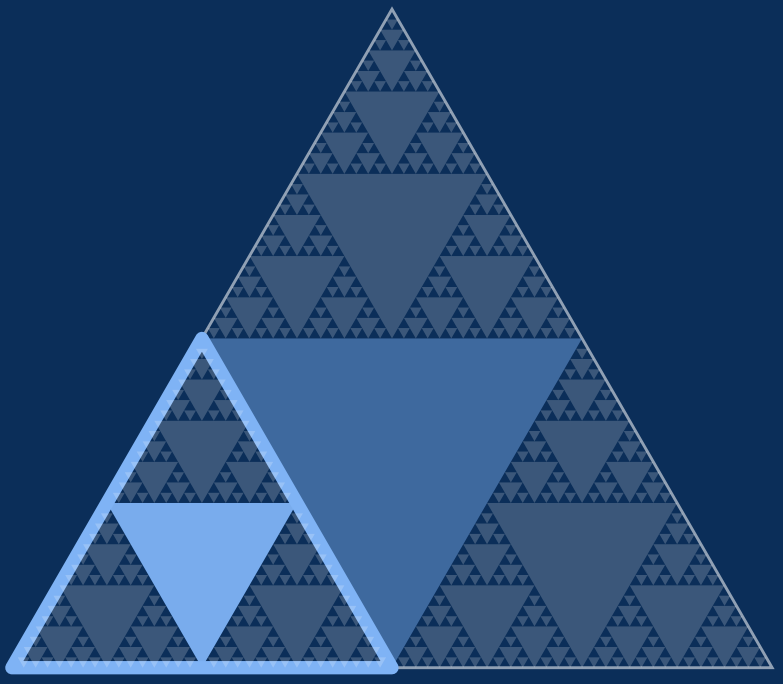


Hegel's Logic
Logic of Thinking

Followed Step by Step

Kai Froeb

About this translation

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About the Author

Kai Froeb (born 1963) is a German philosopher and IT expert living in São Martinho do Porto, Portugal. His work combines more than 35 years of systematic Hegel research with the possibilities of artificial intelligence, developing a new form of philosophical collaboration.

His thinking is radically interdisciplinary. He studied mathematics and computer science at the University of Erlangen–Nuremberg, business administration at EBS, and cultural studies and law at the University of Hagen. At the same time, he pursued intensive general studies in philosophy, sociology and history. He deliberately conducted his studies without orienting them towards academic degrees, preserving the freedom to follow an independent path of thought and research beyond the boundaries of university disciplines.

Since the late 1990s, Froeb has edited and maintained **hegel.net**. Available in twelve languages, the website ranked among the leading results in international Google searches for Hegel for many years and developed into one of the central online resources on Hegel's philosophy. It is probably still the most extensive multilingual website devoted to Hegel on the internet.

In connection with **hegel.net** and **hegel-system.de**, Froeb also created an extensive, publicly accessible archive of primary sources. The German-language collection alone offers 506 digitised original editions of works by Hegel and nineteenth-century Hegelians for free download. Further collections in other languages include 19 original works in English.

More than 40 years of programming experience, beginning in 1980, form another methodological foundation of his work. His first program was a reimplementation of Joseph Weizenbaum's ELIZA, thus completing a circle from the earliest experiments in artificial intelligence to his productive collaboration with Claude today. Froeb uses his IT expertise not merely as a technical resource but also as an instrument of thought: he analyses social and philosophical structures with the precision of a software architect.

Froeb is developing an independent philosophical body of work that stands in the tradition of Hegel while attempting to continue that tradition under contemporary conditions. At its centre is his own performative approach to truth, which forms the common foundation of his philosophical books. Truth appears here not merely as the object of propositions, but as a movement that must also prove itself in the form of thinking and presentation.

His aim is demystification through conceptual clarification: to penetrate every boundary through thought, including the boundary of what initially appears inaccessible. In his work, form follows content—structure, concepts and method are determined by the subject matter itself. At the same time, he seeks accessibility: to present demanding philosophy as clearly as possible, in the spirit of the best Anglo-American scholarly tradition, without simplifying it.

His guiding motif is Hegel's formula: "The truth is the whole"—the search for a form of integration that need not repress or exclude anything.

Über dieses Buch

Mit Hegels *Wissenschaft der Logik* beschäftige ich mich seit etwa vierzig Jahren.

In diesen Jahren hat sich die Lage geändert. Die historisch-kritische Ausgabe des Hegel-Archivs hat den Text zugänglich gemacht und vor allem die Vorlesungen. Darauf aufbauend sind Kommentare entstanden, die dem Gang immanent folgen, ohne ihn zu paraphrasieren. Vieles, was frühere Leser sich erschließen mussten, liegt heute offen. Ein Buch wie dieses war vor dreißig Jahren nicht zu schreiben. Dazu kommt ein Werkzeug, das es vor wenigen Jahren noch nicht gab; wie dieses Buch mit Unterstüzung eines Sprachmodells entstanden ist, sagt das Nachwort am Ende des Kommentars, vor dem Glossar.

