; its expression was introduced as **self-contradictory**, saying (i) explicitly “Not (being)!” and (ii) “Being!” by implication. So it comes close to being a case and a variant of the content v (with $v \leftrightarrow \sim v$), because the negation of becoming, which is d-being, will soon turn out to be a case of becoming as well.

Certainly, if we were to model **becoming** on a **non-well-founded set**, we would rather choose 0^* than Ω , because it seems that becoming includes both: immediate being as an analogue of the ur-set 0, **and** negativity, $\sim (\dots)$, as an analogue of the set-building operation, $\{\dots\}$, running free. Therefore, it seems, becoming is more like $\{0, 0^*\}$, i.e. 0^* , than like $\{\Omega\}$, i.e. Ω . So becoming is both: (i) the opposite of being **and**, *ipso facto*, (ii) the opposite of itself and its essential negativity.

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We handled this very first variant of v by pleading **infinitesimal** validity: We **shrunk**, that is to say, the content *becoming* to a punctiform shape, to the punctiform starting event of the evolution of logical space. So, the rest of the history of logical space will be the negative (the contradictory opposite) of becoming.

But wait: isn't becoming its own negative? And isn't therefore the rest of the history of logical space, qua negative of becoming, becoming again? So it seems. And this betrays our solution, our way out of the inconsistency of becoming, as very **provisional** and **temporary**.

Indeed, the SoL will be a little like one of those annoying action movies, where the hero, hardly escaped from one drastic danger, always runs into a new variant of that self-same danger again. We thought the bad guy was happily dead, but no, here he is again, and his big fat wonder-gun is not yet rotten either. And so, instead of being presented with a nice new adventure of the hero, the audience has to go through it all over again. And again. And again.

But the **provisional** nature of each purported way out of the great inconsistency which reigns the whole thing right from the start is what creates logical, categorial, philosophical **structure**. The SoL lives by it.

And of course, if the process of pure thinking is the **evolution** of logical space, then what **succeeds** the big bang of infinitesimal becoming must be a case of becoming too (only non-infinitesimal this time), it must be becoming-itself **expanded** to a whole logical history.

So "**Dasein**" or d-being (short for "determinate being"), expressed by the logically indexical three word sentence "Not (not (being))!", with all its relative stability, will eventually turn out to be a sort of becoming as well (viz. as alteration).

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Chapter 2: Determinate Being (Dasein)

The chapter on d-being is divided in three sub-chapters (or passages):

- A. D-being as such
- B. Something and other, finitude
- C. Qualitative infinity

The first passage is again divided in three sub-passages:

- (a) D-being in general
- (b) Quality
- (c) Something

You can see here, how the various **categorial titles** recur at different levels. Not only does "d-being" recur at three levels (chapter, passage, sub-passage), but also "quality" is not only the title of sub-passage 2.A.(b), but also of the whole *section one* of the logic of being: "Determinateness (Quality)". In any case, **d-being** and **quality** go closely together (even though **being-for-self** in chapter 3 also falls under the heading "quality" still). We'll have to be aware of this fact in what follows.

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But first some remarks about Miller's translation, at the transition from becoming to being.

- (1) "tollendum est Octavium", p. 107, seems to me to be nonsensical. You may either report the Ciceronian pun in indirect speech: *that Octavius is to be endured/lifted up (in triumph)*, or in direct speech: "Octavius is to be endured/lifted up". In the first case you would have the a.c.i. of Hegel's original: *tollendum esse Octavium*, in the second case you would have: "tollendus est Octavius". (But maybe one can construe Miller's phrase thus: it is to be endured/lifted up – [whom?] Octavius. I am not a Latinist.)
- (2) In Miller's translation, p. 107, bottom, Hegel's claim "that the technical language of philosophy employs Latin terms for reflected determinations" does not seem well-motivated, because in English both terms, "sublate" (*sufferre, suffero, sustuli, sublatum*) and "moment" are Latin, while in the original German "aufheben" is Germanic (cf. "heave up"), while "Moment" is Latin. Hegel is alluding to that contrast. (It seems to me that English didn't have the ambition to create a domestic philosophical terminology, it just took over the Greco-Latin one. No Meister Eckhart, Christian Wolff, Martin Heidegger.)
- (3) The beginning of chapter 2 is hard to render, and particularly so, if one decides to translate "Dasein" as "determinate being". For Hegel says: "Dasein is *determinate being [esse, Sein]*" – which would give the tautology: "Determinate being is *determinate being*" – and then goes on to say: "its determinateness is determinateness which is [*being, existing* determinateness], *quality*. Through its quality, *something* [must be italicized, Hegel has capital "E" in "Etwas"] is [fill in: contrasted] against an *other* [italicized], [and] is *alterable* [Hegel's "otherable", *veränderlich*, cannot be reproduced in English, there being no English verb "to other sth."] and *finite*; [and is] negatively determined not only against an *other* but also plainly-and-simply in itself."

My version would be something like this: "Being-there is *determinate being*, its determinateness is determinateness *which is*, or *quality*. Through its quality, *something* is contrasted against an *other*, and is *alterable* [*turnable-into-an-other*] and *finite*; and negatively determined not only against an *other* but also just in itself."

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The *being* being expressed by "Not (not (being))!" is **determinate** in that it is one of exactly two items which determine each other, there being nothing else outside them to do the determining: **becoming** as the logical predecessor of d-being and **d-being** as the logical successor of becoming. Becoming negates (and annihilates) itself and is *ipso facto* negated, annihilated and succeeded by becoming – certainly a somewhat **strange scenario**.

But we have to distinguish **between OL and BL**. In OL, i.e. **pure thinking proper**, there is (or should I say *there becomes?*) only becoming, which instantaneously annihilates itself, and that's all. Thereby pure thinking stumbles into a new logical urstate, without being able to notice this transition. Pure thinking itself was becoming and is now d-being. We in BL know that d-being is the successor of becoming, but in OL becoming has totally vanished and d-being is like the starter, totally **immediate**.

For us, in BL, d-being is the other, the contradictory opposite, of becoming. But it is the **victorious** urstate in that opposition. The **loser**, becoming, negated/annihilated by d-being, takes revenge, so to speak, by at least **determining** the winner. So **determinateness is the inverse of "negatedness"**. This determinateness is as such invisible in OL, but d-being as seen in OL is *de facto* determinate, even though OL does not (yet!) leave any room for making a distinction between d-being and its determinacy. Therefore the determinacy of d-being is its **quality**, and d-being is (at that early stage) in OL identical with its quality. It is therefore what phi-

losophers nowadays use to call a **quale**, though not one among many possible sensory qualia, but **the unique logical quale**.

If x has quality Q , then x may in principle lose Q and gain Q' instead. A green tomato may turn red, while ripening (and by ripening; it is kind of funny, by the way, that the German variant of “while”, spelled “weil”, has lost its temporal sense and gained a completely causal sense; thus “weil reifend” would mean *because of ripening*). But a **quale** cannot lose its (defining) quality; it does not *have* but *is* its quality; when the quality vanishes, so does the quale itself. This holds for sensory qualia, and it holds as well for the **purely logical quale** d-being.

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Now, we in BL see that becoming is **sublated** in d-being: d-being would not be the logical urstate it is, if it weren't the victorious annihilator of becoming. For us therefore d-being shows a trace of becoming. Becoming is what makes d-being **determinate** after all and which therefore defines it as the unique logical quale that it is. But this is not yet **posited** (not yet *set* or *put*: “gesetzt”), i.e. not yet visible at the OL level.

At the **OL level** d-being appears “as a first, as a starting-point for the ensuing development. It is first” – Hegel goes on to say – “in the one-sided determination of *being*; the other determination, *nothing*, will likewise display itself and in contrast to it [i.e. to the first one, “gegen jene”].” (p. 109 bottom)

So, this will be the **development** of d-being: its negativity, at first hidden at the OL level, i.e. not yet posited, will makes its presence more and more felt at the OL level, gradually, step by step. But look: The argument must not proceed in the short way! We must not reason like this: “We know more about d-being than is visible at the OL level; so let's enrich the OL level in order that it might catch up to our vantage point”. This would be cheating, according to Hegel's austere lights. We have to **wait and see** if the OL level catches up all on its own.

What we know at the BL level is that pure thinking at the OL level will have **two variants of d-being** or (which comes to the same thing) of its determinateness or **quality**, without being able to distinguish between them. Pure thinking will either sink into variant A and, sunk in A, know nothing of variant B, or vice versa. But then the two variants are one and the same for pure thinking (it can make no difference between them); there is only one seemingly affirmative and **immediate** urstate **d-being for pure thinking**, though, in fact (and *for us*), there are two variants of that urstate, one **affirmative** and the other **negative**.

D-being is the unique logical **quale**. Its variants therefore affect its quality, which is thus either positive or negative, either **reality** or **negation** (in the sense of privation, *sterêsis*). In Hegel's words (SoL 111):

Quality, taken in the distinct character of *being*, is *reality*, as burdened [or afflicted: “behaftet”] with a negative [with a case of negating, “Verneinung”] it is *negation* in general, likewise a quality, but one which counts as a deficiency, and which further on is determined as limit [“Grenze”], limitation [“Schranke”].

So we have the following logical structure: **d-being**, identical with (its) **determinacy**, which therefore is (its) **quality** and which in this identity is **reality**.

As long as identity reigns, we thus have:

d-being = determinacy = quality = reality.

But we in BL know that **identity** (and immediacy, being) is not the one and only ruler. There is **negativity** (difference) there as well. And when negativity reigns, we will get a distinction between *d-being* and *determinacy* and *ipso facto* (!) a distinction within *quality* between *reality* (positive quality) and *negation* (negative quality):

d-being \neq determinacy; quality (*qua* reality) \neq negation.

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This is a very old and venerable logical structure, arguably detected by **Empedocles**. Empedocles countenances (a) **four material** and (b) **two kinetic principles** of the universe:

(a) earth, water, air, fire [the four elements]

(b) love (*philia*) and hate/strife (*neikos*)

Now, the kinetic principles operate on the material ones, bringing them **together** (love) and **asunder** (hate) periodically. Thus, the cosmic process is **cyclic** or **periodic**, a succession of periods of love (where unity is growing) and periods of hate (where diversity is growing).

But love and hate affect **their own relationship** as well. When **love** is at its peak, we have complete unity and perfect harmony, so there is nothing left to unite, which makes love collapse (or at least weaken) so that hate can grow again. When **hate** is at its peak on the other hand, love and hate must be in a perfect equilibrium, i.e. equally strong, and then the balance tips to the other side again (the one of love).

So we get a somewhat **paradoxical result**: When love wins, there is nothing but love (and at the same time neither love nor hate any more); and when hate wins, love is exactly as strong as hate. So, love is in a way the “monarchic” and hate the “democratic” principle. (Cf. the well-known “paradox” that in a democracy the foes of democracy must have equal rights, and esp. the right to express and defend their views.)

More **abstractly**, one can talk of **identity** and **difference** (non-identity) instead of love and hate, and say the following: When identity reigns, identity and non-identity are identical; when non-identity reigns, they are non-identical. This is true in a way of **d-being** as well:

When (**d-)****being reigns**, d-being and determinacy (and at the same time reality and negation) are one affirmative quale. When **determinacy reigns**, d-being and determinacy (and at the same time reality and negation) negatively fall apart in difference.

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In “(a) Determinate Being in General” Hegel had portrayed d-being as unitary and affirmative: as “in the form of being” (110), in “(b) Quality” (111) Hegel had stressed the side of negativity, difference: the articulation of d-being. In “(c) Something” he now stresses the side of identity and unity again. This order is supposed to represent what is happening at the level of pure thinking: **d-being splits and reunites**. Qua reunited it is called *a d-being* (“Dasein-des”) and *something* (“Etwas”).

But why should that be so?

We saw (in BL) that **pure being** is no possible content of thought, not even a possible urstate, because it just cannot be purified from its original contamination with negativity. The first thing to happen in the evolution of logical space is therefore **becoming** and the first thing to be there is **being-there** (Dasein) or **d-being**.

But if we have to relegate the logical **start** with pure being (and the **transition**, via nothing, to becoming) to a fictitious logical **pre-history**, then the affirmative being which we have to project retrospectively beyond the infinitesimal becoming was already **d-being**.

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D-being comes in **two varieties**, one affirmative (being as **reality**) and one negative (being as **negation**). Or, more precisely, d-being comes in one singular variety from the standpoint of the affirmative variety, and it comes in two different varieties from the standpoint of the negative variety. This, as it were, **half-hearted duality** is the duality of **duality and non-duality** and at the same time the unity of unity and non-unity (or identity of identity and non-identity, cf. Empedocles: love/strife of love and strife). And it is **duality enough** for reality and negation to qualify as real “successors” of (or as real logical starters instead of) the fictitious urstates **being** and **nothing**. After all, pure being and pure nothing were supposed to be one and the same urstate (**B=N**) from one standpoint (the one of being) and two distinct urstates (**B≠N**) from the other standpoint (the one of nothing), as well.

And as the conflict of the opposing standpoints was solved by infinitesimal **becoming** in the fictitious **pre-history**, so it will be in the real **history** of the evolution of logical space.

Since the **negative** variety of d-being is as **original** as the **affirmative** one, this latter one can always be seen as the outcome of a **becoming** that took place with respect to d-being. Becoming, as a transition *from* d-being *to* d-being, is then called “**alteration**”, and its two sides or terms are called *something* (a d-being, “Daseiendes”) and the *other*.

So instead of the **original series**

pure being [+ nothing]	becoming	d-being
we now have the series		
d-being [in general]	becoming/alteration	d-being ₂ , a d-being, something
Dasein in general [Or: Dasein + dist.]	distinction in it sublation of dist.	sublation of this distinction (115) sublatedness: a (new) d-being]

Note how peculiar becoming qua **alteration** is: it leads from A to A (not from A to non-A). (But such is the concept of alteration: what alters in one respect remains the same in another.)

New scenario: The “sublatedness of the distinction is determinate being’s *own* determinateness; it is thus *being-within-self* [“Insichsein”, “esse in se”, cf. Spinoza: “substantia est, quod in se est et per se concipitur”]; das Dasein ist *Daseiendes, Etwas.*” (115)

“Something is the *first negation of negation*, as simple self-relation in the form of being.” (115, middle) Not yet: **negation-of-itself**, but **double negation** (cf. „Not (not (being))!“). (Double negation is not idle, something happens in it: self-individualization. See below.)

Something is double negation not only **for us** (as was *d-being in general*), but also **for pure thinking**. In *something* “self-mediation is present” and “*posited*” (116, top), therefore its esse is “in se esse”, it therefore is “the beginning of the subject” (115, bottom), i.e. of self-individualization. (In grasping the content *something*, pure thinking has to mediate itself.)

Next series (116, bottom):

Something	alteration	an other [something other]
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Note: In *something*, mediation with self is *posited*” (116, top) vs. “[something] is not yet *posited* as mediating and mediated” (116, bottom). (It will be posited as such in the *other itself*.)

Note: “But to begin with, something alters only in its Notion; it is not yet *posited* as mediating and mediated” [through alteration and the sublation of alterity]. In its **Notion**: in its **BL definition**. When an OL urstate will have further developed so that it (i.e. its successor) now contains what its BL definition contained, then it has altered and is not the same urstate any more,

but a new one with a new BL definition (“Notion”). So the logical urstates are always running behind their respective Notions (BL definitions).

Only in the “Notion” (or Concept) itself, what is posited will have caught up with the BL definition. (The Notion is, at the same time, its *own* Notion, cf. 578 t., 582, ll. 13ff.)

B. Finitude

With *something*, d-being has begun to dissociate from logical space; and with *something and an other*, logical space has **split**. (But pure thinking does not see the splitting yet; it is either sunk into the one side or into the other. It is **bifurcated** itself in the splitting of logical space. With the category of **limit**, though, pure thinking will catch up to our vantage point. But then the splitting will be internalized to the finite something.)

What further **categories** are here developed? We already have:

(being, nothing,) becoming, determinate being, determinateness, quality, reality, negation, something (= a d-being), being-within-self, alteration, other

We shall get (as the categories of **finitude**):

The other (of) itself, self-identical something, being-for-other, being-in-itself, determination, constitution, limit, finite (= finite something), limitation (= transcended, negated limit), ought (= negatively affected in-itself or determination)

Note: These categories are here not developed as some basic *general concepts*, true of things (as e.g. in Kant), but in and for pure thinking: as pure entities on their own account, logical urstates.

Survey of Hegel’s text:

- (a) **Something and an Other** (117-122) [Finitude *for us*, in BL]
 The **other of itself** (118) as **self-identical something** (119 t.); **being-for-other** (119), **being-in-itself** (119) [not: being-within-self, cf. 115; Ansichsein vs. Insichsein]

1.1 Something and other are both somethings.

1.2 Each is equally an other (cf. “*alius alium*” and “*alter alterum*”).

1.3 The other is (“therefore”, 118) to be taken as isolated, abstractly, as the *other of itself*. The **other (of) itself** comes in two variants: it (i) negates itself, *alters* itself” (118 b.) and (ii) is “posited as reflected into itself with sublation of the otherness”, as the “with-itself-identical something” (119 t.). (And **now** the something is *posited* as “mediating and mediated”, 116 b.)

According to (i) the *other of itself* is a variant of the urstate v [with: $v \leftrightarrow \sim(v)$]. And (ii) portrays one of two results of the self-negation of v , the affirmative one. (We can represent the affirmative one as resulting from a trick: if we put the negation signs together in pairs, then the unfounded negation will turn into the unfounded affirmation: $\sim \sim(\sim \sim(\sim \sim(\dots)))$). But the trick shows at the same time its own one-sidedness, because the number of infinite negation signs is not even.

2. “Being-for-other and being-in-itself constitute the two moments of the something. There are here present *two pairs* of determinations: 1. Something and other, 2. Being-for-other and being in-itself.” (119) [Logical space is divided between two inhabitants, and each of them has being-in-itself from its own standpoint and mere being-for-other from the other’s standpoint.]

3. Something's **being-in-itself** as identical with its being-for-other is its **determination**. [See below.]

(b) **Determination, Constitution and Limit** (122-129) [Limit: finitude in OL]

In so far as the **determinateness** of the something is not only **relative** (induced by something other) but „also belongs to its *in-itself*“, it is its **determination** (116f.). More precisely: “*Being-for-other* is, in the unity of the something with itself, identical with its *in-itself*; the being-for-other is thus present *in* [at] the something [*am Etwas*]. The determinateness thus reflected into itself is, therefore, again in the simple form of being, and hence is again a quality: *determination*.” (122) So:

1. Determination is the determinateness of something's *in-itself*.

But, “in the sphere of quality, the differences in their sublated form as moments also retain the form of immediate, qualitative being relatively to one another. That which something has *in it* thus divides itself [...]” (123f.): **Determination** versus **constitution** (involvement “in external influences and relationships”, 124 t.). (Better than “constitution”, for Hegel's “*Beschaffenheit*”, would have been “condition” or “state” or “shape”. But the first two are needed for other purposes (cf. 375, 469), while the last one would have been too geometrical. So, to choose “constitution” was probably the best Miller could do.) – The constitution is, so to speak, the being-for-other of the in-itself: it belongs *within* the something (it's the outer of the inner, to use terms from the logic of essence). So:

2. The in-itself divides into determination and (outer) **constitution**.

But the determining of something is done by an other; therefore the constitution (the influence of the other) reaches right into the determination. So:

3. Determination and constitution reunite as the **limit** of something.

About the limit:

(α) “Limit is the mediation through which something and other each as well *is*, as *is not*.” (127 t.) – (β) “Limit is the middle between” something and the other (127). – (γ) “Something with its immanent limit, posited as the contradiction of itself [...], is the *finite*.” (129 t.) [So the **finite**, *f*, is *posited* as its own contradictory opposite: $f \leftrightarrow \sim f$.]

(c) **Finitude** [Development of finitude for and in OL]

Finite things “*are*, but the truth of this being is their *end*.” (They are “end-ly”, “end-lich”). – “[...] the hour of their birth is the hour of their death.” (129)

(α) The Immediacy of Finitude (129-131)

”The thought of the finitude brings this sadness with it because it is qualitative negation pushed to its extreme, and [...] there is no longer left to things an affirmative being *distinct* from their destiny to perish.” 129 b.) **Qualitative negation** is hard mutual negation of a and b in logical space, not sublatedness of a in b; it negates the **quality** of the logical quale (d-being, something) and thus the d-being (something, itself qua something) as such. So we are “back to the abstract opposition of nothing and ceasing-to-be as opposed to being” (ibid.). But, other than nothing (etc.), “finitude is the negation as *fixed in itself*” (130 t.), an imperishable perishing, self-destruction as “eternal”. There is no transition to an affirmative here, no “ceasing to be of the ceasing-to-be” (130f).

(β) **Limitation** and the **Ought** (131-133/136)

To get ahead (with the perishing of the perishing) we must detect some (new) structure **within** the **finite**, some moments of the finite. The **quality** of the finite (i.e. itself) is its **limit**. So this is what gets negated in finite's self-negation.

Thus, the finite has as moments itself qua negated (called **limitation**) and itself qua negating (called the **ought**).

"Something's own limit thus posited by it as a negative which is at the same time essential, is not merely limit as such, but *limitation*." (132 t.) The *in-itself* "as the negative relation to its limit [...], to itself as limitation, is the *ought*." (Ibid.) Limitation is the limit as transcended (negated). Determination has become an **ought**, limit has become a **limitation**. – "But now further, the finite as the ought *transcends* its limitation" (133), but *only* as the ought [not as the "is"].

(γ) Transition of the Finite into the Infinite (136-7)

The finite in its self-contradiction ceases to be, but in its ceasing-to-be reaches its **determination** (its better self, so to speak, but this better self is only): another finite, "and so on to *infinity*." That is to be taken quite literally, for in the other finite, the finite only **unites with itself**, and in this affirmative being reaches the other not of it(self) qua particular finite but of the finite *as such*: the *infinite*. – Logical space, filled by the finite (or *a* finite), would always have to alter, because the finite would give way to a new finite over and over again, each finite in the infinite sequence being (i) the negation of and (ii) identical to its negated predecessor. So, each item in the sequence is negated (by its successor), none comes away unnegated. Therefore the whole infinite sequence as such is negated as well, by an infinitely-many-place operation of negation: $\neg[f_0, \sim f_0 (= f_1), \sim f_1 (= f_2), \sim f_2 (= f_3), \dots]$. The result of this infinitely-many-place negation, $\neg(\dots)$, is the *infinite*.

The logical space of the simple **infinite** (of the "infinite in its simple Notion", SoL 137) is the paradoxical process (the standing flow) in which each finite negates itself and thereby creates another self-negating finite: an infinite series of identical finites (of finite logical spaces). That (paradoxical) flow doesn't jerk, it is completely continuous, and so doesn't even flow either. Therefore the infinite is "*being and becoming*" at the same time (SoL 137, in fact, it is posited as such, says Hegel). And it is self-relation (viz. originally the **finite's** self-relation: the finite itself becomes the infinite, by its own nature, 138) and indeterminate (ibid.), there being nothing (else) to do the determining. Still, it is (qua affirmative) the negation of the finite as such (of all infinitely many particular finites at once, "now" and ipso facto in "eternity").

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Let us survey the way from the first, **simple** something via the **self-identical** something to the **finite** something, or finite, for short.

For the **simple** something, the other was completely invisible. The **self-identical** something (the affirmative result of the other of itself) is at least **negatively** related to the other. It may be compared to a **Cartesian solipsist** (CS), if this is a person who has read and now believes the first two *Meditations*, but not the four following ones.

CS says to his other: "I think, therefore I exist and am possessing being-in-itself as a thinking substance; you instead are only a content of my representations, and your being is only being-for-other, viz. being for me." [But we in HL see that the other is a CS as well.]

The **simple something** was (in OL, for itself, i.e. for pure thinking, not for HL) the whole of logical space. The **identical something**, CS, is (for himself, i.e. in OL, not in HL) the **soloist** filling all of logical space. (We in HL know s/he is not a soloist; we know there are two pre-

tenders in perfect symmetry.) That is a **first step** on the way to recognizing the other, a step characterized by the distinction between being-in-itself and being-for-other.

In the **second step**, the pretender vacates a bit of logical space as irrelevant for herself/himself. This step is characterized by the pair of terms “determination” and “constitution”. The region in logical space that the pretender left free he deems irrelevant for himself. He thinks he is related to this region only externally, through his constitution. And the other pretender does the same. Each pretender (each CS) now concedes that the other possesses being-in-itself as well and that s/he her/himself possesses a being-for-other in so far as s/he is represented by the other. But they are still sceptical or **agnostic** as to the existence of the other: s/he is a kind of thing-in-itself; all one can know of him/her concerns his/her being-for-other, which is now called “constitution”. (“But is there really an in-itself behind the constitution? I don’t know, and it cannot bother me.”)

But in the **third** and last **step**, *something* experiences itself (if we may go on personalizing it for the sake of illustration) as **inseparably** connected to its other in and through their common **limit**. Now the splitting of logical space is completely reconstructed at the OL level. But at the same time the splitting breaks down, because the limited something and the limited other are now in perfect symmetry and therefore indiscernibly one and the same *finite*.

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And then comes the logical development of the finite leading (via limitation and ought) to the infinite.

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The **finite**, by its own negativity, transcends itself and becomes **infinite**. But this transcending cannot be conceived of as a logical (quasi- or pre-temporal) **succession** any more, because the finite *as such* already consumes all of logical “time” (pre-time) in its dialectic of ought and limitation. So we get an **infinite series** of **finite urstates**:

$f_0,$	$\sim f_0 (= f_1),$	$\sim f_1 (= f_2),$	$\sim f_2 (= f_3),$	\dots
$f_0,$	$\sim f_0,$	$\sim \sim f_0,$	$\sim \sim \sim f_0,$	\dots
$f_0,$	$f_1,$	$f_2,$	$f_3,$	\dots

Nowhere, i.e. **at no particular point**, in *that* infinite series will the infinite be found. Or contrariwise: it is **everywhere** in that series (not beyond, but already there, present).

No member of the series comes away **unnegated** (each having a successor by which it is negated), so one can as well negate the **whole series**, by the very negativity of each of its members, and thereby make explicit, what is going on anyway:

$$\neg [f_0, \sim f_0, \sim \sim f_0, \sim \sim \sim f_0, \dots]$$

The **outer** negation sign “ \neg ” here only expresses the **implicit negativity** of the infinite series of finites. (It is no “alien force”, 138 m., but the own negativity of the finite that makes it become infinite.)

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Excursus. The Logic can be interpreted as a critical reconstruction of **metaphysics**. How can we do this at the present stage?

We have to interpret the logical **urstates** as fundamental **predicates** (categories) of the “passing show” that got lost with the Phenomenology. So, first of all, we have to bring the passing (spatiotemporal) show back in again. The critical **metaphysical question** then is this: What is the spatiotemporal show in the last analysis, i.e. in its deep ontological structure?

A **metaphysic of finitude** would answer: “A manifold of finite items” – and would then have to specify the items ontologically: Are they, basically, things and persons (Aristotle, Strawson)? Or are they pure processes (Sellars’s metaphysics of) or pure sets (Quine’s brave new ontology) or the theoretical entities that current physics postulates (a very optimistic version of scientific realism)? Or are they Heideggerian items (Zeug, Dasein, Gegenstände, Bestand)?

But these further **specifications** are not yet at issue at the present stage of the evolution of logical space. What is at issue is only the question, whether the passing show consists of finite items in the last analysis. Hegel, from the standpoint of the Logic, would of course say: “No. The items of the passing show are not finite in the last analysis; nothing is. The infinite is not beyond the passing show, but already present in it, here and how, as the own negativity of the finite items turned upon itself.” (Or something like that. We’ll get to know more about his standpoint as the argument proceeds.)

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But back to our logical urstate *infinity*. How is the outer negation (in “ $\neg [f_0, f_1, f_2, \dots]$ ”) to be **interpreted**? We can hitherto conceive of **three models** among which to choose (with two of them having already been operative before):

- (i) negation qua logical succession (sublation only in BL): “first (), then \sim ()”,
- (ii) synchronic negation (otherness), possibly with (mutual) sublation (in OL)
- (iii) negation as pure sublation (in OL).

But not (i): because the logical succession is already needed within the negated series itself.

(iii) would be fine; but (ii) would be bad, because with **otherness** the infinite would be the other of the finite, and both would again share logical space as did something and an other. So, we would be back in **finitude** after all.

But up till now we just don't have a model of **pure** sublation. We know sublation only in combination with (i) or (ii), i.e. **either** (i) as BL sublation (e.g. becoming was BL sublated in d-being) **or** (ii) as sublation which is contaminated by otherness and thus by finitude: If A is sublated in B, then at the same time A persists in logical space as the other of B (and vice versa), in mutual "qualitative negation".

What we need is **neither** qualitative, mutual sublatedness (*something* in the *other* and vice versa) **nor** successive or BL sublatedness (becoming in d-being) but **pure sublatedness**, non-successive and at the same time devoid of an accompanying qualitative negation. This pure sublatedness Hegel calls **ideality**. But we are still far from that.

On the contrary, in operating on each of the **infinitely many finites** at a time, **the infinitely-many-place negation**, \neg , collects the finites into a **new urstate** – finitude as such – which gets negated in and by the infinite. Thus \neg turns into \sim (one place negation) back again; in Hegel's words: "[T]he *immediate being* of the infinite resuscitates the *being* of its negation, of the finite again which at first seemed to have vanished in the infinite" (138f.).

But note that this new urstate is there **only as negated**, never as self-subsistent, thus never as an **obtaining** urstate:

$$[f_0, \sim f_0, \sim \sim f_0, \sim \sim \sim f_0, \dots],$$

– a fact which may be seen as a **BL hint** in the direction of pure sublatedness, i.e. ideality.

But we must not force pure thinking and talk it into catching up with our BL knowledge. Pure thinking must proceed at its own quiet pace.

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So, let it **fall back** into finitude (thus lending some kind of self-subsistence to $[f_0, f_1, f_2, \dots]$ after all)! Its logical space is then split between the infinite and the finite, the **limit** between the two being the negativity that separates them (\neg or \sim respectively).

But something is different now than in the former case of the finite something with its limit: the perfect **symmetry** that prevailed between both sides then is now lost or, more precisely, disturbed by **enrichment** of content. There is more to each side than just being the negative of the other (cf. "The right hand side is where the thumb is left"): One is the negative or opposite of the self-destructive finite, the other is the negative or opposite of infinity.

So pure thinking cannot be **lost** in any one of them any more (as if each were as good as the other), but has to **oscillate** between them (in order to get them both) and is in fact the very **oscillation** between them, thus creating an infinite **alternation**:

$$\dots, f, i, f, i, f, i, \dots$$

In the case of the **finite** (and its dialectic of ought and limitation) there was no **real progress** in the sequence of finites, because in each progressive step nothing was reached than the same old finite again. Thus **continuity** reigned over **discretion**. But now we have an "alternating determination of the finite and the infinite" (138) and thus a real **progress** (with discrete steps) **into infinity**.

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Some **notes**. (1) What is the logical (**pre-**)"time" of this infinite progression? Since pure thinking has fallen back into finitude, its pre-time is the old finite pre-time once again, newly "filled" now. In the progression, i and f behave as *ought* and *limitation* against each other.)

(2) We have already had occasion to watch pure thinking in its **oscillation** between its alternating determinations. First, we studied the “transition of the finite into the infinite” (136), then, we studied the resuscitating of the **being of the finite** (138f.). Pure thinking is caught in exactly these two acts, forever, or so it seems.

(3) The infinity of the progress itself is the same “spurious infinity” (142 m.) as the infinity of one of its two members.

(4) The logic here has deduced the paradigm of all infinite progresses.

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Hegel’ text on **infinity** has three passages, which Hegel summarizes thus (137):

“The infinite is:

- (a) in its *simple determination*, affirmative as negation of the finite
- (b) but thus it is in *alternating determination* with the *finite*, and is the abstract, *one-sided infinite*
- (c) the self-sublation of this infinite and of the finite, as a *single* process – this is the *true or genuine infinite*.”

We have already talked about (a) and (b). So, what about “(c) Affirmative Infinity” (143ff.)?

It is “self-sublation” (of i and f) as a (single) process, thus **becoming**, thus both (i) an encompassing, **concrete** unity of being and negativity and (ii) **infinitesimal** [but can the true infinite be infinitesimal?], thus **transition**: to infinite **being**, called **being-for-self**.

Can the true infinite be **infinitesimal**? Yes, qua becoming; but not qua being. Qua becoming it is the transition to infinite being (being-for-self). So the infinite is both, becoming and being. – This explains one of the **puzzling** things about Hegel’s text, viz. the fact that he (deliberately?) **blurs** the distinction between **true infinity** and **being-for-self** in what he says about infinity. (This blurring the distinction has a solid foundation in infinity and being-for-self.)

Cf. 148, bottom – 149, line 1 (“This determination of the true infinite [...] present before us.”), especially:

“The infinite [...], like its two moments [i.e. i and f], is essentially only as a *becoming*, but now a becoming *further determined* in its moments.” And:

“This infinite, as the consummated return to self [als In-sich-Zurückgekehrtsein], the relation of itself to itself, is being [...]”, viz. (which Hegel does **not** say here) being-for-self.

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The transition of **becoming** to **d-being** [Dasein] was as a **real change** (at least prima facie): d-being was the stable negative of unstable becoming. The transition of **infinity** qua becoming to **being-for-self** [Fürsichsein] seems to be a transition just from instability to stability, without change of underlying urstate.

That means that the **quality** of the underlying urstates remains the **same**. This quality is **ideality** (pure sublatedness). See p. 150 (“Transition”):

“Ideality can be called the *quality* of infinity; but it is essentially the process of *becoming*, and hence a transition – like that of becoming in determinate being – which is now to be indicated. [...]”

So, it is **all** already there, the **transition** needs only to be “indicated”, not to be argued for any more. With (a) **ideality** as the quality of the infinite (and being-for-self as well) and (b) infin-

ity qua (transition to) **stable being**, we have already reached **being-for-self**, which is therefore nothing more and nothing less than *truly infinite being* (cf. 157, first sentence of ch. 3).

Some **notes**:

- (1) The “genuine infinite” is “the fundamental concept of philosophy” (Enc. § 95, end).
- (2) “The proposition that the finite is ideal [*ideell*] constitutes idealism. [...] Every philosophy is essentially an idealism [...]” (154f.) (Thus, there cannot be a genuine metaphysics of finitude, after all; or so Hegel says. What then about, e.g., Heidegger?)
- (3) So, **being-for-self** is already a bit of *THE NOTION* in the area of immediate being. (“There’s always a bit of heaven in a disaster area”, Hugh Romney, Woodstock, NY, 1969.)

All (at least a lot) seems to hinge on the concept of **ideality** (pure sublatedness). It’s high time we took a closer look.

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There was no ideality in the sphere of **finite d-being**. The problem with neatly fitting together **being** and **negativity** in that sphere was that it could not be done. Sure, negativity would, as negation-of-itself (cf. the other of itself), lead to an affirmative result from time to time, which could then be wedded to being (in the case of the other of itself this led to the **self-identical something**). But the **union** was never **complete** because of a structural bifurcation in the negation-of-itself: it had an affirmative result, to be united with being, and it had a purely negative result that didn’t join the union (but took a rebel stand, outside): endless alteration, and as well the other over there, beyond the line in bifurcated logical space.

Only in **becoming** was the unity of being and negativity “**concrete**” and total; i.e. only there, no abstraction was made from the splitting force of negativity; becoming had it all and was therefore self-contradictory, self-destructive, infinitesimal, giving way to one-sided, abstract d-being. (Infinity qua becoming will give way to stable being as well, **being-for-self**, but being-for-self is not the opposite of infinity but, on the contrary, **infinite being**.)

In d-being, then, **sublation** was never pure and total. What existed sublated, as a moment, had at the same time a self-subsistent being on the other side of the line. (This is the point of Hegel’s frequent talk of “qualitative negation”.)

Now, in the case of the **finite something** (something with a limit), qualitative negation is turned upon itself, once again, but is now finally in for yielding a unique result (not two of them) and thus a new kind of quality (viz. ideality) which can be wedded to being without remainder.

Therefore the new kind of quality, taken **affirmatively**, i.e. with the stress on being, and then called **reality** (“in a higher sense”, 149 m.), is identical with the new kind of quality, taken **negatively**, i.e. with the stress on negation, and then called **ideality** – full stop. (In the sphere of d-being, **reality** and **negation** were identical only from the standpoint of reality, not from the standpoint of negation.)

So Hegel can say: “It is not the finite which is real, but the infinite” (149), and: “ideal being [*das Ideelle*] is the finite as it is in the true infinite [...]” (149f.). That might suggest a difference between reality in the higher sense and ideality. But in the true infinite, the infinite and the finite are dynamically “united” (as becoming), and therefore Hegel can also say: “Ideality can be called the *quality* of infinity” (150) – and forget about *reality in the higher sense* from then on. **Being-for-self** is sheer **ideality**, “the self-relation of the sublating” 163 b./m.) – no talk of higher reality any more.

Note: In **being-for-self** there is no **hard** (real) fringe containing a **soft** (ideal) interior (e.g. a person of bones and flesh harbouring a mental software), but it's all soft: The sublated is sublated not in an unsublated but in a sublated, viz. in itself.

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But – if this is our next theoretical **destination**, then **how do we get there?** How do we get there, given the “alternating determination of the finite and the infinite” in the **infinite progress?**

Hegel says: “In this alternating determination of the finite and the infinite from one to the other and back again, their truth is already implicitly *present*, and all that is required is to take up what is before us. This [constant] transition [...] constitutes the external realization of the Notion [viz. of the true infinite].” – For the infinite progress is the (external, one-sided) “unity” of the finite and the infinite – “but the elimination, too, of this one-sided determination must lie in the externalization of the Notion [of infinity] now before us.” (143)

So Hegel's **recipe** for finding the notion of the true infinite is simply: **Watch the infinite progress** of the alternating determination of the finite and the infinite!

So, if we watch it, what do we see?

- (1) That f and i hang together in the alternation (qua infinite progress).
- (2) That f and I are separated in the progress (qua alternation).

This gives us two **modes of consideration** (143f.):

- (1) i and f taken in connection,
- (2) i and f taken in separation.

Interestingly enough, “both modes yield the same result” (144 m.): viz. the connection (or unity) of i and f, which is thus dominant (their separation being “recessive”, so to speak).

The **separation** is the “unity” of i and f from the standpoint of f, the **connection** is the unity of i and f from the standpoint of i. But this seems pretty much **old news**, so far: the same old relation we found between love and strife, being and non-being, identity and difference, etc.

However, **Hegel** goes on to say: “[...] each [!] is [...] in its own self the unity [!] of both; thus we have two [!] such unities [not one unity and one duality]. The common element [of both unities], the unity [...] as unity, posits them [...] as negated, since each is supposed to be what it is [and thus self-subsistent] in its distinction from the other; in their unity, therefore, they lose their qualitative nature [!]” (144 b.)

The **important news** is: The finite is also unity of f and i. So, either way (from the standpoint of f as well as from the standpoint of i), f and i lose their self-subsistence and thus their qualitative nature. There remains no hard separation in which they could retain their qualitative nature against one another.

But we have to exhaust all possibilities of consideration in order to make sure that no possibility is left over in which negativity will outlast sublation and remain there in “qualitative” style.

So far, then, we have reflected on the **common element** of both unities, on unity as such. “But further, since [...] they are also taken to be taken as distinct [otherwise they would not be two different moments of their unity], the *unity* [...] which each of these moments is, is differently determined in each of them.” (145 t.) What happens if we take their different determinations explicitly into account?

Well, “finitude *is* only as a transcending of itself; it therefore contains infinity, the other of itself. Similarly, infinity *is* only as a transcending of the finite; it therefore essentially contains its other and is, consequently, in its own self the other of itself.” (145f.)

Note: Hegel must not argue from the **nomenclature**, e.g. “Since the infinite is conceived as the in- or non-finite, ...”! That would be cheating. The nomenclature has to follow the conceptual content, and it is the content, from which we must argue.

That the finite leads to the infinite, right by itself, seems pretty clear; that was the **transition** to the infinite. But why has the infinite in its own self the other of itself, i.e. the finite? Because it just cannot be conceived immediately, like d-being in general. Pure thinking has to grasp the infinite **through** the inherent negativity of the finite.

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Reflecting now in particular on the infinite progress, Hegel points out that i and f are in the progress as “this *movement* in which each returns to itself through its negation; they *are* only as *mediation* within themselves [...]. They are thus a *result* [...].” (147)

In the progress, f goes together with itself through i, and i goes together with itself through f. But not only that: what we get is only one **single result** here, not two separate ones; for if even f is self-mediation, the progress must be thought as infinite in both directions, and in this **two-way-infinity**, “[i]t is [...] a matter of complete indifference which is taken as the beginning; and thus the difference which occasioned the double *result* disappears of itself.” (148 t.)

What then lasts of the difference between I and f? The difference of “the *double* meaning which both have” (148):

The finite is

- (1) “only the finite *over against* the infinite”,
- (2) “the finite and *at the same time* the infinite opposed to it”.

The infinite is

- (1) exclusively the infinite and as such “the spurious infinite”,
- (2) the infinite in which i and f are only moments.

Thus, the infinite, qua becoming, “deposes” (degrades, lowers) itself “to being only *one* of its determinations” and then to go together with itself again and become “the *true* infinite”. (148) The straight line of the infinite progress is thereby bent back into itself and becomes a circle. (149)

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Cf. **becoming**, pure and simple:

Becoming is Being+Nothing. Being in becoming is BN (ceasing-to-be), nothing in becoming is NB (coming-to-be).

The true infinite is I+F. I in the true infinite is IF, F in the true infinite is FI.

Disanalogy: The whole of the true infinite is aptly called according to one of its moments: the (true) *infinite*; while the whole of becoming could not be called (true) *being* (but was infinitesimal becoming, only *followed* by being again).

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3-Mar-09

Being-for-self

Four related **terms** (plus a **fifth**: Dasein, d-being):

Ansichsein	Fürsichsein	being-in-itself	being-for-self
Sein-für-Anderes	Sein-für-Eines	being-for-other	being-for-one

„Fürsichsein“ is a successor for „Dasein“ and its positive moment „Ansichsein“.
 ”being-for-one“ is a successor for “being-for-other” (Dasein’s negative moment).

When **Kant** talks of the „**Ding an sich**“, this thing in itself has *ipso facto* being-for-other, namely for Kant who attributes being-in-itself to it as well as for Kant’s readers. But the being-for-other of the *thing in itself* is supposed to be **external** to the thing, not its own **internal** being. The **logic of finitude** has shown this conception to break down however, for being-for-other and being-in-itself were fused in **determination**, and then again determination was fused with *its* negative counterpart, **constitution**, in the **limit**.

In **Fürsichsein** (being-for-self), the *outer* and the *inner* perspective (to use a bit of terminology from the logic of essence in a premature way) are **fused** right from the start. You cannot talk about the being-for-self of *something* (or someone) *other*, but only about your own being-for-self. Still, don’t we attribute being-for-self to **others** in acknowledging them as our **peers**? I.e. doesn’t alterity presuppose a third – or second – person view on being-for-self?

Yes. But this can only be understood, if we take as basic some **one fundamental** being-for-self which **repels** itself from itself to create many identical copies of itself, the repulsion being the paradoxical relation of non-relatedness.

This **story** is told by **Hegel** – but not this story alone – in the chapter on **being-for-self**.

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The chapter has three sections, each of which consists of three passages in turn:

A. Being-for-self as such

- | | |
|------------------------------|---|
| (a) “Dasein und Fürsichsein” | Determinate Being and Being-for-self |
| (b) “Sein-für-Eines” | Being-for-one (echoing <i>Being-for-other</i>) |
| (c) „Eins“ | The One (echoing <i>something</i>) |

B. The One and the Many

- (a) The One in its own self
- (b) The One and the Void
- (c) Many Ones: Repulsion

C. Repulsion and Attraction

- (a) Exclusion of the One
- (b) The one One of Attraction
- (c) The Relation of Repulsion and Attraction

Nothing much is happening in **section A**. What is said there is more like a rehearsal of what is already known from the discussion of the **infinite**. Only in A.c), do we find a new step: a very smooth and easy the transition to the **one**, which is related to *Fürsichsein* as the something was to *Dasein* (and which accordingly is also called “Fürsichseiendes”: **a being-for-one**, in analogy to “Daseiendes”: *a d-being*).