Mein Ziel war dabei immer dasselbe: Hegel so verständlich darzustellen, wie die Sache es zulässt, und ihn von innen zu verstehen — so weit, dass man in seinem Geist eigene Arbeiten hervorbringen kann. Philologie und Hermeneutik dienen diesem Ziel.

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PREFACE

Anyone can think without logic, the way one digests without studying physiology. That is how Hegel reports the "low opinion" of logic (§ 19 Addition 2); for inferring he grants the comparison: one needs logic as little "to draw correct syllogisms" (DE: „um richtige Schlüsse zu ziehen") as one needs physiology to digest (§ 183 Addition). What is dispensable here is logic as a doctrine, as it stands in Hegel's book and in this one; thinking itself is always logical, otherwise it would not be thinking. The doctrine does not produce thinking; it spells out what already happens in thinking: the determinations that, in Hegel's words, "run through our spirit instinctively and unconsciously." (DE: „unseren Geist instinktartig und bewußtlos durchziehen")[1]

Physiology is needed when digestion is disturbed, and it is useful otherwise too: someone who knows something about it chooses better what does him good. Thinking↑ is similar. Whoever says that something is so, that it is more than another, or that it has a ground, uses categories: the basic words with which we determine whatever we think. Errors arise where one of them is used further than it reaches, for instance where something is measured that is not ordered by more and less. Logic↑ goes through these determinations and asks of each what it presupposes and how far it reaches. Whoever has followed it can see, in an assertion, which determination is being worked with and whether it bears the question.

Georg Wilhelm Friedrich Hegel (1770–1831) published this investigation in two works. It stands in detail in the *Science↑ of Logic* (1812–1816), and in brief in the *Encyclopaedia of the Philosophical Sciences*, the textbook in which Hegel gave his whole system in outline for his lectures: logic, the philosophy of nature, and the philosophy of spirit. Its first part is the logic, compressed to a fraction of the size; that is why it is called the small logic and the detailed work the large one. This book follows the small logic. For the most part it is also the later version: the *Encyclopaedia* appeared in three editions, in 1817, 1827 and 1830, and we

1 *Science of Logic*, Preface to the Second Edition: TWA 5, 30 (GW 21, 17 f.). In the same sentence logic is called the "reconstruction" of the determinations that reflection has singled out and "fixed as subjective forms, external to the material and content." (DE: „als subjektive, an dem Stoff und Gehalt äußere Formen fixiert")

follow the last; only the doctrine of being did Hegel recast afterward, for the second edition of the large logic, which appeared in 1832 after his death.[2]

What logic means here is broader than usual. Rules↑ by which other sentences follow from given sentences appear in this logic as one determination among others (the syllogism, Ch. 28; in the movement of thought Ch. 1.2, 8.3); they are not its subject as a whole, and they have been worked out more precisely by formal logic, above all since Gottlob Frege (1848–1925), who created a formal language for it↑ on the model of arithmetic. How people actually think is an empirical question and is not asked here. Nor is this logic a merely useful ordering that could just as well be laid out differently: it develops the forms without which an object cannot be grasped as determinate.

Logic has three parts. The doctrine of being takes up the determinations with which we say what something is, how large it is, and how much it can bear: That is water, it is five liters, that is too much for the pot. The doctrine of essence asks what the present thing depends on: The ice on the pond is there because it was cold in the night. Its determinations appear in pairs such as ground and consequence, cause and effect. The doctrine of the concept asks what a thing itself is and whether it is so completely: That is an oak, and this oak is healthy. By concept Hegel does not mean the notion someone has in his head; what is meant is what one looks for when one wants to comprehend a thing: its inner nature, from which its sides follow. Idea↑ is what he calls the agreement of a thing with its concept: It is what it ought to be according to its nature, like the healthy oak.

Example. With magnitude we say how much of something is there, whatever it is: a more or less that changes nothing in the thing. Taken for itself↑, no magnitude fixes anything; five is five only beside four and six. It becomes fixed only in relationship to another magnitude, say as twenty out of a hundred, and there it is determined only by magnitude. Here the ratio stays the same while its numbers change: Twenty out of a hundred is as much as two out of ten. That is how a constitution otherwise behaves: it remains what it is while the more or less in it changes. A magnitude that has something lasting in this way is no longer indifferent to the thing; what the thing is may depend on it. Hegel calls it the measure (§§ 105 f.; Ch. 17.7.1, 17.7.2). Where the step leads is shown by an old question that Hegel takes up at the measure (§ 108 Addition). A heap of wheat remains a heap if one removes a grain; if that held without limit, it would hold for the next grain and every further one, and in the end no heap would be

2 The second edition of 1827 expanded the text considerably and therefore renumbered the paragraphs: the first has 477 paragraphs, the second 574, the third 577. Where the editions differ in substance, this book discusses it; the first edition is cited from GW 13, the second from GW 19.

left. The magnitude is thus indifferent to the thing only within a limit. This is what a step of logic looks like: A category, taken for itself, does not hold, and what it lacks emerges in it itself and leads to the next. Magnitude↑ remains valid, only not for itself alone.