And even that easy transition doesn't really belong to A.c), but is developed in full only in B.a). So, the whole of section A seems to be theoretically **idle**.

Ad A.a) D-being and being-for-self:

“In being-for-self, the difference between being and determinateness or negation is posited and equalized” (157 m.). That much we know. (Determinateness has been totally integrated into being.) And this we know as well: “As already mentioned, being-for-self is infinity which has collapsed into simple being” (158 b.).

(At the beginning of the logic, concrete **becoming** had collapsed into abstract, simple being, called **d-being**, as well. But b-being was the opposite of becoming, while being-for-self is the same as the infinite, i.e. it has the same quality: **ideality**.)

In so far as **determinateness** and **negation** are present in being-for-self, it is (“trivially”, one might say) as well **d-being** (i.e. stable unity of being and negativity), but its **determinateness** is “bent back into the infinite unity of being-for-self” as a moment (an *ideal being*), called “**being-for-one**” (159 t.).

Ad A.b) Being-for-One:

The **finite** is present in the infinite as an **ideal** being: as such it has only **being-for-one**. But we already know that the infinite is not a **hard** fringe around a **soft** core but soft through and through. – There is going to be a hard, in fact extremely hard, urstate, called **one**, in the sphere of being-for-self, shortly. But not yet; as yet, “there is only *one* ideality of that, for which or in which there is supposed to be a determination as moment, and of that which is supposed to be a moment in it.” (159 m.)

„To be ‘for self’ and to be ‘for one’ are therefore not different meanings [or sides] of ideality, but are essential, inseparable moments of it.” (160 t.)

Being-for-self can be represented by the infinite formula ‘ $\sim(\sim(\sim(\dots)))$ ’. But many logical urstates can, e.g. the **other-of-itself** and (as we shall see) **essence**. So, it all depends on how the formula has to be **interpreted** at each different stage in the evolution of logical space.

Excursus:

In the case of the **other-of-itself**, (i) ‘ \sim ’ stands for qualitative negation (which separates something and an other in logical space), and (ii) the affirmative variant of the negation-of-itself (i.e. affirmation of itself) is here to be interpreted as affirmative **something**. But there remains a negative variant as well, expressing permanent **alteration** and standing therefore an **other**.

In the case of **essence**, as we shall see, we don't have recourse anymore to some form of immediate being in order to interpret the affirmative variant of the negation-of-itself. Here, negation is pure and **absolute** (not only self-related).

But there remains a **negative** variant as well. The affirmative variant – **identity** – and the negative variant – **difference** – “**shine**” one into the other, as Hegel will say. (Each seems to be the **whole** of essence and has the other and itself as its moments. They are, as it were, two **different** sites of **identical** essence: You look at essence one way and it looks back as identity; you look at it the other way and it looks back as difference.)

So, in the sphere of **essence**, ‘ \sim ’ stands for “shine”, illusion, for the sealing off of pure thinking from any putative object. (In essence, pure thinking “shines” only within itself.)

Note: In German ‘shine’, spelled ‘Schein’ (verb: ‘scheinen’), means
 (1) the same as in English (‘Sonnenschein’, ‘Mondschein’, cf. ‘Scheinwerfer’, i.e. ‘shine thrower’, for a headlight, spotlight, flood light),
 (2) certificate showing or proving something (e.g. that you may drive a car: ‘Führerschein’, that you attended a seminar: ‘Seminarschein’, that you were sick and couldn’t go to work: ‘Krankenschein’),
 (3) appearance, illusion (cf. this item from the Prussian catalogue of virtues: “Mehr sein als scheinen!”).

In **being-for-self**, ‘~’ stands for pure sublation, i.e. **ideality**. The **affirmative** and the **negative** variant of the negation-of-itself are totally integrated with each other and at the same time with **being**. Being is thus **infinite being**. And Being-for-self is **self-related ideality**.

Ad A.c) The One:

Since there is only **one ideality** of being-for-self and its moment (being-for-one), being-for-self “is the simple unity” of both: itself and its moment. There is nothing, so to speak, in being-for-self to fund (pay for) a duality of it and its moment. So it collapses into **immediacy**, the internal mediation breaks down. “Being-for-self is thus *a* being-for-self, and [...] the wholly abstract limit of itself – *the one*.” (163)

The **one** as **limit** is **abstract** and **self-related**, because it has got no concrete sides (like something and other) whose limit it could be. Thus, the “soft” ideality of being-for-self has turned into the hard “reality” of the one. [For a fuller treatment, see B.a)]

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That was the **easy part** of the chapter on being-for-self. Now come the difficulties, as Hegel himself remarks, for: “The *moments* which constitute the Notion of the one as a being-for-self [its BL definition] fall *asunder* in the development. They are:” (163 b.)

- (1) negation in general [B.a.) The One in its own self: there is *nothing in it*],
- (2) *two* negations [B.b) The One *and* the Void],
- (3) two that are therefore the same [B.c) Many Ones: sheer duality and plurality],
- (4) sheer opposites [C.a) Exclusion of the One: The ones are all on a par],
- (5) self-relation, identity as such [C.b) The one One of Attraction: indiscernibility],
- (6) relation which is *negative* and yet to *its own self* [C.c) / Transition to quantity].

The main and **fundamental inconsistency** of being-for-self is its violation of the principle of the **identity of indiscernibles** (which is a theorem of second order predicate logic):

$$(Id.Ind.) \quad (\forall F) (Fx \leftrightarrow Fy) \rightarrow x = y.$$

Since the conditional in the opposite direction (the indiscernibility of what is identical) is relatively unproblematic, we can strengthen (Id.Ind.) to get what may be called **Leibniz’s Law**:

$$(LL) \quad x = y \leftrightarrow (\forall F) (Fx \leftrightarrow Fy),$$

which can be used to **define** identity in second order predicate logic. (So, identity and its ilk, like difference, and the number predicates, twoness, threeness etc., all **supervene** on regular or ground floor predicates. Hegel calls them “determinations of reflection.”)

But the many **ones**, being **one exactly like the others**, do **violate** (Id.Ind.) and (LL) and are thus forming an inconsistent and instable urstate.

That is the **foundation** of the difficult part, which comes next: sections B and (above all) C.

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Being-for-self is the **third** to (i) **simple being** und (ii) **d-being**: their “synthesis” (but we wanted to forget about dialectics). In fact, determinateness is now bent back upon itself, and in this sense d-being is indeed **integrated** into simple being.

Being-for-self: **being** as negation-of-itself, with negation understood as **sublation**

Now, **self-sublation** makes for “softness” (ideality), and **being** makes for “hardness” (reality, now in the “higher sense”).

(And here *reality in the higher sense* may have its only interesting scene, after all.)

“The *ideality* of being-for-self as a totality [viz. its of moments, i.e. of itself and its only moment: itself again] thus reverts, in the first place, to *reality* and that too in its most fixed, abstract form, as the *one*.” (164 m.)

In the unity of **hard** being and **soft** self-sublation, that is, self-sublation has no chance of unfolding its internal structure, but gets compressed to absolute, amorphous density: the **one**.

But this is not the end of the (logical) story.

Ad B.a) The One in its own self:

The one simply *is*, it is **unalterable**, beyond d-being 164 b.).

Even Hegel or we, in our **BL**, do not define the **one** as the other (opposite, negative) of something else (as we did with d-being). We define it as the totality self-sublation and at the same time as simple being. I.e., we don’t use former logical urstates for its definition (as we used becoming for the definition of d-being), **pure** being and sublation being no urstates but a mere projection and an operation respectively. One could even say: If you want to know what **simple** being is, don’t look at **pure** being (which is a logical fiction) but a being-for-self as collapsed into the **one** (in which collapse “all difference and manifoldness” “has vanished”, 165 t.).

B-being qua *something* was de facto *within-self*; we *detected* that. But here, with the **one**, its being-within-self is **posited** (165 t.), i.e. part of its very definition.

As not being determined by some other, the **one** is the **whole** of **logical space**. But since all difference and manifoldness have vanished from this logical space, there is **nothing in it**, it is empty: the **void**.

The **inconsistency** of being-for-self begins to make its presence felt: The one is (i) **within-itself** (“in sich”); but then (ii) **nothing**, thus not even itself, is (with)in it. (In its being-within-itself it is pure negativity, but on the other hand it is simple being; and we already know: $B=N$ and $B \neq N$!)

Ad B.b) The One and the Void:

But ‘ $B=N$ ’ and ‘ $B \neq N$ ’ do not fall apart here, as two conflicting relations between B and N, but are one and the same (thus paradoxical) relation in the unity of the **one**, because the one does not tolerate two different relations (or any difference) within itself. But then, in its paradoxical character, the one has to project the difference **outside** itself. So, “the nothing as the void is *outside* it.” (165 m.)

New situation: “Being-for-self determined in this manner as the one *and* the void has again acquired a *determinate* being.” (165 b.) Logical space has regained an articulate **structure**: It is all empty with only the one in it.

(Hegel in a **remark** explains that this is the core of **metaphysical atomism**.)

In d-being we had: Integrated negativity vs. disintegrated negativity.
Here we have: Integrated negativity vs. integrated negativity
 (thus disintegration and d-being again).

Ad B.c) Many Ones: [First and Second] Repulsion:

1st stage of the d-being of being-for-self: the one and the void.
 2nd stage: the one and the (many) one(s).

Because of ‘B≠N’, we have *here* the **one** and *there* the **void**. But because of ‘B=N’ we have as well *here* the **one** and *there* the **one**; in Hegel’s words:

As essentially *self*-relation, the other [we are here talking of the one’s d-being] is not indeterminate negation as the void, but is likewise a *one*. The one is consequently a *becoming of many ones*.

Strictly, however, this is not really a *becoming*, for becoming is a transition of *being* into *nothing*: the one on the other hand becomes only one. (167 b.)

And: “The negative relation of the one to itself is *repulsion*.” (168 t.)

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Next, a **first** and a **second repulsion** have to be distinguished.

First it might seem, as if the one, by **repelling** itself from it self, **posited** and **generated** the many ones (as perfect clones of itself). But if what is putatively created in repulsion really is another indistinguishable one, then that new one repels itself from itself just like the first one.

Therefore, **secondly**, the repulsion is mutual or reciprocal between the many ones. It thus (cf. C.a) will turn out to be **exclusion**: each one **presupposes** the many ones and **excludes** them from itself.

Notes: (1) “Thus plurality [sc. of the many ones] appears not as an *otherness*, but as a determination completely external to the one.” (168 b./m.)

Plurality is in fact (quite independently of Hegel’s Logic) no variant of otherness in that it cannot be defined in terms of **identity** and **negation** and **quantification** (like duality, triality, etc.). Cf.:

there are exactly two F **iff**_{df}
 there is an x such that Fx; and there is a y such that Fy; and x≠y; and for every z, if Fz, then either z=x or z=y.

(2) According to Aristotle, a **genus** is **differentiated** into species by a **differentia** (i.e. otherness), and a **species** is “pluralified” into **individuals**, and these are two totally **different ways** of going from unity to diversity: (i) form something to an other, (ii) from one to many.

(There really are – *pace* Plato – no genera according to Aristotle, but there are species and individuals, and both come pretty close to the same thing: essential **forms**. But then, we have a riddle of **individuation** which must be solved. The logic of being-for-self offers a way of solving it to present day Aristotelians: the form/species repels itself from itself to many individual forms and collects them back again into the unity of the species, when the individuals die – the **process** of the **species**.)

Ad C.a) Exclusion of the One:

Next, the second repulsion is explicitly characterized as **exclusion**. But we in **BL** see that all the ones are **indistinguishable**, thus identical: **one One**. And this is so as well on the level of

OL, for: to our external **comparison** as relating the ones there **corresponds** in OL the relation of repulsion itself (the ones are related by it). But if (and in so far as) the ones are related at all, they turn out to be **identical**, because they are indistinguishable). This OL movement toward their identity is **attraction**. In the “*one* affirmative unity” of attraction the many ones are **ideal** (their *reality* is **repulsion** qua exclusion, which is presupposed by attraction).

Ad B.b) The one One of Attraction:

Repulsion “is only the *ought-to-be* of ideality. In attraction, however, ideality is realized” (173 m.), but only for the **many** ones [and for uns in BL], not yet for the **one** One of attraction itself [and for pure thinking in OL]. The many ones “do not in their ideality return into themselves but have this ideality in another one” (174 t.) [and thus only for us].

But the one One of attraction “does not sublimate them [the many ones] abstractly”, i.e. purely **negatively** (positively only for **us**, in **BL**): “Since it contains repulsion in its determination [i.e. presupposes it], this latter at the same time preserves the ones as many in it” (174 m.).

(But isn’t then the one One already **quantity**, which is the (non-abstract) sublation of the ones? Not yet; in quantity even the one One of attraction will be sublated.)

Ad B.c) The Relation of Repulsion and Attraction:

To **show** this, Hegel has to show not only that **repulsion** does not start from an immediate, self-subsistent one but also that **attraction** does not lead to a self-subsistent one.

At first repulsion and attraction stand **apart** from one another; but they are as well “essentially connected with each other” (174 b.). We have the one (and the void); so repulsion seems to come **first**, and then attraction (which presupposes repulsion) comes to the many “as an other” (175 t.). But in fact, attraction “is in repulsion itself” (175 m./t.); otherwise repulsion (exclusion) would break down at its own success: the many ones would just fly up and away.

So we have a **mutual presupposition** of repulsion and attraction. But each is also self-mediation (175 b.) and thus presupposes itself. Second **Repulsion** presupposes itself qua first repulsion; the being of the many ones is repulsion itself. **Attraction** idealizes the many ones; but the ones are unalterable, so their ideality must already have been there.

So self-presupposition and presupposition of the other go together in repulsion and attraction. The **result** of this dialectic of repulsion and attraction is the process which “posits and contains it throughout only as sublated” (177 b.). This process then collapses, qua **becoming**, into the **simple immediacy** which is **quantity**, in which therefore being-for-self (which started as self-sublation and reverted to reality) is sublated. (“Quantity is sublated being-for-self”, 187 t.; and continuity and discreteness are attraction and repulsion sublated in quantity; quantity starts in the form of continuity because of its immediacy.)

But was not the one **One** (of attraction) already “the realized ideality” and thus sublatedness (174) of the ones? Yes, but only of the many ones, it was not yet its own ideality.

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In **d-being**, there was alteration: A became B, i.e. something became an other (A *vanished* and became B, 178 t.).

In **being-for-self**, there was no alteration: the one was “*unalterable*” (164 b.). The otherness was wholly internalized (“itself a being-for-self”, 178 m.).

In **quantity**, being-for-self (unalterability) and being-for-other (alteration) are the same (185). A becomes B and remains A nonetheless (i.e. it alters, and remains the same).

17-Mar 09

Basically, in the Logic of being we have **two “ingredients”** to work with:

- (1) **immediacy**: being;
- (2) **negativity**: mediation, relation, negation, determinateness.

Pure immediacy, i.e. pure being, has turned out to be a **logical fiction**. So whenever we have immediacy, there will also be “a little bit of mediation in it” (cf. d-being and reality).

Since we have no pure immediacy to start with, mediation will never be all **well-founded** but always contain “a little bit of self-relation”, i.e. of “self-relation of the *negative*” (164 m/t) or “self-related negation” (165, l. 3).

The purely immediate *would* (per impossibile) be **being**, but being cannot be **purely** immediate. So the **logical mark** of **being** is not pure immediacy, but consistency (non-contradiction) and therefore stability, rest (stable, affirmative self-mediation, if such there can be; a promising candidate was *infinity qua being*, i.e. *being-for-self* – but it turned into the One).

The **logical mark** of **negativity** is inconsistency (self-contradiction) and therefore instability, unrest.

Now, the **One** does not just *have* a little bit of self-related negation (at its outer rim, say) but *is* self-related negation (164, 165), though not concrete self-negation with distinguishable moments, but **abstract** self-negation, sheer negativity, nothing. On the other hand, it is being-for-self, thus infinite being, thus an (at first) **promising candidate** for stable, affirmative self-mediation: being.

The **One** is, as it were, a perfect **superposition** of **pure being** and **pure nothing**. Taken in **isolation**, each of these was a logical fiction; taken **together** as **moments** of a third, they were ways of **becoming**: ceasing-to-be and coming-to-be; but taken **together** as two self-subsistent **urstates** superposed and **fused** into one new urstate, they are the **One**.

Thus, the One inherits **stability** from being and **self-mediation** from negativity. Its problem is that its stability doesn't come from its self-relation, nor does its self-relation come from its stability. Stability and self-relation (being and nothing) are only glued together, super-closely.

In its stability and self-mediation the One is **unalterable**. Nothing can happen to it. But in its internal inconsistency, qua self-negation, it cannot be at rest either. So, quite a lot will happen, but it won't touch the One in its own self but only what goes on around it, so to speak.

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Now, here is the **logical core** of the concept of the **void**, not yet spatial: We call something void or empty, if nothing is in it (e.g. a bottle, a pot). The void (as a singularity) therefore is affirmative logical space with nothing (no urstates, propositions, whatever) in it. The **void** therefore may be defined as the **quality** of the perfect superposition of being and abstract negativity. “The void is thus the *quality* of the *one* in its immediacy.” (165 m.) “The one is the void as the abstract relation of the negation to itself.” (ibid.) For short: **the one is the void**.

“However,” next step, “the void as the nothing is absolutely distinct from the simple immediacy, the also *affirmative* being of the one [remember that negativity and affirmative being are **only glued** together], and since they stand in one and the same relation, namely, that of the one [are glued **together** after all], their difference is *posited* [i.e. belongs to their BL definition – and *surely* it does, if according to the BL definition the one is the superposition of two *different* urstates], but as distinct from the affirmative being of the one, the nothing as the void is outside it” (165).

There is no room for any distinction **within** the one, just as there is no chance of any alteration **of** the one.

The metaphor of being and nothing as **glued together** in the One may be helpful here to illustrate what is going on. The One (affirmative being) is **glued** together with its quality, the void (abstract negativity); but then **only** glued together, so they are still different. But as the one can harbour no distinction, its own quality (qua distinct from it) must be outside it. So we have “the one *and* the void” and therefore **d-being** again (165 m/b).

The moments of **being-for-self**: viz. itself and **being-for-one** (that had collapsed into the One), are now **revitalized**, but as “external to themselves” (165 b): the One as the successor of being-for-self and the void as the successor of being-for-one. Both are the same unity of being and negativity, only differently accentuated, just as quality was in **d-being**: as reality and as negativity, respectively. But here quality as such is negatively accentuated and projected outside the urstate One itself. (In this separation of an urstate from its quality, the next logical stage, **quantity**, may already be foreshadowed.)

But the One and its quality (ideality, moment, negativity, ...) are glued together. So what is projected outside is still the whole thing: the quality has taken its qualified with it. The **void** is still the **One**, as the **One** is still the **void**.

So, in the structure of **d-being** (the One *and* the void) no real alteration has taken place, when the One became the void. The One became the One, outside itself. What is left from the **void** is just the idea of an **outside**: the difference between the One and the One is totally external to them, intrinsically they are the same, one is only just outside the other.

But then, the second One behaves just like the first One: it “alters” itself into another intrinsically identical One etc. for the third, fourth, fifth One as well. And even the first and second keep on “altering” in this way. So, we get **many Ones** in the logical space which had been empty, the void, before. The thought content of the **void** can now be reinterpreted as that into which the many Ones multiply themselves by the adumbrated “alteration” which really is no alteration and which Hegel calls **repulsion**.

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For subsection “**C. Repulsion and Attraction**”, see above. Here, I shall try to sketch only the main ideas and then go on to main “**Section Two: Magnitude (Quantity)**”.

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As the many Ones are all **internally identical**, there is no privileged first One as the unique source of the general repulsion. So, the repulsion is mutual between any two Ones and is thus (mutual and general) **exclusion**.

Exclusion is **second** repulsion, while **first** repulsion seemed to have a privileged One as its source. But, of course, something like first repulsion is still needed; otherwise there would not be many Ones to exclude each other, in the first place. (So, second always **presupposes** first repulsion as something that must have happened in an a priori past, as it were)

Next, Hegel introduces **attraction** as **counterbalancing** repulsion, the basis of attraction being the intrinsic **identity** of the many Ones. And they are identical even considered extrinsically, because in the void there are no particular landmarks to create different external (quasi-spatial) properties. (So, there is no One_k closer to landmark k than One_{k+1} .) Therefore, they are in fact, all **identical** as well; and this identity appears at the **OL level** (i.e. for pure thinking) as their mutual and general attraction into the **one One of attraction**.

But **repulsion/exclusion** is still operative as well, and Hegel shows that attraction and exclusion **presuppose** each other (as well as each itself). **Pure thinking** at the OL level just is the

ongoing process of repulsion and attraction of the many Ones. And what Hegel must show for the transition to **quantity** to be accomplished, is that pure thinking **rises** above what it **is** (repulsion and attraction of the Ones) and makes what it is (and then: was) its new **content**. This new content is the **one One of attraction**, accomplished in such a way that its internal structure of repulsion and attraction is **positively** sublated, i.e. **preserved**. So, the **one One** is not as internally unstructured as each of the many Ones.

The theoretical work that Hegel has to invest here is to show how pure thinking can **leap up** so to speak from only repelling and attracting the many Ones, to our **BL vantage point**. For us, the process of repulsion and attraction is already the one One, but (as yet) only as a regular **propositional state of affairs** in our BL, not as an OL urstate to be grasped by pure thinking.

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A **leap up** (of pure thinking) of the required kind occurs at different stages in the logical development. It occurred for the first time in the transition from the **infinite progress** (the unity of the finite and the infinite *for us*) to **true infinity** (their unity *for pure thinking*). It will occur again in the transition from **measure** (the unity of quality and quantity *for us*) to **essence** (their unity – in which all of being is reduced to absolute “shine” – *for pure thinking*).

Here, as soon as pure thinking grasps the urstate *the one One of attraction*, it passes on to **quantity**. Or, more precisely, the one One of Attraction then **collapses** into the immediacy of quantity as did the infinite into the stable and infinite **being-for-self**.

To show that pure thinking grasps the **one One**, Hegel has to show that in the process of repulsion and attraction no single aspect remains unsublated (as he had shown that in the infinite progress no aspect, neither the finite nor the infinite, remained unsublated).

Let us suppose that has been done – and move on to **quantity**:

The **process** in which the **One** is self-subsistent neither qua starting point nor qua result, but only present qua **sublated**, “in the instability of its moments, is the collapse, or rather going-together-with-itself, into simple immediacy. This being [being: because it is immediacy], in the determination it has now acquired, is *quantity*.” (177 b).

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Quantity “is the determinateness which has become indifferent to being [...]” (185 t) – Who is (actively) indifferent toward whom? Being toward quantity (cf. the German original: “dem Sein gleichgültig”: Sein does not care or bother about its quantity). Hegel goes on: “[...] a limit which is [...] no limit, being-for-self which is absolutely identical with being-for-other – a repulsion of the many ones which is directly the non-repulsion, the continuity of them”.

We have to try to understand these characterizations.

- (1) **Being** does not care about (its) **determinateness**. It is no quale anymore; determinateness (i.e. quantity) may vary, being will stay the same. (Enc § 99: “Quantity is the pure being in which determinateness is posited no longer as one with the being itself, but as *sublated* or *indifferent*.”)
- (2) Quantity is a **limit** which is no limit.
- (3) Being-for-self is absolutely **identical** with being-for-other.
- (4) Quantity (qua sublated being-for-self) is a repulsion which is **non-repulsion, continuity**. Continuity thus is attraction, but attraction as sublated in a new urstate.

In **d-being**, *alteration* (becoming an *other* than itself) was what happened to *something*. In **being-for-self**, there was (at first) no alteration and no other anymore. Now, in **quantity**, alteration *is* staying-oneself: The coming-out-of-self here is no turning into one’s opposite, but

is as such a “perennial *self-production*” of unity, “a perpetual becoming-other which is self-identical” (189 m). **Quantity** is, so to speak, **soft repulsion**: a “creative flowing away of itself”, an “uninterrupted continuity” (188 t), it is (cf. **Spinoza**) “*infinita, unica et indivisibilis*” (189).

In being-for-self, the **many** ones were (as such) a **violation** of the **identity of indiscernibles** (IdInd). In **quantity**, this is still so, but at the same time (IdInd) enforces its validity. So, basically, quantity is the **contradiction** of (IdInd) and Non-(IdInd): The many ones are still many, but at the same time one and the same. Cf. p 190 m/t: **Quantity** is plurality as simple [!] unity [not as an aggregate or a mereological sum]; its **Notion** is “that each of the many is the same as every other”.

Thus, in quantity, repulsion and attraction are not different movements any more, but their unity is now explicit: repulsion as such is attractive and attraction as such repulsive.

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Examples of pure quantity: space, time, matter, light, the ego (185f.)

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Chapter 1. Quantity

- A. Pure Quantity
- B. Continuous and Discrete Magnitude
- C. Limitation of Quantity

We have talked about pure quantity (A), and we have mentioned attraction and repulsion in quantity, thus continuous and discrete magnitude (B). In quantity qua (immediate) **unity**, attraction (thus continuity) is dominant first: **continuous magnitude** (199 b). But repulsion is there as well, so quantity is as well **discrete magnitude**. Hegel does not make much argumentative ado about this “transition” (cf. 200 t). He just says that each moment of quantity is as well the whole of it (200).

The **Encyclopedia** may be of some help here, § 100: Continuous and discrete quantity are not **species of** but **perspectives on** (aspects of) quantity: The same whole is at one time posited under one of its determinations and the other time under the other. And this, if taken in oscillation, gives the antinomy of infinite divisibility (Kant’s second antinomy of pure reason).

Discrete quantity might be considered the logical core of **set** or **class** (cf. 200 m). (Remember that set theory was invented and developed by Georg Cantor for the sake of **infinity**; finite sets are rather trivial. So, discrete quantity qua the logical core of set may still be “*infinita, unica et indivisibilis*”.)

Next, Hegel goes from quantity to **quantum**: quantity with a **limit**, and this happens again without much argumentative effort in “C. Limitation of Quantity”: In the duality of continuous and discrete quantity, quantity as such is limited; so “both undergo transition into quanta”, but not in two sorts of quanta, but into quantum as such (201 b).

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Chapter 2. Quantum

- A. Number
- B. Extensive and Intensive Quantum
- C. Quantitative Infinity

According to the **classical conception of number** (cf. Aristotle’s discussion of various conceptions in Met. MN), each number is a **unit of units** (a one of ones).

And Hegel assents: The One is the **element** or medium of **number**, and that in two respects (cf. “one of ones”): according to **discreteness** as **amount** (of units), according to **continuity** as **unit**(y) or oneness.

Frege has criticized the classical conception exactly on the ground that it violated (IdInd) and has analyzed numbers as properties of **concepts** instead. E.g. the number two is the common property of all concepts which have exactly two instances. This sounds circular, but the circle can be eliminated:

Concept c has exactly two instances iff
 $(\exists x)(\exists y)(x, y \text{ fall under } c, \text{ and } x \neq y, \text{ and } (\forall z)(\text{if } z \text{ falls under } c, \text{ then } z=x \text{ or } z=y))$

That may be fine for the purposes of **mathematics** as that particular region of our thinking which is **posited** as free of contradiction.

Nevertheless mathematics springs from **inconsistency** (in a process of logical emancipation – this much may be conceded to Frege), and the **logical source** of mathematics (here: of number theory) may be captured well by the **classical** conception and its (anyway critical) reconstruction in Hegel’s logic. (Thus, there is here no real conflict between Hegel and Frege, though Frege would no doubt believe so.)

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So, number is **amount** and **unit**. This gives the kinds of **arithmetical operation**: addition, multiplication and raising to square power. Uniting units is number formation (numbering, counting, SoL 206); uniting (counting) numbers is addition; uniting (counting) numbers of equal amount (which thus can serve as units) is multiplication, uniting numbers of equal amount as many times as the amount contains units (so that amount and unit are here equal) is raising to square power.

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B. Extensive and Intensive Quantum

- (a) Their difference
- (b) [Their] Identity [...]
- (c) Alteration of Quantum

Ad (a):

One could perhaps say (Hegel doesn’t but gives other examples) that extensive and intensive quantum are the aspects of **cardinality** and **ordinality**. With natural numbers, there is no difference in extension (only in intension) between cardinals (which measure the size of finite sets) and ordinals (which give the order type of finite well-ordered sets). We get the same infinite sequence in both cases: 0, 1, 2, 3, ...

Finite cardinal and finite ordinal numbers are different only “in their Notion” (intension). The **cardinals** are **encompassing**, they have their individual determinations (numbers of units) **within** themselves; e.g. the cardinal 3 is the unit(y) of three units. The **ordinals**, on the other hand, have their determinations **outside** themselves; e.g. the ordinal 3 is the ordinal which has exactly three predecessors (0, 1, 2).

Beyond finitude, with infinite sets, cardinals and ordinals even part in extension. There is exactly one cardinal of the size of the set of natural numbers, called Aleph_0 , but there are infinitely many ordinals of that size (Aleph_0 , Aleph_0+1 , ...+2, ...+3, ...).

One can see here a bit of the **strength** of Hegel’s Logic. Hegel didn’t know anything about set theory. Nevertheless his logic laid bare a pivotal distinction of set theory, which Hegel then

interpreted along more commonplace lines as a distinction of (a) “normal” natural number and (b) **degree**.

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The cardinal number or **extensive quantum** is determined by what (i.e. by how many) it comprises or **encompasses**. So, it is within itself “discrete, a plurality which has no being distinct from its limit, nor is the limit external to it. Quantum thus [...] is *extensive magnitude*.” (217)

[Continuity and discreteness are determinations of quantity as such, while “[e]xtensive and intensive magnitudes are determinatenesses of the quantitative *limit* itself” (217).]

But the many in the defining limit of a given cardinal number are all alike, all the same.

“Consequently the limit of quantum [...] passes over into *simple determinateness*. In this simple determination of the limit, quantum is intensive magnitude; and the limit [...] is now also thus posited as unitary – *degree*.” (218)

(b) Identity of Extensive and Intensive Magnitude

But equally, intensive magnitude has its defining amount, which is therefore within it (in a sense). (The twenty predecessors of the ordinal 20 have to be united in one unity in order to define 20.) Thus, intensive magnitude passes over into extensive magnitude again, and both are in fact **identical**.

Identical through the negation of difference: That was the defining trait of **a d-being** or **something**. Therefore: “With this identity, the *qualitative something* makes its appearance”, as a kind of substrate of quantum. “*Something* is a quantum” (221).

(c) Alteration of Quantum

With d-being and something **alteration** is back again. At the same time, the quantum is infinite qua successor of the one and of being-for-self. So it **repels** itself from itself. Repulsion and alteration therefore go hand in hand with the quantum; “it is now the express character of quantum to *impel itself beyond itself* and to become an other” (225 m). But the other is no longer indiscernible from it, but greater or smaller. The quantum “consists in undergoing increase or decrease” (225 m), as an infinite progress in both directions (the greater and the smaller): in counting and in dividing the continuum.

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In the *Encyclopedia* we find a slightly different disposition of the section on quantity:

- a. Pure Quantity
- b. Quantum
- c. Degree

In **degree** (or intensive magnitude), Hegel says there (§ 104), the **notion** of quantum is **posited**: What we knew about quantum in our BL is now visible for pure thinking in OL. We knew the contradiction of quantum: that its many units are at the same time indiscernible and therefore one and the same. In the degree their oneness reigns, but their plurality is also present: in the external neighbourhood of the degree (the plurality of an ordinal n consisting in the n predecessors of n).

Now it is characteristic for degree that its very **internality is its externality** and vice versa. In pure quantity **being** was indifferent toward its determinateness (which was thus quantity). Now the affirmative side (being) and the negative side (determinateness) are fused:

Degree is indifferent toward degree (i.e. itself).

Degree **is** exactly what it **is not** – and doesn't even care! It is **self-determined** (every ordinal is what it is without any help of its “friends”, i.e. the other ordinals), but its self-determination is completely **external** and foreign to it.

This paves a short way to **measure** for the encyclopaedic logic (EncL) in §§ 104-106:

We know from SoL that **quantum** is **something**, therefore alterable and finite. We know (from EncL and SoL) that **intensive** quantum (degree) is indifferent toward itself.

Qua finite something the quantum alters, and qua degree it is indifferent to this alteration and always stays the same: quantum. In EncL § 104 Hegel says:

In this contradiction: that the *independent* (i.e. *being-for-self*) indifferent limit is absolute *externality*, the infinite quantitative progress is posited – an *immediacy* which immediately veers round into its opposite, into mediatedness (the passing beyond the quantum just posited), and vice versa.

Number is a thought, but thought as a being which is completely external to itself. [...]

The quantitative infinite progress goes to infinity in both directions: toward the **infinitely large** in counting and toward the infinitely small (the **infinitesimal**) in dividing the continuum. And it never reaches its beyond, i.e. **quality** as such.

But in fact we have here already a union of quantity and quality: To have its own internality (being-for-self) in sheer externality is already quality: the quality of quantum.

In Hegel's word (EncL § 105, translated by W. Wallace, with my commentaries):

That the Quantum in its independent character [in its being-for-self determinateness] is external to itself, is what constitutes its quality. In this externality it is itself and referred connectively [related] to itself. There is a union in it of externality, i.e. the quantitative, and of independency (Being-for-self), – the qualitative. The Quantum when explicitly put [i.e. posited] thus in its own self, is the Quantitative Ratio [or quantitative relation: “Verhältnis”], a mode of being [a determinateness] which, while in its Exponent [as exponent of the ratio/relation], it is an immediate quantum [cf. “p” in the function:

“ $x = py$ ”], is also mediation, viz. the reference [relation, “Beziehung”] of some one quantum to another, forming the two sides of the ratio. But the two quanta are not reckoned at their immediate value: their value is only in this relation.

And § 106 says:

The two sides of the ratio are still immediate quanta: and the qualitative and quantitative characteristics [determination(s)] still external to one another. But in their truth, seeing that the quantitative itself in its externality is relation to self, or seeing that the independence [being-for-self] and the indifference of the character [of determinateness] are combined [united], it is **Measure**.

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24-Mar 09

It is good to be clear on some basic conceptual tools with which Hegel uses to operate.

The distinction between “**in itself**” (“in principle”) and “**posited**” is closely related to the distinction between **determinateness** and **determination**.

The determination of an entity (here: of a logical urstate) is so to speak the determinacy of its in-itself (and as such the opposite of the entity’s outer constitution). It is that which is yet hidden at the OL level (like the oak tree in the acorn), but is already in for becoming visible.

When it becomes visible at the OL level, it gets **posited**, which means that the (former) determination becomes (the new) determinateness or (in still other terms) that the **notion** of the entity in question becomes **realized** and acquires Dasein (**being-there**, i.e. existence of the type of the logic of being, called **d-being**). It is now there for pure thinking at the OL level.

The aspects of the in-itself of a given logical entity (urstate) which are stated in its BL definition are its **determinations** (in the plural now, if there are, as usual, more than one aspect). As long as the logical process goes on (and is still underway to its final fixed point), when an urstate, *u*, gets posited, a new urstate, *u'*, arises as its successor, with the determination of *u* being the determinateness of *u'*.

Here is an **example**:

“But with the *positing* of quantum in conformity with its Notion [sc. in the **ratio of powers**], it has undergone transition into another determination [therefore into another in-itself, expressed by another BL definition]; or, as we may also express it, its *determination* is now also a *determinateness*, what quantum is *in principle* [in itself, “an sich”] it is now also *in reality*.” (SoL 323 m/t)

Quantum was **number** and, more specifically, **ordinal** number or **intensive** magnitude, **degree**, and degree was by definition indifferent to (and for) itself, was exactly what it was not (and didn’t even care). It was self-determined (thus an instance of being-for-self), but its self-determination was completely foreign and external to it. – Now, in the **ratio of powers** the externality of the degree is **internalized**; here “the quantum in its otherness is *identical* with itself” (SoL 322 m/t).

An ordinal (a degree) is what it is considered in isolation, but in its outer **being-there** (d-being) it is determined by the set of its predecessors (the other degrees). In the **ratio of powers**, $y = x^2$, quantum itself determines its other by which in turn it is determined. (or so Hegel says. We’ll come back to this shortly.)

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Now, in the minor Logic (EncL), the **doctrine of essence** begins thus:

Essence is the Notion as *posited* Notion [...].

Essence is (the) Notion, even **posited** Notion? How can that be true? Isn’t essence just that: essence?

Well, even (pure) **being** is already the Notion, not yet the posited Notion though, but only the Notion **in itself** (in principle, “an sich”). Here is the reason why:

Nothing [a nice ambiguity] is posited in **pure being**. If something [again an ambiguity, but not a nice one, because we are here not talking about the logical urstate *something*] were posited in it, if being had a (concrete, non-abstracting) BL definition, if it could be really thought instead of “meant” only, **then** it would (per impossibile) have to have a logical **predecessor** at the OL level and would be **determination** of that

predecessor, while the predecessor in turn would be **realized** in and with being, i.e. would have its **being-there** (d-being) in pure being (surely an absurd scenario).

Now, pure being is “meant” to be all of logical space, thus “the absolutely infinite, unconditioned and free”, to quote Hegel’s opening claim about the pure **Notion** (SoL 601). Therefore, pure being is already the Notion **in principle** (in itself: still totally hidden and implicit).

We learned: In and with **essence**, Notion is posited. That means that the aspects of our BL definition of Notion (i.e. of the Notion of the Notion, i.e. the determinations of the Notion) are already there at the OL level, but not yet united into a **single** thought or **single** logical urstate. Thus Hegel continues (EnCL § 112):

[Essence is the Notion as *posited* Notion], the determinations are in (the) Essence only *relative* ones [W. Wallace: correlatives], not yet [as] absolutely reflected in themselves [but still reflected in their respective other]; therefore the Notion is not yet as *for-self*. Essence, which is Being coming into mediation with itself through the negativity of itself [the grinding mill running free, grinding what is already ground, without original input], is the relation to itself, only in so far [and because of this restriction other than in the case of the Notion] as the relation is relation to an other, this other however being immediately not as something which *is*, but as something which is *posited* and *mediated*.

What does that mean? In essence the determinations of the Notion are present, but only as **correlatives**, not as united into one thought. Their correlation is not d-being, however, but one side, the side of the “other”, is not *there* (“d-being-ly”), but only posited and mediated (sublated). (Being posited is in fact the essence-logical successor of the being-logical being-there or d-being, i.e. “Gesetztsein” is the successor of “Dasein”.)

This is true, in the first instance, of the “other” of essence: **being**, which is in (the) Essence only as “**shine**”, not as a real other. But it is true as well of the internal structure of essence. (In fact, there is no opposition here in the first place: Essence is the “shining in itself” and thus **creates**, posits, the determinations of that shining: the “**essentialities**” or “determinations of reflection”.) The determinations of reflection come in pairs, first as **identity** and **difference**. Now, each of these two essentialities purports to be the whole of essence, and each includes the other as its moment, each in turn “shines” into the other one.

So, **identity** is “in itself” (in principle, “an sich”) as well **difference**, and vice versa. But they don’t come around to form one unitary urstate of essence. Or when they finally do, in the urstate (the essentiality) **contradiction**, their union is the extremely unhappy one of posited inconsistency and “geht zu Grunde”, literally: goes (falls) to ground, i.e. perishes (the German “zugrunde gehen” fits together well with what results from that perishing: the **ground**, as the last one of the essentialities, 444 m).

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But what now about the **Notion**? (We started talking about it and should say one more word in order not to remain totally cryptic, although it is not our present subject matter.)

With the notion the **fixed point** of the logical development is reached, at least “in principle”. That means that **OL content** and **BL content** now finally coincide (at least “in principle”) and that our BL definition of the Notion is represented in the Notion itself or that the Notion is as well the **Notion of the Notion**. On the other hand, as Hegel says, the Notion is as yet *only* the *Notion* of the Notion, not yet its full (self-)realization, this latter being be the **absolute idea** with which the logic actually ends.

A quick way to give (or summarize) the BL definition of the Notion is this (SoL 578 t):

The progressive determination of substance [the concluding essence-logical urstate] necessitated by its own nature [i.e. substance itself necessitates its progressive determination], is the *positing* of what is *in and for itself*. [Substance in this positing becomes as well subject.] Now the Notion is [and here comes the quick definition] that absolute unity of being and reflection [i.e. being and essence, being and positedness] in which being is *in and for itself* only in so far as it is no less *reflection* or *positedness*, and *positedness* is no less being that is *in and for itself*. This abstract result [the quick and short definition of the Notion] is elucidated by the exposition of its concrete genesis; that exposition [the real definition of the Notion: the logic of substance, and in the last analysis the whole of the logic of being and the logic of essence] contains the nature of the Notion whose treatment it must have preceded.

What pure thinking “does” in grasping the Notion (i.e. the positing of the Notion) must be part of (in fact all of) the **content** (i.e. the being in and for itself) of the Notion. Nothing is hidden anymore in the Notion, it is totally **transparent** for itself (for the pure thinking which it itself is). There is no opaque grinding mill (opaque negativity) anymore. The mill so to speak now results from its own grinding activity. It is the ground output of its own activity.

In and with essence, the **negative** existed **only** as negated (no simple immediacy anymore). The mill of negation ran free, using as input **only** its own output, but it still had *being in and for itself* which was not yet as well posited (the mill was simply there, grinding; though no original, “immediate” corn was there to be ground).

In and with the Notion, **negativity as such** exists **only** as negated. The mill of negation now is posited as well, i.e. it is itself the product of its own grinding (negating). But if negativity as such is now only as negated, it will have lost its sting (the sting of antinomy and self-destruction) and be domesticated. All’s well that ends well.

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From quantity to essence through measure

We know from SoL that **quantum** is **something**, therefore alterable and finite. We know (from EncL and SoL) that **intensive** quantum (degree) is indifferent toward itself.

Qua finite **something** the **quantum** alters, and qua **degree** it is indifferent to this alteration and always stays the same: quantum. In EncL § 104 Hegel says:

In this contradiction: that the *independent* (i.e. *being-for-self*) indifferent limit is absolute *externality*, the infinite quantitative progress is posited – an *immediacy* which immediately veers round into its opposite, into mediatedness (the passing beyond the quantum just posited), and vice versa.

Number is a thought, but thought as a being which is completely external to itself. [...]

The quantitative infinite progress goes to **infinity** in both directions: toward the **infinitely large** in counting and toward the infinitely small (the **infinitesimal**) in dividing the continuum. And it never reaches its beyond, i.e. **quality** as such.

That is an interesting point. The **beyond** of the quantitative infinite progress could nowadays be thought of, *prima facie*, as a **transfinite** number. So, \aleph_0 is the smallest non-finite cardinal number and ω the smallest non-finite ordinal number (limit number). But if set theory thus might be taken to have shown that the **beyond** of the quantitative progress is still a **quantum**, it has on the other hand shown as well that in reality this is not the case, because the progress just continues in the **transfinite**. The true beyond, in which the progress would have come to a halt, can only be **quality**.

And in fact we have here already a union of quantity and quality: To have its own internality (being-for-self) in sheer externality is already **quality**: the quality of quantum.

In Hegel's word (EncL § 105, translated by W. Wallace, with my commentaries):

That the Quantum in its independent character [in its being-for-self determinateness] is external to itself, is what constitutes its quality. In this externality it is itself and referred connectively [related] to itself. There is a union in it of externality, *i.e.* the quantitative, and of independency (Being-for-self), – the qualitative. The Quantum when explicitly put [*i.e.* posited] thus in its own self, is the Quantitative Ratio [or quantitative relation: “Verhältnis”], a mode of being [a determinateness] which, while in its Exponent [as exponent of the ratio/relation], it is an immediate quantum [cf. “p” in the function: “ $x = py$ ”], is also mediation, *viz.* the reference [relation, “Beziehung”] of some one quantum to another, forming the two sides of the ratio. But the two quanta are not reckoned at their immediate value: their value is only in this relation.

And § 106 says:

The two sides of the ratio are still immediate quanta: and the qualitative and quantitative characteristics [determination(s)] still external to one another. But in their truth, seeing that the quantitative itself in its externality is relation to self, or seeing that the independence [being-for-self] and the indifference of the character [of determinateness] are combined [united], it is **Measure**.

I won't go through the details of the three variants of quantitative ratio:

the direct ratio	$y = px$
the indirect ratio	$y = 1/x$
the ratio of powers	$y = x^2$

Suffice it to say that in the ratio of powers the quantum, x , **determines itself**: x times x , in its own externality. So Hegel can say:

“But in the ratio of powers, quantum is present in the difference as *its own difference from itself*. [It is not only different from itself but is now itself its very difference from itself!] The *externality* of the determinateness is [has always been] the quality of quantum and this externality is now posited in conformity with the Notion of quantum, as the latter's own self-determining, as its relation to its own self, as its *quality*.” (SoL 323 t)

The point is that the externality as such has at last turned out as the internality, *i.e.* as the quality, of quantum.

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Pure thinking at the OL level has now gone **full circle**: from quality to quantity and back to quality. From one inconsistency to another and back to the first. From the frying pan into the fire and back into the frying pan. And this could go on forever in a new infinite progress.

What will happen next is that the **circle**, which is there for us, in BL, and in which pure thinking is caught at the **OL level**, will have to become a unitary **OL urstate** for pure thinking itself.

But first, this new unitary urstate is there for pure thinking only as the **immediate unity** of quality and quantity in which its inconsistency is well hidden: this is **measure**. (“Abstractly expressed, in measure quality and quantity are united.” SoL 327 t. “At first, as an immediate measure it is an immediate quantum, hence just some specific quantum or other; equally immediate is the quality belonging to it, some specific quality or other.” 333)

In the Minor Logic, measure is treated very briefly. First, we have **immediate measure**, a quantum to which a quality is attached (e.g. a foot, for measuring length).

To this **immediate unity** of quality and quantity there corresponds the **immediacy** of their **difference** (for, of course, they are different as well): We get **specific quantum** which is a **rule** – one might even say: a **rule of thumb**: we know roughly how large a garden must be in order to be neither just a patch or bed nor a whole park, but a garden, justly so-called. The (specific) quantum *qua* **bare quantum** may be diminished or increased without measure thereby being set aside or the rule being violated. Thus, you may turn part of your garden into a car port or buy your neighbour's garden and add it to your own without thereby ceasing to have a garden. But of course, if you go on diminishing or increasing the area of your garden, you will finally wind up with a patch or a park respectively.

Beyond the measure we will hit upon the *measureless*. But the measureless of x is the measure of y. Thus, the measureless of your garden may be the measure of your park. This “self-abrogation and restoration of measure in the measureless” (EncL § 109) can be imagined as an **infinite progress**, an infinite “nodal line of measure relations” (SoL 366) again. (In nature, each nodal line will of course be finite, cf. e.g. the two nodes at 32°F and 212°F, as regards the aggregate state of water.)

The **immediacy** of the unity of quantity and quality is now sublated (**EncL § 110**): “But measure shows itself as sublating itself into the measureless. However, on the other hand it is only going together *with itself* in the measureless, which is the negation of measure but itself unity of quantity and quality.”

This then is the point at which **pure thinking** at the **OL level** catches up with our BL thinking in uniting quantity and quality into one dynamic, self-mediated urstate. The oscillation between quantity and quality which threatened as an infinite progress for us (in BL) is now present, as an oscillation between the specific measure and the measureless, at the OL level. So, again we have here a transition of the kind we know from the case of the infinite progress of the finite and the bad infinite into the true infinite. In Hegel's words (§ 111):

The infinite, which is affirmation as a negation of negation, now has quality and quantity as its factors [sides] instead of the more abstract factors [sides], being and nothing, something and other etc.

Measure thus gets aligned with **becoming**, **alteration**, the **infinite**, as a dynamic unity of two factors each of which is inconsistent and gives way to its counterpart.

But there is here no way anymore for a collapse into a stable, affirmative unity. The whole **sphere of being** is now compressed into a single urstate “being”, which is a **substrate** of two **states** (purely external qualities), quality and quantity, both of which are self-destructive and, “*through the negation* of every determinateness of being”, turn being into **absolute indifference**, a purely negative and inconsistent “simple unity” (SoL 375).

Being was **abstract indifference** at the beginning of the logic qua result of our abstracting from all possible differences. Now this same indifference is reached as a result of being's own “abstracting” from all internal differences in its internal inconsistency. This is why the indifference is now called “absolute”: it is internal to being itself, self-induced.

And there is no way here to save the situation by pleading **indexicality**. This move has been used up with becoming and alteration and has in the event turned out not to be of lasting success. So, the inconsistency is there to stay, forever, destroying all internal structure. The enterprise of the presuppositionless theory has finally ended in **shipwreck**. So whole logic of being is “sublated” in – shipwreck (called “absolute indifference”)! Or so it seems.

Now, what remains of the logic of being is **absolute negativity**, negation without any affirmative, immediate input. This result is “merely the product of the *external* reflection of the subjective thinker” (SoL 384 t), and if that were all, our project would indeed be in ruins.

But of course Hegel wants to turn that result into something **helpful** which we can work with. Pure thinking itself must somehow come into the position of rising above its shipwreck and of making its shipwreck its new content.

But I think that at the end of the **logic of being**, there is no other way than that the **theoretician intervenes** and sets the derailed logical train on the tracks again – or, better still, finds **new tracks** to continue the journey. That is what makes the transition from being to essence such a big thing after all.

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Considerations at the end of the “tracks of being”:

- (1) Being was to be grasped by thinking, in an act of pure intellectual intuition, as something immediately given. We now see that being is everlasting **self-destruction** without any profile (structure, determination, distinction, difference). Thus, we in BL may conceive of a negation of being, stipulating at the same time that it is not of its (i.e. being’s) ilk. We must be careful, for being itself is already the negation (and destruction) of being, so we must devise something sufficiently **new**.
- (2) So the new urstate which is to negate being might be conceived as an urstate which is **not graspable** as something immediately given by pure thinking but as hiding behind the immediately graspable. What is hiding behind the phenomena as something deeper and more real, is usually called their **essence**. Thus, the essence of **manifest** water is a **theoretical** (and as such unobservable) entity called H₂O.
- (3) So, we might **dub** the looked for new logical urstate “**essence**” and **stipulate** (i) that it is the **negation of being as a whole**, but (ii) a **new**, essence-like, hitherto unknown kind of **negation**, and (iii) nonetheless a negation that arises out of the **antinomy of being** itself (and not totally unconnected to it), so that pure thinking will be somehow be able to get from the tracks of being onto the tracks of essence.
- (4) Now, if we dubbed the unknown **other** of antinomious being “essence”, then being will be **non-essence**, or the **unessential**. But of course, we don’t want the new urstate *essence* to fall back into the relation of **something** and an **other**. At first it does, for lack of profile of the new negation, and thus we get the opposition of the **essential** and the **unessential**. This is the beginning of the logic of essence (chapter 1, on “shine”, section A, pp. 394-5).
- (5) But we know that the opposition of the essential and the unessential cannot be *it*; its content (**essence**) does not fit into its form (**d-being**). Of course, we could go deeper into the logic of being: Had not the **infinite** fallen back into the opposition of something and an other as well, and had the solution not been **idealization**, i.e. the sublation of the finite and the bad infinite – and then the transition to **being-for-self**. But in being-for-self, the urstate and its sublated moment, i.e. being-for self and being-for-one, were identical, and we don’t want to be essence and antinomious being to be identical. That would be a **fixation** of the antinomy. (And besides we know that being-for-self will lead through quantity and measure into the antinomy anyway.)
- (6) So, we need something totally **new**. The new urstate *essence* lies **behind** or well hidden **within** antinomious being which in turn is no real other for essence but only its null and invalid **foreground**. We in BL must sever the pure thinking of antinomious being from any (objective) **truth claim**. But what remains of a content of thinking if

severed from objective truth claims is called a mere **seeming**, mere **appearance**, or, as I shall say in order to mimic Hegel's German, a mere **shine**. So, we have at least a **name** for what has remained of being, in relation to the new urstate **essence**: **shine** ("illusory being" in Miller's translation, but shine need not be **illusory**, it may as well be treated for what it is, and then no illusion is attached to it).

- (7) So, being in its everlasting antinomy is **shine**, and its global negation is **essence**. Shine in its total invalidity and nullity cannot stand in any real opposition to essence. It is strictly **nothing** (writ small) in relation to essence. All there is to it must somehow come from essence itself. (So there is a sense in which shine is identical with essence after all, but we must be careful not to say that shine is essence, full stop; nothing could be further from the truth.)
- (8) So, pure thinking grasps shine but it must "mean" *something else* (but care must be taken not to interpret this along the lines of d-being) behind shine, called essence. Thus, pure thinking goes **representational**! **Shine is a sign**, a *sêma*, in Greek. The dimension of **semantics** is thus opened up before our very eyes. (But Hegel does not comment on it; the importance of semantics for first philosophy became clear only decades later, with Frege, Russell and Wittgenstein.)
- (9) In shine, pure thinking is totally closed within itself and severed from any real urstate. The window it is trying to look through is here in fact a **mirror**. It gets reflected to itself, and that's it. Want some more **metaphors**? He we go. If pure thinking could walk, in shine it would persistently stumble over its own feet. In shine, it is completely entangled with itself. There is no "transcending" to any outside, to the real and objective (not: any more, but: not yet, because in the sphere of being, we were still completely beyond the duality of the subjective and the objective; now this duality announces itself from far away, but that is all for the time being).
- (10) Shine is **not** essence, shine **points** to (signifies, designates) essence as to its **hidden source**. Shine is the **shining of itself within itself** of (the otherwise hidden) **essence**.
- (11) Again we may employ our formula for **the negation-of-itself**: " $\sim(\sim(\sim(\dots)))$ ", and at the analogy with non-well-founded sets, especially with **the unit set of itself**, Ω , which is such that thus $\Omega = \{\Omega\} = \{\{\Omega\}\} = \{\{\{\dots\}\}\}$. This formula is now to be interpreted without any reference to immediate being. It now stands not only for self-related negation but also for **absolute negation**. That means we don't use any "immediate" clue for interpreting it anymore.
- (12) Nevertheless, we can interpret the outer negation sign as standing for the negation of shine, thus:

$$\text{essence} \leftrightarrow \sim(\sim(\sim(\dots))) \leftrightarrow \sim(\text{shine}).$$
 But then shine has the same internal structure as essence and is indeed identified with essence, save the fact that it gets negated one more time, by essence. Thus, essence negates itself and is called "**essence**" qua **negating** and "**shine**" qua **negated** by us in our external BL reflection. Surely an **inconsistent** situation again.
- (13) The **inconsistency of essence** is, of course, vital for any logical progress. On the other hand, it must not be so overwhelming as to block any progress. It will be posited in the "essentiality" (determination of reflection) of **contradiction**. But first it should stay in the background. We come from the open inconsistency of being and need a way out of inconsistency (not a way in).
- (14) So we do two things. (i) We say that essence is not cognitively accessible for pure thinking (yet) and all pure thinking has is shine, which is indeed inconsistent, be-

ing that which is left over from being. This makes room for a little bit of logical structure of shine after all, to be considered in sections “B. Illusory Being” and “C. Reflection”.

- (15) (ii) We then do what we always do with the formula of self-negation: take its negation signs in pairs to get self-affirmation and then add (to correct this one-sidedness) the formula once again, but this time as it were with an uneven number of negation signs, so that one outer negation is left over. This gives us the **formulae** “[unfounded affirmation]” and “~[unfounded affirmation]” respectively as two **equally valid** formulae of **essence**.
- (16) The first formula depicts essence as **identity**, the second formula depicts essence as the negative thereof, **difference**. Identity and difference are called “essentialities” or “determinations of reflection” by Hegel, but first and foremost each of them is the whole of essence. They are **determinations of reflection** only in so far as each “shines” in the other one, thereby betraying its own one-sidedness. Qua determinations of reflection they articulate the logical structure of shine (the topic of chapter 1, sections B and C).

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Our next task will be to say something about the internal structure of shine (**positing, external** and **determining** reflection) and then something about the determinations of reflection (**identity, difference, contradiction** and **ground**).

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31-Mar 09

Rough program for the rest of the semester

- 7-Apr 09 EncL §§ 121 (ground) – 159 (reciprocity/notion)
 14-Apr 09 SoL 529-540 (The Absolute), 600-622 (The Notion)
 21-Apr 09 (?) SoL 623-663 (The Judgment), EncL §§ 166-193 (Judgment, Syllogism)
 28-Apr 09 SoL 824-844 (The Absolute Idea), EncL §§ 213-244 (Idea)

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Some preliminary remarks:

(1) **Essence** is (SoL 391 b)

- (i) **shining within itself**, and the determinations of this shining, or reflection, are the “essentialities”,
- (ii) **appearing**, which opens up what others have called the ontological difference: between (inner) **essence** and (outer) **existence**,
- (iii) **manifesting itself** and in its manifestation **one** with its appearance: **actuality**.

(2) The sphere of essence is “the sphere in which the contradiction, still implicit [an sich] in the sphere of being, is made explicit [gesetzt]” (EncL § 114). In fact, one of the essentialities *is* **contradiction**. (The fundamental logical content of essence is explicitly expressed by the negation-of-itself.)

(3) There are differences of exposition between the major Logic of Essence of 1813 (LE 13) and the minor Logic of Essence of 1830 (LE 30).

In LE 13, Section One (Essence as Reflection Within Itself) ends with a lengthy chapter on **ground** (as the last essentiality), and Section Two, “Appearance”, begins with a chapter on existence, before it approaches its proper subject matter (appearance).

In LE 30, the modal aspects of the LE 13 treatment of ground (“C Condition”) are shifted to section 3 (“Actuality”, § 146), and the treatment of content and form is shifted to section 2 (“Appearance”, §§ 133-4). On the other hand, in LE 30, **existence** is now incorporated in the first section: “Essence as Ground of Existence”).

Probably Hegel would have followed this new disposition, had he still had the time of devising a second edition of the major logic of essence.

The later disposition seems to make more sense: 1. The genesis of the ontological difference („from essence to existence“). 2. The rule of the o.d. (“appearance”). 3. The overcoming of the o.d. („actuality“).

The chapter on the absolute is missing completely in LE 30, which seems to confirm the hypothesis that it did not fit in well in the first place. It is rather a short way to the notion than the first hop or stage on the longer way from appearance to the notion.

(4) From EncL § 114:

“As the [O]ne [N]otion is the common principle underlying all logic [is the substantial in everything], there appear in the development of Essence the same attributes or terms [the same determinations] as in the development of Being, but in a reflex form [in reflected form]. [So:] Instead of Being and Nought we have now the forms of Positive and Negative; the former at first as Identity corresponding to pure and uncontrasted Being [to the opposite-free being], the latter developed (showing [shining] in itself) as Difference. So also, we have Becoming [...] [as] Ground of determinate Being [Dasein]: which itself, when reflected upon the Ground, is Existence.”

Sein	Nichts	Werden	Dasein
Positives (Identität)	Negatives (Differenz)	Grund	Existenz

That is a bit amazing. **Either** the Logic of essence is paralleled to the entire logic of being; then we would have: (1) quality/reflection, (2) quantity/appearance, (3) measure/actuality. **Or** we have a parallel here between the logic of quality and the logic of essence: (1) being etc./reflection, (2) finite d-being/existence & appearance, (3) infinity & being-for-self/actuality.

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Chapter 1 **Shine**

- A The Essential and the Unessential [already treated, shortly]
- B Shine
- C Reflection, (a) positing, (b) external, (c) determining reflection

“[Shine] is the same thing as *reflection*; but it is reflection as *immediate*”, while reflection is shine made foreign or “estranged from its immediacy” (399 m; therefore we use homely Saxon “shine” and foreign Latin “reflection” respectively).

How then are we to understand **shine/reflection**? It is what **comes back** from a surface onto which some light shine. (So, shine may go two ways: to and from the surface, while reflection comes only one way. But as shine is supposed to be the same as reflection, we are presumably supposed to abstract from its to-direction as well.)

“[Shine] is all that remains from the sphere of being.” (395 b) Shine is the immediate successor of the **unessential**: the unessential stripped of its being. Note regarding the **method**: To come into the sphere of essence, one has to start working with essence-fallen-back-into-d-being: the essential and the unessential. So, the **unessential**, the putative “other” of essence, minus **being** is **shine**.

Shine is “*reflected* immediacy” (396 t): only there in the coming back from ... (**nothing**). There is no immediate surface (no other) from which it could come back; shine is “the non-self-subsistent which *is* only in its negation.” (ibid.) – Hegel says that shine is “the phenomenon of scepticism” and that “the Appearance of idealism, too, is such an *immediacy*, which is not a something or a thing” (ibid).

This immediacy then is not present in shine, but only presupposed as “a side that is independent of essence” (397 m/t). But shine is nothing apart from essence, and so, in fact, the moments of shine “are thus *the moments of essence itself*”. (397 b) Shine is to be fully **internalized** to essence itself. As such it is **reflection**.

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The metaphor of the **mill** grinding (running) **free**, without input, but generating an output nonetheless which can ex post be presupposed as the original (but in fact: imaginary) input, is becoming relevant now, with the operation of the mill standing for the operation of negation:

Becoming in essence is “the *movement of nothing to nothing, and so back to itself*. [...] Being [in the sphere of essence] *is* only as the movement of nothing to nothing, and as such it is essence; and the latter [...] is this movement [as absolute shine itself], pure negativity, outside of which there is nothing for it to negate but which negates only its own negative, which latter *is* only in this negating.” (400 t) – That means that essence qua operation (becoming, transition) is absolute shine, creating or, better, positing what is getting negated in the act of negation itself. “This pure absolute reflection that is the movement from nothing to nothing determines itself further.” (Ibid.) – It is **positing**, **external** and **determining** reflection.

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Positing, in the course of the logic, was the making **explicit** (or giving d-being to) what was there in itself, in principle, **implicitly**. Now this diachronic **logical** movement (BL movement) is turned into an OL content as **positing reflection**.

Positing is not **stipulating**, postulating, inventing, creating. Positing has to be **true to the facts**, it is bound by what is there already, “in itself”. The acorn cannot be posited into a palm tree, nor the coconut into an oak tree.

According to **colour realism** (“Qualia ain’t in the head”, Michael Tye), colours are a physical reality, something like **surface reflectances**. So, a pink ice cube is pink even if stored in the dark of a freezer. But it is pink there only *in itself* (or in principle); the pink is not *posited* in the freezer. It gets posited in and by (day) light. Daylight is true to the colour facts: pink things look pink and green things look green (etc.) in daylight.

So, the real, i.e. **phenomenal**, visible, pink *is there* only in the **coming back** (in the reflection) of the light from the in-principle-pink surface (white light goes to the in-principle-pink surface, and pink light comes back from it). The important thing to see is that phenomenal colours *are there* (have *being-there*, Dasein, **d-being**) only in their **being posited**. So, being posited, **positedness**, is the (essence-logical) successor and equivalent of (being-logical) **d-being**. “In the *sphere of essence*, *positedness* corresponds to determinate being.” (406 m/t) – “*Determinate being is merely posited being or positedness*; this is the proposition of essence about determinate being.” (406 m, positedness is the middle term between d-being and essence.)

But here, in the “interchange of the negative with itself”, we have “the absolute reflection of essence” (400 m), not the “relative” reflection of light from some surface. **Essence**, that is, is reflecting surface, light source, and reflected light **all in one**. So, in the absolute reflection of essence, even that from which the (seemingly relative) reflection comes back has to be posited, but posited as an in itself (i.e. as *not* posited). This positing or “setting” (Setzen) which is a “setting as not set” is a “fore-out-setting” (Voraussetzen, the German word for *presuppose*): **pre-positing**, i.e. **presupposing**.

The **positing reflection** of essence is thus a **presupposing** (401 m), a positing as not posited. But to what fact(s) could one still be true in positing the in-itself? (And nevertheless, e.g., in Kant’s transcendental philosophy the thing in itself gets *posited*.) The only fact around, in the absolute reflection of essence, to be true to is **absolute negation**: the mill of negation running free. The grinding of this mill is the positing of the output (the ground corn, i.e. the negated being) – which is as it should be; but (which is highly strange) it is *ipso facto* as well the positing of the input, more specifically, the positing of the input *as not posited* (but as given as an in-itself).

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External reflection would be reflection with respect to the in-itself; it could therefore not truly reach its subject matter (the in-itself) in positing this or that. But if the absolute reflection of essence posits its own “input” as not-positing, then by that very same token it is turned into **external reflection** with respect to that input as an in-itself.

This is (by the way) how we pre-theoretically interpret **perception**: as mere **receptivity** which leaves the things perceived (“received”) as they are, i.e. we conceive perception as external reflection (and only on closer theoretical inspection do we begin to conceive it as a positing of what is there in principle). More generally speaking, **external reflection** is the totality of our cognitive acts and states standing over against the object to be cognized. So, we have the infinite reflection of subjectivity on one side and the thing in itself on the other side, the latter

“the immediate” and the former the “reflection-into-self” which stands “over against it” (403; cf. the whole page):

“This external reflection is the syllogism in which there are two extremes, the immediate and reflection-into-self; the middle term of the syllogism is the connection of the two, the determinate immediate [the thing in itself as cognized, determined, determinate], so that one part of the middle term, immediacy, belongs only to one of the extremes, determinateness or negation, belongs only to the other extreme.” (403) [So, there really is no valid syllogism here to be found, but rather a *quaternio terminorum*: “Banks are for sitting. Wachovia is a *bank*. So, Wachovia is for sitting“. Subjectivity won’t come together with the thing in itself, because there is no unique middle term to unite them.]

“But a closer consideration of the action of external reflection shows it to be secondly, a positing of the immediate [that is so in the absolute negation which is essence: the immediate input into the operation of negation has to be posited, otherwise it would not be there at all], which consequently becomes the negative or determinate [it gets negated, qua input, and is the other of the output]; but external reflection is immediately also the sublating of this its positing; for it *presupposes* the immediate [positing reflection, we know, is presupposing reflection]; in negating [the input] it is the negating of this its negating [the input is as well there to stay and in fact the same as the output]. [And so the in-itself and external reflection come together after all:] But in doing so it is immediately equally a *positing*, a sublating of the immediate negatively related to it [in the phenomenal colours the seen surface is not immediate anymore but interferes with vision, vision has sublated the immediate in it], and this immediate from which it seemed to start as from something alien [the surface as such is alien to vision], *is* only in this its beginning [the surface qua phenomenally coloured is only in the reflection of light from it to the eye]. In this way, the immediate is not only *in itself* [in principle, for us in BL] [...] *identical* with reflection, but this identicalness is *posited*. [...] The fact is, therefore, that external reflection is not external, but is no less the immanent reflection of immediacy itself; in other words, the outcome [or output] of positing reflection is essence in and for itself. Reflection is thus *determining reflection*. [Essence is the input and the output of absolute negation.] (403f.)

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As **determining reflection**, subjectivity, thinking, **reason** is seen as powerful: as the internal movement of the *thing in itself* (better: the absolute; cf. the saying, in the introduction to the *Phenomenology*, that the absolute wants to be with us.) – What we in our external **BL** reflection did, when we went from **being** to **essence**, must be seen as the internal movement of essence itself (cf. 405f.).

I said that pure being, at the frontline of essence, grasps only **shine**, but that it must mean something else, **essence**, which is “hidden” and thus gets only **signified** (not grasped), but which cannot really be “something else” (the essential over against the unessential shine) either.

Now, shine is **reflection**, and **pure thinking** qua grasping shine, is the act of reflecting. In its reflecting it has to **posit** essence as its referent, but it remains **external** to its referent, thus **external reflection**. But all of logical space is now essence; so there is nothing here but essence. Therefore, reflection, even the external reflection (in which shine only signifies essence which remains hidden), must be the internal movement of essence itself, thus internal, **determining reflection**. And the aspects of this reflection must be aspects or moment of essence itself: **essentialities** or **determinations of reflection**.

Reflection first is **positing**: making visible what is there implicitly, but (naively conceived as) making visible what is already there in itself in exactly the same manner (cf. naïve colour realism), thus **presupposing** (positing as not posited) what is posited. But then reflection is in fact **external**, not reaching its object (the phase of scepticism that follows naïve realism). But with the absolute negation (of essence) input and output are the same (and still two): One and the same reflection repels itself from itself (406 b) and is there on both sides, the side of the input and the side of the output. This is called “absolute presupposing” (ibid.), because the presupposed is in no way other than the presupposing.

“Consequently, positedness is, as such, negation [privation, lack of reality, negatedness]; but, as presupposed, it is [not only the negated input, but] also reflected into itself. Positedness is thus a *determination of reflection*.” (Ibid.) **Negated** and at the same time **reflected into itself**, thus **affirmed-by-itself**: that is the repulsion of reflection from itself, into two **determinations of reflection**, which are the same and yet one the negative of the other. Each of them is reflected into itself, thus the whole of essence, and each has the other as its – identical! – opposite.

“By virtue of this reflection-into-self the determinations of reflection appear as free essentialities floating in the void without attracting or repelling one another.” (407 m) We have here only the original repulsion (but it is not there to stay, when it has done its work). Each of them, qua posited by the other, is at the same time sublated, but qua reflected into self, both are self-subsistent and are “infinite self-relation” (408).

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These essentialities are **identity** and **difference**, to begin with. (In „A. Identity“, pp. 411f., it seems that Miller has got the disposition wrong: one “2.” (411) too many! Remark 1 ends at 412 b., and then comes Nr. 2. of the main text, including the transition to difference (413), which would otherwise be part of remark 1.)

In fact, Nr. 2 on p. 412 is extremely important: “This identity is [...] essence itself, not yet a determination of it, reflection in its entirety, not a distinct moment of it. As absolute negation it is the negation that immediately negates itself [...]” Etc. “What is present, therefore, is self-related, reflected difference, or pure, *absolute difference*.” (413) And only now do we have two determinations of reflection and two images of essence as a whole.

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7-Apr 09

Today: **The logic of essence in a survey.**

Essence, at first, qua pure **reflection**, is **identity**, according to the formula “ $\sim(\sim(\sim(\dots)))$ ”, where negation is bent back into affirmation: unfounded and therefore **absolute affirmation**.

The affirmation is mediated through double negation, therefore identity includes negation and is “in principle” as well negation. So, it has its negative – **difference** – as its moment, as well as itself. [The infinite formula of identity includes itself (many times) as well as the formula of difference (again many times), which is the same formula with only the “imaginary” difference that the number of negation signs is imagined as uneven.]

Difference, on the other hand, includes identity and itself as its moments and is, like identity, the whole of essence, qua **absolute difference**.

Identity and difference are usually defined as second floor predicates with respect to first floor predicates: “ $x = y$ iff (f)(fx iff fy)” (with the predicate variable “f” ranging over first floor predicates). But here, in the logic of essence, they get an **absolute**, i.e. totally **unfounded** expression. Reflection is pure and absolute, not guided by first floor predicates (i.e. not guided by the logic of being anymore).

We, in **BL**, see that essence is identity **as well as** difference. Pure thinking at the **OL** level either conceives of essence as identity **or, alternatively**, as difference. But the situation has changed since the logic of being, especially of d-being. When pure thinking grasped *something*, it at the same time negated and sublated the *other*, which, though, persisted outside of this act of pure thinking in the logical space of d-being (for us, in **BL**). Pure thinking never had the whole, dichotomous logical space of d-being in view but was always lost in one side of it. The nearest it came to having it all in view was in grasping the **limit** and then the **finite** (i.e. the something with its limit). But the limit wasn’t concrete dichotomous logical space but at best represented it. – Now, in grasping **identity**, pure thinking (i) negates and sublates (“**posits**”) difference and (ii) at the same time **presupposes** (“pre-**posits**”) it, as a self-subsistent urstate (and vice versa: in grasping difference it presupposes identity).

We see now why it might have been important that Hegel first talked about **reflection** (positing and presupposing, external, determining). In the sphere of essence, pure thinking has acquired a new relationship to logical urstates: it can grasp them as before, but not only that, it can as well **presuppose** them, **ungrasped**. This is a major step towards **propositionality** already, for propositions can be presupposed (without being explicitly grasped) as well. (But the difference between affirming and only grasping a proposition or between grasping a true and grasping a false proposition has not yet been provided for.)

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LE 30 (EncL):

Essence as Ground of Existence

a. The Pure Determinations of Reflection

α) Identity

β) Difference

1) Immediate Diff. (§ 117f.)

2) Essential Diff. (§ 119f.)

γ) The Ground

LE 13 (SoL):

Essence as Reflection Within Itself

Ch. 1. Shine (incl. Reflection)

Ch. 2. The Essentialities or Determinations of Rf.

A. Identity

B. Difference

(a) Absolute Difference

(b) Diversity

(c) Opposition

C. Contradiction

Ch. 3. Ground

- b. Existence (In LE 13 existence and the thing are treated
 c. The Thing in section 2, “appearance”.)

(We have talked about **identity** and **absolute difference**. Next comes **diversity**.)

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With positedness, presupposition, difference not only a prerequisite of **propositionality** is realized, but (not surprisingly) at the same time a prerequisite the **objectivity/subjectivity distinction**. (“There is something over there, **different** from this “my” act of positing it.”)

In the sphere of being, determinations were **qualitative**, but though quality was rooted in relation and negation, the relation was not grasped by pure thinking. Now, in the sphere of essence, pure thinking grasps negation (and determination) qua **relation**, difference, positedness, mediatedness. The determinations of reflection are (as such) reflected into themselves and thus not merely **dependent** determinations as in the sphere of being, but at the same time self-subsistent, and presupposed as such.

In **diversity**, this becomes obvious (“posited”, I would say, but Hegel does not say so). Identity includes itself and difference as its moments, but as these moments are as well reflected into themselves and therefore self-subsistent, identity **falls** as well **apart** (SoL 418 m) into its moments and pure thinking grasps the dichotomous logical space which comes out of this falling apart as a new form of difference, viz. **diversity**. Its “parts” are, of course, identity and difference (i.e. diversity itself), which can now be **compared**, not only by us in BL, but (inarticulately) by pure thinking in OL (which just *is* their comparison). As compared, they are either like or unlike each other (either equal or unequal). So, **likeness** and **unlikeness** are the posited version of **diversity** which in turn is their *in-itself* base (as the phenomenal colours are the posited version of physical surface reflectances which provide their *in-itself* base).

But the “indifferent sides” of diversity “are just as much simply and solely *moments* of one negative unity”, called **opposition** (421 b). Likeness and unlikeness, reflected (from their positedness) into themselves, are the determinations of opposition (424 m): the **positive** and the **negative**. Taken (i) together as well as taken (ii) in isolation in their respective self-subsistence, these are (and each of them is, EncL § 120) “the posited **contradiction**” (SoL 431 b).

Now, the **inconsistency of essence** (i.e. of absolute negation) has finally taken over logical space. Again, all structure is demolished, as the sides of the contradiction fall (or, in German, “go”) to the **ground**. Essence now is explicitly what it has been all the time: the **unity** (and **totality**) of essence in its dual shape, with identity and difference as its two aspects; and so the inconsistency, which was suppressed in the separation of these aspects, is back again. “The ground is the unity of identity and difference [...] It is *essence* posited as *totality*.” (EncL § 121). The formula of absolute negation, “~...”, finally taken at face value in its strict inconsistency, is thus the formula of the **ground** – a black hole (and at the same time *whole* or *totality* – oh, the unsung speculative power of the English language!), in which all **structure** is **crunched**. – So the logic of reflection ends in a black hole, called ground, and gives way to “black hole logic”.

For, surprisingly, there is some structure in a black hole as well, quite a lot of structure according to LE 13, though very little structure (or none at all) according to LE 30. Not only the logic of **hylomorphism**: essence as (a) form, (b) form and matter, (c) form and content, but also parts of the logic of **modality** and **causality** are put into the 1813 ground chapter, while in 1830 **ground** is only that from which **existence** arises, as a new form of being: In the ground, essence has sublated difference and mediation and thus restored **immediacy** or **being**. But the essence-like being, **existence**, is mediated through the sublation of mediation (EncL § 122).

Existence – existent = thing. Cf. Dasein – Daseiendes = Etwas // Fürsichsein – Fürsichseiendes = Eins // Existenz – Existierendes = Ding.

With respect to the “category” (the reflexive, essential category) of *thing*, Hegel then develops the following subject matters (according to LE 30):

Existence is the **immediate** unity of **reflection-into-self** and **reflection-into-another**, therefore an indefinite manifold of **existents**, which are reflected into themselves, but at the same time are shining into one another and constituting a **world** of mutual **dependencies**, of grounds and grounded(s), where the grounds are themselves existents (EncL §123).

But since each existent at the same time contains its dependencies “at” (or *on* or *within*) itself and is reflected into itself as ground, it is a **thing**. (“Thing” is the Germanic word for (i) the assembly of the free to decide public matters, then (ii) for the matters or affairs to be talked about, (iii) then for any more or less substantive item whatsoever; cf. Heidegger on “thing”. A thing essentially does some “assembling”.) (§124)

A thing therefore *has* its reflection-into-another “at” (*on*, *within*) itself: its **properties**, which in turn have their reflection-into-self at/on/within the thing (§ 125). But qua existents (though not things, properties thus weaken the equation of existents and things a bit) even the **properties** are unities of reflection-into-self and reflection-into-another, therefore they are on the other hand as well freed from their allegiance to the thing and are abstract determinatenesses: **matters** (§ 128). [Here the concept of **matter(s)** enters the scene. More about it later.]

So here we find the **dialectic** of things qua **bare particulars** “having” (not *being*) properties and then of things qua **bundles** of free, self-subsistent **universals** (“matters”), which was previously developed in chapter 2, on perception, of the *Phenomenology* (chapter 1, on sense certainty, seems to correspond to the whole logic of being, chapter 3, on the understanding, to the section “appearance”, and chapter 4, on self-consciousness, to the logic of the notion – very roughly speaking). This dialectic will eventually (§ 130) lead to the **self-sublation** within itself of the **thing**, by which it is degraded to **appearance**.

On the way to this self-sublation, Hegel in LE 30 develops the logic of **hylomorphism** (which he had put in the chapter on **ground** in 1813): The matters got together into **the One matter** (prime matter), § 128, and the thing then falls apart into **matter** and **form**, § 129, which leads to the **contradiction** within the thing which in turn leads to the aforementioned self-sublation. [More on matter and form below.]

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Section Two (or B): **Appearance**

The *thing* as such is neutral with respect to the question: “Appearance or reality/in-itself?” So, in the *Phenomenology*, the thing is the object of simple **perception** which just “takes in” the perceptible universals. Now with appearance, we get the distinction between the inner and the outer and therefore a job for the **understanding** which is: to penetrate to the unperceivable inside of or behind things, to the forces that are at work in the perceivable processes. Thus Platonic forms as well as the modern conception of laws of force and mass are treated in chapter 3 of the *Phenomenology* under the heading “Force and Understanding”. (But, of course, we are here not in the *Phenomenology*; we are in the *Logic*, and so consciousness and its cognitive faculties are not our subject matter.)

What gets treated in the present section are: a. The World of Appearance, b. Content and Form, c. The (Essential) Relation.

Matter, in the context of **hylomorphism**, was responsible for the **subsistence** of things and was the totality of the thing no less than the form was that totality (§ 129). Now, in the context

of **appearance**, matter is sublated and only one of the **determinations of form**: The appearances don't subsist in the full sense anymore but are dependent aspects of an (*open*, I would like to add, and *unfounded*) totality: the **world of appearance** (§ 132).

In LE 13, Hegel discusses appearance under the three headings “The Law of Appearance” (A), “The World of Appearance and the World-in-itself” (B), “Dissolution of Appearance” (C). In LE 30, the relation of content and form takes the place of these subject matters: It is the **form** which, qua **content** (and content in turn is as well form), is the **law of appearance** (§ 133). (I still **postpone** the treatment of **matter**, **form** and **content** one more time.)

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Only for appearances, not for things in themselves, can there be **laws** of nature. **Naturalism** tends to be insincere on this point. E.g. as against the naïveté of present day **creationists** the naturalist will rightly point out that the forms of life we observe on earth are fully explainable by a (mathematically necessary) **statistical trend**, given the fundamental **biological** or, should biology be reducible to physics, **physical** laws.

But now let a (“naïve”, pre-critical) **metaphysician** enter the scene, addressing the naturalist: “Oh, what happened to you? Remember last week when I tried to convince you that there are, and must be, natural **laws**, i.e. modalities in **rebus**? You just wouldn't believe and kept insisting that it's all just **regularities** with no modal force whatsoever. And today you are talking to this funny guy who thinks that God is permanently interfering with nature, and though he has not produced a single convincing argument, you convert to my metaphysical position?”

And the **creationist** chimes in: “How absurd to believe there are, or even could be, laws of nature! I am totally in line with what my friend, the **naturalist**, seems to have said to you on this issue last week. It's just **regularities**. But of course, the regularities we observe stand in need of **explanation** and the only candidate explanation around is that they are **freely willed** by **God**. If He decided, gravity would be done away with at this very moment.” The metaphysician will laugh and turn away: “Oh, I see the both of you guys are perfect partners in discussion; you really deserve each other!”

But the metaphysician is in for a chilly shower, he as well. Turning around, he runs into an adherent of **critical** (i.e. **transcendental**) **philosophy** who happened to overhear his little discussion with the naturalist and the creationist. “But didn't you once tell me”, he asks, “that things – at least the real and substantial elements of things – exist **in themselves**? How, then, can they be essentially related and bound together by laws? If anything is a distinct entity, then, clearly, a thing in itself is.”

What will **Hegel** say? He will point out that the transcendentalist is right in so far as **laws** (of nature) go together with **appearances** and appearances only. But he will add that the naturalist, the metaphysician and the transcendentalist are all doing **bad metaphysics** or, more to the point, that reality itself is doing bad metaphysics in developing different logical layers which then find their spokesmen in the naturalist, the metaphysician and the transcendentalist respectively. (And the creationist? Is he into *mad* metaphysics? If so, his position could, with a little help of some sophisticated metaphysical friends, be easily turned into a metaphysical theory which meets professional standards, i.e. into another piece of *bad* metaphysics.)

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Matter, Form, Content, Absolute Form

The (essential) **relation** is characterized by the identity of what stands in it. In LE 13, we have the duplication of the **world** as world of appearance and world in itself (which mirror each other perfectly), and in LE 30, we have **content** (the world qua manifold of appearances) and

form (the world qua unitary law of appearance) as the identical material to be distributed to the two sides of the essential relation.

Now, in order better to understand what is going on in the essential relation, let us go back and survey the logical development of **form**, first in its relation to **matter** and then in its relation to **content**.

“**Matter**” is introduced (in EncL) with respect to the **thing**, in the plural first: the properties, bound in the thing, are as well self-subsistent matters (and are, by the way, treated as such in contemporary theories of universals) out of which the thing **consists**, they are its subsistence (§ 127). **Plurality** is characteristic in the realm of existence: The existents are indefinitely many (§ 123), and the thing has indefinitely many properties, which in turn are many matters. The **singular** corresponding to this plural is the said **subsistence** of the thing: the numerous matters coalesce into the **one matter** (§128). We need plurality **and** singularity, and if the matters are all there is to a thing, they have to provide for singularity. The differences that ground and found plurality are then attributable to another element, over against matter: **form**.

Existence in the determination of reflection of **identity** is **matter**.
Existence in the determination of reflection of **difference** is **form**.

This then is **hylomorphism**: the thing consists of matter and form, the matter being its subsistence, the form being responsible for all its distinctions and determinations. (So, each is the totality of thinghood, in its respective way.)

But hylomorphism has to deal with a **regress of matter** that gets stopped by Aristotle with so-called **prime matter**, which is wholly indeterminate: potentially everything and actually nothing. But then prime matter as such can never be found anywhere, and everything we can ever deal with is form. It is only “Vorstellung” (imagination, representation) and the “understanding” which try to **fix** matter before it vanishes into form, e.g. by relying on the thought content of pure **quantity** as an example of matter (cf. above, ad quantitatem).

The thing, qua both: matter and form, in the vanishing of matter sublates itself into **appearance**. That is, hylomorphism is an instable ontology which has an inbuilt logical tendency towards conceiving things as appearances.

With appearances, we have a primacy of form over matter: The **subsistence** of an **appearance** is sublated and is only one moment of **form** (§ 132). [Thus, prime matter is present here only as the spectre of the thing in itself, if at all.] Form, as the principle of plurality, develops (posits) appearance into a whole **world** of appearance, to an “**outside one another**” which is not yet space (but, of course, a logical source or core of space).

But subsistence of things (i.e. appearances) now being a moment of form, form is as well **content** [(pre)formed matter, so to speak] which develops into the **law** of appearance (§ 133). The law qua content is form **reflected-into-self** (form as unified); the form over against the content is **reflected-into-other**: outer form (form as diverse and as the source of diversity, of contingent determinations). The world seen under the perspective of law can then be called **the world-in-itself**, to be detected by (physical) science (cf. Sellars’s scientific realism).

This **world of appearance** whose **content** (inner form) is the **law** (a finite set of fundamental physical equations, let’s say) and whose (outer) **form** is outer **diversity** (the contingent initial conditions of the world which are inherited by later times from earlier times according to the fundamental equations) is still free (devoid) of **subjectivity** and **propositionality**. (These go together naturally – subjects being those entities that make truth claims and truth claims being those entities that are propositional.) But the world of appearance is pre-propositional in the sense of being already underway to propositionality and subjectivity.

We needed the conception of content, because matter tended to vanish and only form was left and we therefore needed to reproduce the form-matter-distinction within (thus **absolute**) form itself. This gave us (absolute) form qua **form-and-content**. Form as opposed to content is relative, one-sided form (as the bad infinite was the relative, one-sided infinite). But content and relative form transform themselves into each other in a “**reciprocal revulsion**” (§ 133), just as the finite and the bad infinite did. And so the “reflected finitude” (§ 132) of the world of appearance gives way to the reflected infinity of **absolute form**, which is in principle there now but which will be posited in the **absolute relation** (§ 133) of **substantiality** (§ 151).

But first there comes the **essential relation** (whole/parts, force/expression, inner/outer) and only then the **absolute relation** (actuality going into the relation of necessity in substance). In the absolute relation the relative, essential relation will be sublated into absolute identity: substance as such. It is instructive to compare substance with the law (the world-in-itself) and the accidents with the world of appearance:

Content is substance **qua substance**, (outer, relative) form is substance **qua accidents**. These, the accidents are no additions to substance from the outside, but are substance itself. (We first have to speak of substance in the singular: it is the whole logical space, as in Spinoza’s metaphysics.) Substantiality is the “absolute revulsion of form and content into one another” (§ 151), thus absolute form.

Now the important **difference** is that law and outer appearances (content and outer form) are still foreign to one another, while substance is itself the totality of accidents, their absolute negativity (i.e. their own, not a foreign negativity) and “absolute power” (§ 151). If the logic ended with the outer appearances and their law, then it would be the task of **physics** to really come up with a **final law** (final set of basic equations, a “world formula” or definite “theory of everything”).

But then, two basic **questions** would forever remain open as **intractable**: (1) Why that law? (2) Why those initial conditions? Ex hypothesi, physics would have to leave those questions not only open but even **unaddressed**.

Substance now is supposed to hold the (indirect) answers to the two questions, since it is the **revulsion** of the law and the initial conditions into one another! They kind of explain each other in their revulsion, not in a vicious circle though, but in a circle whose vicious darkness or opacity is in for illumination and transparency, as soon as (blind) necessity will be transformed into (rational) freedom and ipso facto **substance** into the **Notion**.

Thus, **physics** must always continue in laying bare successor fundamental equations of the ones it had found – in an **infinite progress** (bad infinity). Meanwhile on the logical level the stage of the world of appearance and its law is left behind. And so the bad infinity of physical successor theories is left behind as well.

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Next we have to look at the essential relation [passage (c), after (a) the world of appearance and (b) content and form; §§ 135-141] What has happened up to this point is in SoL, at the opening of Section Three, “Actuality” (SoL 529), summarized by Hegel in the following way:

Actuality is the *unity of essence and Existence*; in it *formless* essence and *unstable* Appearance, or mere subsistence devoid of all determination [i.e. prime matter] and unstable manifoldness [the **form**, *pace* Plato and Aristotle, is here not considered as stable], have their truth. Existence is indeed the immediacy which has proceeded from ground, but form is as yet not posited in it [so it was wise to relocate the discussion of form from the chapter on ground to a later part in LE 30]. In determining and forming itself it [i.e. Existence] is Appearance; and when this subsistence which is determined

only as reflection-into-an-other [a world of many appearances] is developed further into reflection-into-self [the law, the world in itself], it becomes *two worlds, two totalities* of the content, one of which is determined as *reflected into itself* [the world in itself], the other as *reflected into an other* [the world of appearance]. But the essential relation [our next topic] exhibits [or is, “stellt dar”] their *form relation* [the content is one and the same anyway, so there is no *content relation*; only according to the form do we have two sides and thus a relation] [...].

This essential relation (exhibiting the *form relation* of both worlds) is, first, **the relation of whole and parts**, second of **force and its expression**, and third of **outer and inner**.

The **whole** is its parts (consists of its parts); the **force** is totally present in its expression, and the **inner** is totally expressed at the outside.

The whole being its parts is an idea relevant in modern ontology from **Leibniz** to **Russell** and the early **Wittgenstein**. Corporeal substance, according to Leibniz, is compound, and what is compound must (according to all three of them) consist of simple parts. But (as Kant’s treatment of the antinomies shows) the conception of simple parts has its pitfalls, to say the least, which Hegel is referring to in his remark on infinite divisibility (SoL 517f.) as well as in the note/remark to EncL § 136.

The third relation (inner/outer) is particularly interesting for discussions of the ontological and epistemic status of **inner mental states** and **acts**. If their outer expressions in behaviour were only contingently related to them, then there could be logically private items and therefore a logically private language in which a person could talk to herself about her logically private mental states and acts.

But as **Wittgenstein** some 120 years later, **Hegel** insists that the inner is **necessarily** (essentially) capable of getting fully expressed in outer behaviour. (There cannot be a great poet, full of ingenious poems, who by unfavourable contingent facts always comes up with only poor outer expressions of his “inner poems”.) The **outer** is the same **content** as the **inner** (EncL § 139), and as regards the **form**, the inner and the outer are absolutely, i.e. **emptily** opposed; so what is *only* inner is as well *only* outer, and vice versa (§ 140).

§ 141: “The empty abstractions through [or by means of] which the one identical content is forced [or supposed] to be still in the relation sublimate themselves in the immediate transition the one in the other; the content itself is nothing else but their identity. Through the expression of force the inner is *posited* [put in the technical sense of “positing“] into existence; this *positing* is the mediating through empty abstractions; [therefore] it [the mediating] vanishes within itself to the *immediacy* in which the *inner* and *outer* are identical in and for themselves and their difference is determined as only positedness. This identity is *actuality*.”

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14-Apr 09

We are presently talking about the logic of essence in a short survey and have arrived at the beginning of “Section Three: Actuality”.

According to our program, I will first (I) complete the little survey and then say something (II) about the absolute und (III) about the Notion.

(I) Survey Completed

The section about actuality in LE 13 contains (1) a chapter on the **absolute** and its (absolute) **attribute** and its **mode**, with a remark on Spinoza and Leibniz, (2) a chapter entitled “actuality”, containing the logic of the **modalities** (actuality, possibility, contingency, necessity – relative and absolute, real and formal) and (3) a chapter on “the absolute relation”, containing the logic the “categories of relation” (Kant), i.e. **substance**, **causality** and **reciprocity**.

In LE 30, Hegel starts with **modality** outright:

Actuality is the unity, become immediate, of essence and existence, the inner and the outer. The expression [exteriorization] of the actual is the actual itself [...] (§ 142).

This is a rather **high** conception of the actual, which may lend some plausibility to Hegel’s otherwise bewildering, infamous claim (in the introduction to the *Philosophy of Right*) that the **actual** is **rational** (reason-like) and the **rational** is **actual**. There are many things in nature and in society, quite actual in a lower sense, that are not rational at all.

The **lower sense** of actuality is given in § 144, with recourse to **possibility**:

But the actual in its distinction from possibility (which is reflection-into-self) is itself only [i.e. one-sided-ly] the *outer* concrete, the inessential immediate. [...] In this value, of a mere possibility, the actual is a contingent/accidental, and conversely the possible is mere accident/chance itself.

First, in § 143, **possibility** is split from actuality as actuality’s minor self, so to speak. If the difference of the inner and the outer is re-enacted with respect to actuality, then possibility stands for the inner (and is “abstract and unessential essentiality”, § 143) and “lower” actuality (the contingently actual, the accidental) stands for the outer, while actuality (in the higher sense) is it all:

Actuality in the full sense comprises (but not as a mere sum, it sublates as well) (a) the inner abstract and unessential essentiality which is **possibility** and (b) the outer contingently actual which is the **accidental**.

[The accidental, “das Zufällige” is the contingently *actual*, while the contingent (as such) is usually defined as what is possible but not necessary, so that it cuts through the actual and the non-actual.]

By the way: Interesting and theoretically important are Hegel’s remarks on **possibility** and **consistency** (freedom of contradiction) in § 143. How do we know what is possible? Well, what is **inconsistent** is **impossible**. But what is positively possible? A standard thesis is: “**What is consistent is possible**”. This is Hegel’s reaction to the standard thesis: Well, then everything is possible, because everything can be made consistent by abstraction; and everything is impossible as well, because prior to abstraction everything is inconsistent. – This means that the question of consistency and inconsistency is the question whether we abstract away from contradiction or not. (I think that this is basically right.)

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Since actuality comprises both, possibility and accidentality (contingent actuality), the latter are its **moments** (§ 145). Now, **Hegel** says something very **remarkable** with respect to the modalities, viz. that Kant may have been right to call possibility (and thus perhaps accidentality as well) a modality, because it is a mere mode or manner, but that **actuality** (in the full sense) and **necessity** aren't modalities in this sense.

So he would have to say that the usual **inter-definability** of **possibility** and **necessity** is a superficial phenomenon:

$$(\Box p \leftrightarrow \sim\Diamond\sim p // \Diamond p \leftrightarrow \sim\Box\sim p).$$

There may be such a “**merely modal**” concept of **necessity**, but it clearly is not the real thing. And he seems to be right, which can be shown quite independently of his own arguments.

Let's take a short look on some conceptions of actuality. According to David **Lewis's indexical theory of actuality** there is nothing intrinsically special to actuality; it's just that everybody calls their **own world** the actual one, because this is exactly what “actual” means (says Lewis).

A more substantive, less relativistic, conception of actuality would be **Leibniz's** theory: that “there are” (in a sense) all the possible worlds, but only qua contents of God's **intellect** (each internally consistent but each inconsistent with any other, so that at most one of them may be actual); and then there is the best of these which as such is the content of God's morally perfect **will** and thus the object of His omnipotent **agency**. That's what makes it actual, because that is what “actual” means. (“Actual” means: *what the omniscient, omnipotent and morally perfect being freely chooses to create.*)

But then one could reason **with** Leibniz **against** Leibniz: If there is no independent meaning of “actual” according to which our world is guaranteed to be the actual one (i.e. if “actual” just means *created by God*), then it is highly improbable that our world is the actual one, because it does by no means seem to be the best of all possible worlds. (That is, we must be merely possible substances in God's intellect then.)

The point is that **actuality** lies outside the sphere of the modally inter-definable concepts of possibility, contingency and (weak, i.e. modal) necessity. So, one might do “**weak**” **modal logic** without any appeal to actuality: The possible holds in some worlds, the contingent holds in some worlds but not in some others, and the necessary holds in all worlds – and no word about **actuality**!

Something totally new enters the scene, as soon as one world is declared to be **actual**, in a non-relative (absolute) sense. This, strictly speaking, goes far beyond the theory of modality. Then even the mere modalities get a new complexion. For now, the necessary is as well actual, so it rises (infinitely!) in ontological status. And even much of the possible now is actual as well (though this does not seem to affect possibility as such).

Anyway, if we did not already learn it from Leibniz or from David Lewis (somewhat *malgré lui*) we could learn from Hegel that the **theory of actuality** (and strong necessity) and the usual **theory of the modalities** (including weak necessity) are “*two* pairs of boots” (as one says in German). Hegel therefore does not bother to go into the usual theory of the modalities at all, but starts with actuality and treats the mere modalities more or less as abstractions from actuality. What interests him, are actuality and necessity in the strong sense.

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Necessity brings **life** to **actuality**, so to speak, a moment of **activity** (though we have not yet reached subjectivity): activity as the self-movement of (absolute) form (§ 147). **Actuality** is the **immediate** unity of the inner and the outer, **necessity** is their **living, active** (mediating)

unity. We have the totality of **conditions** for a certain **fact** (a “Sache”, i.e. a state of logical space), and then the **activity of form** transforms the conditions into the fact. It is one and the same content anyway; what is important is only the transferring or transforming. (If all the individually necessary and collectively sufficient conditions of a possible state of affairs are given, then that state will obtain as a fact. That is, the conditions will be transformed by the activity of form, without anything further happening, into that state.)

The one **content** (identical in the conditions and the fact) stands for **being**, the **activity of form** stands for **reflection**, i.e. **essence**. We have here being **plus** (at the same time) reflection, and this is what is characteristic of necessity: The necessary **is because it is**.

This may sound **vacuous**; but there is a real transformation here at work, from the totality of the conditions to the fact itself. **Spinoza’s** concept of **causa sui** may be interpreted either in a deflationary or in an inflationary way: **either** as meaning that which simply has no causal mediation (and whose necessity might therefore be as well called contingency) **or** as meaning that whose real causal mediation lies in itself. **Hegel** obviously opts for the “inflationary” interpretation: Necessity is exactly that inner structure which turns substance into a *causa sui*.

(Here one sees that **David Lewis’s** theory of the modalities is not a real substantive theory, but just a nice and tidy representation of (some of) our modal intuitions. What is so specific about the necessary that it is the case in all worlds? The theory doesn’t tell. It couldn’t. The necessary just ‘happens to be the case in all worlds’ (so to speak). But then it is contingent as well, according to what we normally mean by “contingent”. And we could now go on and consider super-worlds, logical galaxies, as we might call them, and so on up in an infinite progress, as with the (finite and transfinite) cardinals.

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Substance according to Spinoza, *is* in itself and can be *conceived* through itself, and it has (as parts/expressions of its essence) **attributes** (through which it is conceived) and **modes** (which are its more or less contingent outer). Spinoza then proves that the singular infinite substance is as well *causa sui*, which means, according to the definition of the latter, that its essence includes its existence. (This is somewhat neutral between the inflationary and the deflationary conception of *causa sui*.)

Now **Hegel** (1) brings the *causa sui* character closer to the definition of substance and makes it part and parcel of its very substantiality, and (2) interpretes it “inflationarily”. **Thus substantiality** is indeed a **relation**: the one **absolute relation** (which gives Hegel the opportunity to go with Kant’s table of the categories, where substance, causality and reciprocity are listed as the categories of relation).

Thus substance is the (absolute) relation

- (1) between **it qua substance** and **it qua totality of its accidents**; then
- (2) between it qua powerful first and original cause [“Ur-Sache”] and it qua effect, thus between *it and it* as between two substances, one **active**, the other **passive**; finally
- (3) between two substances who in their **interaction** create equal status among themselves, because the active one is like the passive one except for its very activity; it can therefore have an effect on the passive one only in turning it into the active one – and then vice versa. Thus, the **indiscernibility** and thus **identity** of (active and passive) substance is here actively **posited** by substance **itself** in pure **reciprocity** – this act of self-positing being nothing other than ...

... **the Notion!**

(II) The Absolute

The chapter on the **absolute** is a kind of short version of the two chapters that follow (on actuality and the absolute relation), leading, as they do as well, from the unity of the **inner** and the **outer** all the way to the **Notion**.

What is important on that way is that our **external BL reflection** on the absolute gets fully **interiorized**, and in the end, in the logical urstate of **reciprocity**, everything we did and thought at the BL level is done and thought by pure thinking on the OL level itself. In the chapter on the absolute this **process of interiorizing** is considered under the heading of “exposition”: the absolute gets “**exposed**”, first by what we say about it, then by itself. – Our reflection cannot posit or determine anything in the absolute, so our exposition *must* in the last analysis be “the *self*-exposition of the absolute and only a *display [or showing] of what it is*” (530 m/b), called as well “manifestation”.

In the manifestation nothing gets done to what is manifested (nothing is posited, i.e. made visible, or determined in it). Or the positing here makes visible what is already visible (so to speak). Hegel’s **absolute** has the structure of Spinoza’s **substance**:

It has, first, an **attribute**, which is what is conceivable of it: “the whole content of the absolute”, which is “the totality which previously appeared [in the technical sense] as a world” (SoL 533 m/b), therefore this content (it itself) as shown in its self-exposition, which latter is its form, or form-activity).

And it secondly has a **mode**, which is its externality (viz. – at first – as an object of our thinking about it), but then more specifically its “externality *posited* as externality” (SoL 535 t).

We have here a structure close to what **Fichte** says about the absolute and our knowledge or concept(ion) of it in his later versions of the *doctrine of knowledge*: There is the absolute on the one side and our conception of it on the other side. What unites them as their middle term is called the “**attribute**” (of the absolute) by Hegel. The extremes to this middle term, of course, are the **absolute** itself and its **mode** (SoL 534f.). So, the mode that’s we, our conception of the absolute, first and pre-theoretically in our **manifest image** of the world (of appearance), and then in our BL (i.e. in exactly that which is being said by Hegel and interpreted here by me), which is “the negative as negative, the reflection which is *external* to the absolute” (535 t). But BL goes far beyond the manifest image and conceives of its own externality. So Hegel goes on (ibid.):

But mode, the *externality* of the absolute, is not merely this [the manifest image], but externality *posited* as externality [in our BL] [...]. Therefore it is in the mode that the absolute is in fact first posited as absolute identity [of the inner and the outer, of the absolute as such and its reflection]; it is what it *is*, namely identity-with-self, only as self-related negativity [our good old friend, “~(~(~(...)))”, again], as a *reflective movement* [*Scheinen*] that is posited as *reflective movement* [*Scheinen*].

But if shining is made visible as shining (if shining is shining as shining), if the externality of the absolute qua content of our thinking and thus our thinking as well is made visible as external, then this self-cancellation of our conception (to speak with Fichte) comes to the self-exposition or the manifestation of the absolute. Thus, Hegel can say:

Accordingly the true meaning of mode is that it is the absolute’s own reflective movement, a *determining*; but a determining which would make it not an *other* but only that which it already *is* [i.e. the determining here is completely “cognitive”, in o way “manipulative” anymore], [thus this determining is] the transparent externality which is the *manifestation* of itself, a movement *out of* itself [and into our seemingly external reflection], but such that this *being-outwards* [Sein-nach-Außen] is equally inwardness

itself and therefore [now comes what is in fact shorthand for the definition of the Notion] a positing that is not merely positedness, but absolute being. (SoL 535f.)

Think of the phenomenal **colours** again as **posited** by **perception** given their physical bases (some surface reflectances). Here we have merely positedness, as regards the phenomenal. But in the unique case of the absolute, what is **posited** is already there as absolute being or (as Hegel later says, with an eye on the notion) what is *in and for itself*. In the Notion, being-in-and-for-self is identical with positedness, and such is the absolute in its self-exposition (or manifestation) as well.

So Hegel can go on (SoL 536 t/m):

When therefore a *content* of the exposition is asked for, *what* then does the absolute manifest? the answer must be that the distinction between form and content is simply dissolved in the absolute. Or the content of the absolute is just this, *to manifest itself*. The absolute is the absolute form which [...] is absolute *content*. The content, therefore, is only this exposition itself.

As this movement of exposition [...], the absolute is manifestation not of an inner, nor over against an other, but it *is* only as the absolute manifestation of itself for itself. As such it is [...]

[...] “*actuality*”, Hegel says in LE 13; but he might as well and more accurately have said “*the Notion*”.

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(III) The Notion

The absolute manifestation of itself for itself – this then is the Notion. It is officially reached at the end of LE 13 under “C. Reciprocity”. Last week I talked about **Heraclitus** as the (probable) discoverer of the conception of a *relationship of reciprocity* (“Wechselverhältnis”, RR for short). What stands in a(n) RR are **distinct entities** which are nonetheless **related essentially** or internally. In a set of **chess** figures one can neatly separate the aspect of distinctness from the aspect of essential relatedness: Qua pieces of wood the black king and the white queen are distinct, qua abstract roles they are internally related and at root identical in so far as both belong into the identity of the game of chess. Because of this separability of distinctness and essential relatedness, chess is not a real RR.

In a real RR, those aspects cannot be separated. What seem to be distinct entities through and through, in an real RR, nevertheless are essentially related through and through at the same time. So, an RR is latently characterized by an inconsistency. It is a harmonious tension, to speak with Heraclitus. Its identity is hidden “inwardly” and manifests itself outwardly only as a set of “modalized” relations, e.g. as **causality**. (Remember that **Hume** was right in saying that distinct entities could not stand in necessary relations; but he was wrong in trying to devise a deflationary account of causality. Causality betrays the aspect of non-distinctness of the entities which stand in causal and thus necessary relations.)

Now, Hegel is totally in line with the conception of a(n) RR, when he says:

Necessity is [...] *inner identity*; causality is the manifestation of this [...]. (SoL 570 m)

But now wait a minute! “**Manifestation**” is a term that points beyond the sphere of necessity and merely inner identity. Causality may normally be kept within this sphere, but if we watch closely enough and follow causality all the way to what Hegel calls **reciprocity**, we see that it points beyond it and that it in fact **manifests** necessity and inner identity, thus turning necessity into **freedom** and ipso facto inner identity (which is at the same time only outer identity: a system of outer relations, and in both ways opaque identity) into **transparent identity**.

So to complete the above quotation:

[Necessity is *inner identity*; causality is the manifestation of this], in which its illusory show of *substantial otherness* [of two distinct substances, an active and a passive one] has sublated itself and necessity is raised to *freedom*. [...]

In reciprocity, therefore, necessity and causality have vanished; they contain both, *immediate identity* [which is not yet manifested and thus only inner identity, showing itself outwardly] as *connexion* and *relation*, and the *absolute substantiality* [i.e. distinctness] of the *different sides*, hence the absolute *contingency* [“no necessary relation between distinct entities”] of them; the original *unity* of substantial *difference*, and therefore absolute contradiction. (SoL 570)

So, Hegel does not accept the conception of a(n) RR as a last world about logical space, he wants to leave the **Heraclitean opacity** behind and attain to **Parmenidean transparency**. Reciprocity thus is **both**: the **end** of opacity and necessity (inner identity) and its “absolute contradiction” and the **beginning** of transparency and freedom, of “the absolute manifestation of itself for itself” which is the **Notion**.

There is a mistranslation at 571, lines 2-3:

This *inwardness* [of inner necessity] or this in-itself, [not: sublates, but:] is sublated by the movement of causality [causality itself, in its reciprocity, is what “generates” the Notion, although at its own cost, by sublating as well itself and vanishing], with the result that the substantiality [real distinction] of the sides standing in relation is lost, and necessity unveils itself [viz. as freedom]. Necessity does not become *freedom* by vanishing, but only because its still *inner identity* [Heraclitus] is *manifested* [Parmenides] [...]. Conversely, at the same time, contingency [the distinctness of both sides] becomes freedom, for the sides of necessity, which have the shape of independent, free actualities [...] are now *posited as an identity* [by reciprocal causality] [...].

[We should read the last paragraph of LE 13, SoL 571 b.]

Now at last we have reached the **mill** that constitutes itself in its grinding: a **relation** (or form) that is identical to each of its **relata** (its content) and is thereby defined. So, we are no longer dependent upon a given meaning of “not” (taken over from the **propositional calculus** and adapted to the setting of the SoL), but we can now – quite conversely – define **negativity** as the **relationality** (the relational aspect) of the *relation between itself and itself* (the Notion).

This new negativity is not destructive anymore, but has both sides of itself, one the negative of the other, stand in perfect harmony or even identity. Under the aspect of identity, the identity-of-itself-and-itself is the **universal**: negativity which is self-identical.

But, of course, negativity as well **differentiates** and thus “determines” (in a new, transparent, constructive way) each side, which on the other are identical. This self-identity (self-relation) which is negative (self-identical negativity with the stress on “negativity”) is the **individual**.

Lastly, the **simple** identity of the universal and the individual is **particularity**. In other words, the universal qua individual (and thus potentially in relation to other individual universals) is the **particular**. (What would be the “non-simple”, i.e. the active, self-mediating identity of the universal and the individual? Presumably the **Notion** as such.)

The universal, the particular and the individual are “three totalities” which are “one and the same reflection” (571 b).

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In the introduction the logic of the Notion (“The Notion in General”), the Notion is likened to the I of transcendental apperception.

Let us first look at “the Notion of the Notion”, as given on p. 582.

Next, Hegel goes on to ask if this Notion of the Notion is in accord with what others have said about the notion (582f.) and then (584 t) refers to **Kant** as a positive example. We should read that as well (at least till the end of p. 583).

24-Apr 09

We are presently talking about the section “Subjectivity” of the “subjective logic”, i.e. the “doctrine of the Notion”: The Notion / The Judgment / The Syllogism.

Chapter 1, “The Notion”, contains, as Hegel remarks at the beginning of chapter 2 (“The Judgment”) “more a subjective reflection or subjective abstraction” (623), i.e. one in our BL. This is a kind of luxury here, not necessary, for:

[...] the Notion is itself this abstractive process, the opposing of its determinations is its own determining activity. The Judgment is this positing of the determinate Notions by the Notion itself. (Ibid.)

So, the real theoretical work in the logic of the Notion (LN) begins with chapter 2.

Here are some even more “subjective reflections” on the Notion.

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Aristotle is opposed to **Plato** with regard of the ontological status of the **universal**. According to Plato, the universal is real, even the truly real (*ontôs on*), and it is active and living (see *The Sophist*).

But **Aristotle** reasons like that (end of Met. Z): If the universal, say *animal*, were real, then it would be possible to run into it: So, here is – the ANIMAL itself, as a *tode ti*. But how many legs does it have? Humans *essentially* have two legs, horses *essentially* have four legs and snake *essentially* have none at all. So, the animal itself will (essentially, but it is *all* essence in the forms/ideas anyway) exactly two and exactly four and exactly none legs – a contradiction.

In fact, therefore, the **universal** is *like matter*: an indeterminate determinable, and in fact *is* matter, though not regular, sensible matter, but *hylê noêtê*, intelligible matter (Met. H 6).

But then the **species** is not a true universal at all. You can run into a species as a *tode ti*: if you run into one of its individual members. The individual and its species have all essential properties in common, so there is no (essential) difference in thinkable content between a species and its individuals. Therefore the **double meaning** of “*eidos*”, meaning (a) *species* and (b) (*essential individual*) *form*, is no conceptual handicap at all, quite the contrary: it is an exact conceptual tool.

Aristotelian forms/ideas thus are all **immanent** and **specific**. There are no generic (and no transcendent) Aristotelian forms/ideas. **Platonic** forms/ideas on the other hand come in all grades of generality, from specific forms up to the *megista gene*. But this, as Aristotle sees, leads to **contradiction**. Plato would not deny that, but would say that the art of dialectics, as the philosopher’s method, is made to deal with that contradiction.

Now, Hegel is in fact trying to reconcile Aristotle and Plato on this fundamental point. He conceives the forms/ideas (i.e. the Notion) as **immanent**, *pace* Plato, but at the same time he conceives the universal (the generic universal) as real, *pace* Aristotle, and takes over from Plato the art of dialectics as the way to handle the immanent negativity of the Notion.

The horse and the snake are both animals, different from each other but not from the animal. They are *animal all over* and *nothing but animal*. This is the universal’s **shining to the inside**. But the universal is **shining to the outside** (SoL 606 m/b) as well: It has a place in a hierarchy of universals (qua individual universal, i.e. qua particular).

From Hegel’ point of view, **Aristotle** brings particularity (“species-hood”) too close to individuality, and **Plato** brings it too close to universality (generality). For Aristotle all forms are individual forms and *ipso facto* specific forms, and that leaves him with a deep problem of individuation (within a species). An Aristotelian form must be like a Hegelian One, **repelling**

itself to many Ones. What is universal (general, “allgemein”), on the other hand, is not real, not substantial, according to Aristotle.

Plato, in Hegel’s view, wrongly posits a gulf between the individuals and the (specific and generic) forms, hence between the individual on the side and the particular and the universal in the other. But all three of them belong together as the self-subsistent moments of the Notion.

Universality, particularity, and individuality are, taken in the abstract, the same as identity, difference, and ground. But the universal is the self-identical, with the express qualification, that it simultaneously contains the particular and the individual. Again, the particular is the different or the [determinacy, Wallace says:] specific character, but with the qualification that it is in itself universal and is an individual. Similarly the individual must be understood to be a subject or [grounding, foundation, Wallace says:] substratum which involves [contains] the genus and species in itself and [is itself substantial]. (Enc. § 164)

In the realm of **plurality** (which starts with the judgment), where we find many individuals, particulars and universals, one can easily see how they all fit together:

Each **individual** is as well particular (specific, as witness Aristotle) and universal: Socrates is a human being and an animal.

Each **particular** is one individual particular among many, and it is universal (comprising many individuals, and, *pace* Aristotle, divisible into sub-particulars.)

Each **universal** is one individual universal among many, and it has its place, as a particular, in the hierarchy of universals. So e.g., animal is a particular corporeal substance.

In the realm of **singularity**, i.e. with the Notion qua all of logical space, these relations are not so easily understood. The one and only Notion or Concept is all three of them: i, p, u, like the one and only **essence** was identity, difference and ground. But now it is explicit in each of the moments that the Notion is all three of them.

In its **universality** the Notion/Concept “is in free equality with itself in its” determinacy. (The universal “goes through” its differences). In its **particularity** “the universal continues serenely equal to itself”. In its **individuality** the Notion qua universal a particular is reflected into itself – “which negative self-unity has complete and original determinateness, without any loss to its self-identity or universality”. (Enc. § 163)

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But where does this “complete and original determinateness” come from? Out of itself. In the sphere of **being**, we had being as the immediately given *common factor of all truth claims whatsoever*, plus negation, as adapted from the propositional calculus. This was not much, but enough for creating all the various contents of the logic of being.

In the sphere of **essence** only negation was left as a possible given source of content, and it turned out enough as well and productive of (essential) being. Now, with the Notion, nothing is left as a given source of content, and even that is supposed to be enough to create content.

The Notion is definable as *the* (one and only) **self-creating content**. Or, alternatively, as **absolute form** which as such creates (and is) its own content. In its creating it is mediation, relation. So it is relation between itself and itself. So we may define the Notion as well as *the* (one and only) **relation which relates itself to itself**.

Now we need not appeal to the **propositional calculus** any longer in order to get a sense of negation. **Negation** can be **defined** as that which makes the Notion a relation, its relational aspect. And the other, “positive” aspect of logical space, called “being”, is that which is re-

sponsible for there being relata (or terms) of the relation. But in fact, terms and relation are one and the same: this is meant by the Notion's **universality** (self-identity). Nevertheless, negation is present in the Notion, thus creating determinateness, which in the Notion is (its) **particularity** (the first negation). But the negation is self-related (as it was already qua essence), and this self-relation of negation is the Notion's **individuality** (the second negation or the negation of the negation).

In short: The Notion has the structure $[r_1 \mathbf{R} r_2]$, with $r_1 = r_2 = \mathbf{R} = [r_1 \mathbf{R} r_2]$

The identity of both relata constitutes its **universality**.

The difference of the relata, qua terms of a relation, constitutes **particularity**.

The non-well-foundedness (i.e. self-relation) of \mathbf{R} constitutes **individuality**.

First, the Notion is to be taken in its universality (as essence was in its identity), as the simple whole of logical space. But it is **shining towards its outside**, like the sun, say (Plato's likeness of the source of logical space). So, we have logical space shining constantly beyond itself. But this cannot be. What we in fact have, is a logical space more encompassing than we first thought: one in which the universal is only a particular, and its "other", the particular itself is right there to its side.

So, logical space, U , comprises U and P . Thereby U itself is only a particular. We have here **coordination** and **subordination** at a time: The universal notion in its shining to the outside is coordinated to the particular notion; but at the same time the latter is subordinated to the universal notion in the hierarchy of generality.

But of course, the particular universal and the Particular are as well both particulars. So they are both subordinated to the Particular as well, which thus is there common "universal". – This is the total manifestation of one in the other. We just cannot fix their difference.

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And it is lastly all bent back into the **individual**, which is (a) the whole of universal logical space, but as well (b) the **loss** of the Notion:

But individuality is not only the return of the Notion into itself, but immediately its loss. Through individuality [...] it becomes *external to itself* and enters into actuality. (SoL 621 t)

The individual, therefore, as self-related negativity is the immediate identity of the negative with itself; it is *a being-for-self*. (Ibid. m)

The first individuality is notion-like: transparent and free. The second individuality is thing-like or *one-like* (a being-for-self): negativity turned opaquely on itself. This opaque negativity splits the Notion into two parts which are vaguely called "subject" and "predicate" and whose unity, the **judgment**, is affected by immediate being as a kind of cement, the copula "is".

It is the element of Individuality which first explicitly differentiates the elements of the notion [etc., see Enc. § 165]

So, this then is the **judgment**.

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It is important to see that Hegel makes a distinction between the sentence (or proposition, "Satz") and the judgment ("Urteil"), between sentential form and judgmental form (Enc. § 167). **Judgmental** form is **predicative** form: S is P .

Modern predicate logic (MPL) and traditional formal logic (TFL) differ on that point. **MPL** tries to capture as much as possible of sentential form (there are more formally valid inferences than formally valid syllogisms after all), predication just being restricted to the most

basic level of the sentence. **TFL** on the other hand casts all (categorical) sentences into predicative form, adding “quantity” to any subject and “quality” to any predicate. (Cf., on these issues, Fred Sommers, *The Logic of Natural Language*.)

Now **Hegel** is (of course) loyal to TFL, but sees that it does not capture “the logic of natural language” as it stands, which he comments with a “so much the worse for natural language” (I am overstating the case). Fred **Sommers** on the other hand tries to enrich TFL up to a point where it equals MPL in expressive strength and may be used to reconstruct the logic of natural language at the same time (while MPL tends to regiment – not to lay bare the logical form of – natural language, according to Sommers).

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Now the individual, qua the lost Notion, being a one (out of many ones), comes as **many individuals** in the realm of **judgment**. “Judgment” here is **not** to be taken subjectively, as an act of ours, but neutrally, as objective/subjective: “All things are [i.e. each thing is] a judgment” (Enc. § 167). Each thing is an individual with a universal nature, or a universal individualized (ibid.). This of course is the reason why we can make “subjective” judgments about them without thereby doing violence to them (as Nietzsche and Adorno feared).

But if things are judgments, doesn’t that amount to a Tractarian ontology of facts? No, says Hegel, for the predicate is **ideal** (!) in the subject (§ 170) and has no self-subsistent being at all. Nevertheless, qua judgments things are finite, because judgment is not only union but as well articulation and separation: of a thing’s Dasein (d-being) from its universal nature, of its **body** from its **soul** (§ 168).

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In his exposition of the judgment, Hegel follows Kant’s list of the types of judgment. This creates a certain quandary. Kant has **four** times three different types of judgment, while Hegel regularly gives us three of each whatsoever. He helps himself with a little trick: Essence, as the antithetical middle sphere between being and the Notion, makes for two types of judgment, because judgment, in its own turn, is the locus of separation. (Syllogism, as the locus of unity and identity, is not thus torn asunder by the negativity of essence):

Being	Qualitative judgment (judgment of Dasein, not “existence”)
Essence ₁ (reflection)	Judgment of reflection
Essence ₂ (necessity)	Judgment of necessity
Notion	Judgment of the Notion

Cf. the syllogism (which brings up another surprise):

Qualitative syllogism
Syllogism of reflection
Syllogism of [not: the Notion, but] necessity

Now, what is specific about Hegel’s treatment of the judgment and the syllogism, is that it is not “formal”, not a survey of forms that judgments (and syllogisms) can take. According to **Kant**, e.g., each judgment must have **one** out of **three** quantities, one out of three qualities, relations and modalities.

There is no such thing in Hegel. For him all twelve types of judgment are **different judgments**, with different (purely logical) contents.

The **abstract** judgment says: “The individual is the universal” (Enc. § 169), which of course is not true without qualification, because the individual is as well **not** the universal (but the individual). This, according to LN 16, gives us the **negative** judgment as a successor of the

positive judgment in the domain of the **qualitative** judgment. – But let me follow LN 30, in a short survey.

(a) **Qualitative** judgment.

We have a (logical) **quale**, i.e. a d-being which is identical with its quality, and press it into predicative form, using it two times over, as subject and as its own predicate:

1. The **positive** judgment: “the individual is a particular”, “the rose is red”.

Now, Hegel always treats the copula as expressing **identity**, as if being were identity. This gives him the supposed justification for saying: But the rose is not identical to (its) redness; therefore we need to pass on to the negative judgment. –Isn’t that sheer sophistry? No, not here, given our starting point: the logical quale which was used twice, as S and as P. The judgment tears it asunder in two, thus belying the identity that it expresses at the same time in the qualitative “is”.

Note: Hegel tries to deduce the specific sense (or senses) of the copula, and all he has to start from is the identity of the logical quale which was torn asunder in the qualitative judgment.

2. The **negative** judgment (justified by the form of judgment, given the identity of the logical quale that serves as S and as P): “the individual is not a particular”, “the rose is not red (but of some other colour)”.

3. (aa) The **identical** judgment, “the individual is the individual” and (bb) the **infinite** judgment, “the individual is not [P from a foreign sphere]”, “the lion is not a table”.

After the logical quale/something, which thus does not ground a true judgment, we have to consider an existent/thing:

(b) Judgment of **reflection**

Here the predicates aren’t immediate (sensible) qualities anymore, but more like **dispositions**: e.g. *useful, dangerous; weight, acidity* (§ 174).

1. **Singular** judgment: The subject, the individual as individual, is a universal.
2. **Particular** judgment: The subject is partly this (and partly that).
3. **Universal** judgment: Some are the universal (i.e. all).

Now, the universality is posited as well on the side of the subject, which makes for the:

(c) judgment of **necessity**

Again the subject matter of the judgment has changed (no formalism!): We have now arrived in the region of **substance**. So in the

1. **categorical** judgment, the genus or the species get predicated of the individual.
2. **Hypothetical** judgment: both sides have the form of self-subsistent actuality, whose identity is only an “inner” one. (So, we have here a self-alienation of the Notion)
3. **Disjunctive** judgment: Universality as genus and as the circle of its self-excluding particularisation.

(d) Judgment of the **Notion**

The content now, finally, is the Notion.

1. **Assertoric** judgment: S is an individual, and P is the reflection of the subject’s particular “Dasein” onto its universal: “S is good/bad/true/beautiful” etc.
2. **Problematic** judgment: Assertoric judgments are mere affirmations under the principle of bivalence: true or false, and thus invite their counter-affirmation. Thus an assertoric judgment is degraded to a problematic judgment.

3. **Apodictic** judgment: Here, the reason or justification is built into the judgment: „This house, qua being so and so, is good”. The mediating ground or reason is here present in the judgment: “*All things* are [i.e. each thing is] a *genus* (its determination and end) in an *individual* actuality of a *particular* constitution” (Enc. § 179).

§ 180:

In this manner subject and predicate are each the whole judgment. [...] What has been really made explicit [posited] is the oneness [unity] of subject and predicate, as the notion itself, filling up the empty ‘is’ of the copula. While its constituent elements [its moments] are at the same time distinguished as subject and predicate, the notion is put [posited] as their unity, as the connexion [relation] which serves to intermedicate them: in short, as the Syllogism.

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In the logical development of the **judgment**, the **copula** has achieved the value of the **notion** (concept, term) in the **apodictic judgment** (“The house, being so and so constituted, is good”). --- It first had the value of **d-being** (in the **qualitative** judgment or judgment of d-being), then of **reflection**, then of **necessity**.

Thus, the apodictic judgment gives way to the **sylogism**, first the **qualitative** syllogism.

In the premises of the **qualitative syllogism** one can (non-trivially) predicate

U of P **or** U of I **or** P of I (always the more general of the less general).

Two of these predications have to be picked as premises; and then we have to look what term occurs in both premises: this is the **middle term**, to be left out in the conclusion. This procedure gives us the three Aristotelian **figures** of the (qualitative) syllogism:

1 st figure:	U of P,	P of I,	therefore U of I	(P as middle term)
2 nd figure:	U of I,	P of I,	therefore U of P	(I as middle term)
3 rd figure:	U of P,	U of I,	therefore P of I	(U as middle term)

The usual combinatorial form yields a **fourth figure**, with the middle term, M, as predicate in the major and as subject in the minor premise. But then M must be P (the particular) again, like in the first figure, for only P can occur, both, as predicate (of I) and as subject (for U). So, Hegel says that the fourth figure is an empty formalism.

Here is the **regular table** of the four figures (‘G’ as middle term, ‘F’ as minor, ‘H’ as major), with “Hegelian” subscripts as reminders:

1 st figure	2 nd figure	3 rd figure	4 th figure
G _p H _u	G _i H _u	H _p G _u	H G
F _i G _p	G _i F _p	F _i G _u	G F
F _i H _u	F _p H _u	F _i H _p	F H

One sees that subject and predicate are simply **reversed** in **both premises** of the fourth figure, as compared with the first. The middle term, G, is functioning, both, as subject and as predicate, in both figures, while in the 3rd figure it is functioning only as predicate (and must therefore be U) and in the 2nd figure only as subject (and must therefore be I).

So Hegel skips the 4th figure in **LN 30** altogether as “a superfluous and even absurd addition of the Moderns” (Enc. § 187, Aristotle had only three figures), while in **LN 16** he had taken the chance of putting the tautological, “mathematical” syllogism in its place (“U – U – U”).

In the **qualitative syllogism**, first, an **individual** is coupled (concluded) with a **universal** by means of a (particular) **quality**. But an individual has many qualities and each quality can in turn be subsumed under many different universals. So in the first figure one can prove different and then (as difference is followed by opposition in the logic of reflection) even opposite claims of a given individual.

This “**contradiction of the syllogism**” expresses itself as an infinite **progress** (or, in fact, an infinite regress): the premises are as such unproven, therefore only judgments, not syllogisms. So they too must be proven (mediated) by more premises, and so on up.

This deficit (expresses and) **sublates** itself in the further development of the syllogism. The “immediate” syllogism (of the 1st figure) gives way to the 2nd figure and this in turn to the 3rd. In the conclusion of the 1st figure, the individual is declared to be universal and thus (being both, I und U, at the same time) may now serve as middle term. The same happens to the particular in the 2nd figure.

So, taken together, the qualitative syllogism goes full circle in its three figures and all its terms get **fully mediated** by each other: I and U by P, P and U by I, I and P by U. The progress (or regress) is thus bent back into a **circle**:

The major of the 1st figure is the conclusion of the 2nd and the minor of the 1st the conclusion of the 3rd figure, and so on for the premises of the other figures as well. (But, of course, this circle has still something vicious about it: a mutual presupposing of the figures. So the story of the syllogism must go on.)

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In the syllogism of reflection, the **middle** is not an abstract particular determinacy of the subject any longer but is as well *all individual concrete subjects* who have this particular determinacy among others (Enc. § 190). This gives us the **syllogism of allness** (so to speak the 1st figure of the syllogism of reflection, because here again P is the middle term):

Major:	All P are U	All humans are mortal
Minor:	I is P	Caius is a human
Conclusion:	So, I is U	So, Caius is mortal

But the major here presupposes the conclusion and has to be justified, which leads to the **syllogism of induction**, where I is the middle term (as in the 2nd figure of the qualitative syllogism), but the individual now as the **potentially infinite totality** of all individuals, which thus cannot be inspected empirically in their entirety. (Hegel displays its form at SoL 690.)

Because the totality of the individuals cannot be inspected as something present and given, the syllogism of induction presupposes the **syllogism of analogy**, where U functions as mediating middle (SoL 692):

The *earth* (an individual, but ...) is inhabited,
 The moon is *an earth* (... in the value of a universal),
 Therefore the moon is inhabited.

But of course, taking the middle term in two different values comes close to a *quaternio terminorum*. So the syllogism of analogy cannot be the end of the story either.

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The **qualitative** syllogism as such (and in its **first** figure) has the **particular** as middle term, which then gets replaced by the individual and the universal in the other figures. So the qualitative syllogism is dominated by the 1st figure.

The syllogism of **reflection** as such (and in its **middle** version) has the individual as middle term, though here as well the other two terms attain to the middle position. So the syllogism of reflection is dominated by induction (its “second” figure).

The third syllogism is the **syllogism of necessity**, which, as such (and at its happy **end**), has the **universal** as its middle, again in such a way that the other terms (I and P) will attain to the

middle position as well. (Cf. Enc. § 191.) So the syllogism of necessity is dominated by its „third“ figure.

Categorical syllogism:	a particular species or genus as middle.
Hypothetical syllogism:	an individual fact as mediating (antecedent) and an individual fact as mediated (consequent)
Disjunctive syllogism:	the mediating universal as the totality of its particular specifications and as excluding individual specification

In the disjunctive syllogism one and the same universal is (the case) in these different determinations, which are therefore now negated:

This *realization* of the notion, – a realization in which the universal is this *one* totality withdrawn back into itself (of which the different members are no less the whole, and) which has determined itself as *immediate* unity by sublating the mediation: – this realization of the notion is the *object*. (Enc. § 193)

This transition corresponds to the sound kernel of the (in its syllogistic form deficient) **ontological argument** for the existence of the perfect being.)

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Thus, the **absolute** is the **object** now (Enc § 194), which then falls asunder into many objects each of which is the totality: “the absolute *contradiction* of the complete self-subsistence of the manifold [objects] and their equally complete non-self-subsistence”.

The object is then considered over the developmental stages of **mechanism** (macro-physics), **chemism** (micro-physics and chemistry) and teleology (biology as objective teleology and end-means-relations as subjective teleology).

The realized end then leads to the last stage of the logic: the **idea**, which is

- (a) **life**,
- (b) **cognition** (in general), and then more precisely
 - (i) cognition proper ((α)analysis; (β)synthesis: (1)definition, (2) division, (3) theorem)
 - (ii) volition (practical cognition),
- (c) the speculative or **absolute idea**: the **method** of the logic in which its whole course is sublated.

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- ⁱ Vgl. Nietzsche, Werke III, ed. Schlechta, S. 476; Adorno, *Negative Dialektik*, Schriften 6, Ffm 1973, S. 21.
ⁱⁱ Vgl. zu diesem weitgespannten Thema Mike Stange, *Antinomie und Freiheit. Zum Projekt einer Begründung der Logik im Anschluß an Fichtes Grundlage der gesamten Wissenschaftslehre*, Diss. Tübingen 2007.
ⁱⁱⁱ For this part of the paper I have drawn upon my article ‘Hegel und Heidegger’, to appear in YYY(ed.), ZZZ.

Freiburg: Alber.

- ^{iv} Hegel 1970: 76. (Cf. the translation by A.V. Miller, Hegel 1977: 52-53.)
^v Hegel 1970: 78. (Cf. Miller’s translation, Hegel 1977: 54-55.)
^{vi} Hegel 1970: 79. (Cf. Hegel 1977: 55.)
^{vii} Hegel 1970: 72. (Cf. Hegel 1977: 50, ‘thoroughgoing scepticism’.)
^{viii} Hegel 1970 and Hegel 1977: chapter IV. B. Freedom of self-consciousness: Stoicism, Scepticism, and the Unhappy Consciousness.
^{ix} Hegel 1970: 22. (Cf. Hegel 1977: 9.)
^x Hegel 1970: 12. (Cf. Hegel 1977: 2.)
^{xi} Hegel 1970: 13. (Cf. Hegel 1977: 2-3.)
^{xii} Strawson 1959: chapter 6.
^{xiii} Cf. Castañeda 1966 and Perry 1977.
^{xiv} Hegel 1970: 87. (Cf. Hegel 1977: 62.)
^{xv} Priest 2002:103-104.

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