Magnitude means more than it expresses for itself; likewise whoever says "a heap" means more than can be said with more and less. So it is at every point of logic: Every step is taken because the determination reached does not yet adequately express what is meant, and therefore one must go a step further (carried out in Ch. 1.3). What stands at the end is then no final determination replacing all the earlier ones; it is the whole path, in which each has its place. Hegel's sentence for this reads: "The true is the whole."[3] Logic is concerned with this truth, and in this sense Hegel, at the joints of logic, calls the later determination the truth of the earlier.

This book wants to present Hegel's logic so that anyone can understand it, and so that specialists recognize it as Hegel. Both aims have a common ground. Work on Hegel's text is usually measured by whether it hits Hegel: whether it agrees with his words and with the thoughts expressed in them. This book takes that standard seriously and goes a step further. Hegel did not write in order to agree with himself. He does not speak of his logic but of the *Science of Logic*: It is meant to hold as a science, not as the opinion of its author. When this book speaks of Hegel's logic, it does so only to make it recognizable and to distinguish it from logics that proceed differently.

For Hegel, logic is the science of the pure idea (§ 19); the true shape in which truth exists can, according to him, be "solely the scientific system of it." (DE: „allein das wissenschaftliche System↑ derselben sein")[4] Logic educates, he says, by exercising thinking, "because science is thinking of thinking" (DE: „weil die Wissenschaft Denken des Denkens ist") (§ 19 Remark). And in the last year of his life he still wished for the leisure to work through his work "seventy-seven times":[5] For him it was not finished as long as it did not fully hit the matter. His concern was thinking itself (Ch. 40.1): to understand in which forms we think, how truth is found, and how science proceeds. It is also the concern of this book. We want to learn to think: to find out how one finds truth, how one thinks and researches systematically, and which errors one avoids in doing so. For that

3 *Phenomenology of Spirit*, Preface: TWA 3, 24. How the sentence applies in logic is shown in Ch. 15.5; what it says at the end of logic, in Ch. 38.6.1.

4 *Phenomenology of Spirit*, Preface: TWA 3, 14.

5 *Science of Logic*, Preface to the Second Edition (dated 7 November 1831, a week before his death): TWA 5, 33. Hegel compares himself with Plato, who is said to have reworked his books on the state seven times.

reason the book does not take Hegel's text as a quarry from which one fetches what happens to fit and leaves the rest lying; it follows his question and reads him from it, from within. From this it follows why the two aims belong together. Whoever retraces Hegel's thoughts as answers to his own question understands him better than someone who merely arranges his sentences, and learns to think in the process.

What we take to be Hegel's question may be our own, with standards we bring along and merely rediscover in him. With the categories, precisely these standards are up for examination; whoever merely applies them has skipped the question of logic. Whether Hegel says what we bring to him, or something else, perhaps more, the book therefore checks against his wording, in the sections "On the Text↑": What is found there corrects our understanding or extends it, and with it one reads the text anew.

An old parable says: Whoever points a finger at the moon wants one to look at the moon and not at the finger. Hegel's text is such a finger, and the moon is the matter to which he himself wanted to point. One↑ needs the finger, for it gives the direction, and whoever reads it wrongly looks elsewhere. For that reason the book attends to both: to Hegel's words and his text, so that one sees what they point to, and to the matter itself, how one thinks, checks and researches correctly. Without Hegel, two neighboring books ask the same question, *Truth*↑ (2025) and *Thinking – Ordering Without Losing* (2025) (below, "The Neighboring Books").

How the book is built. From this purpose it follows that the book goes the path of logic twice. First↑ the reader thinks it through himself, at the matter and without a pointer. The movement of thought with which the book begins develops the determinations from the matter, with the best reasons that can be found, and without appealing to Hegel or anyone else; how it proceeds, it says itself (Ch. 1). At the end of each of its three parts a paragraph, **What to take away.**, says what follows from it for one's own thinking. Then Hegel follows. The entrance is made, as in the *Encyclopaedia*, by Hegel's own introduction, the *Preliminary Conception* (§§ 19–83). Its largest part concerns the three positions of thought toward objectivity, the attitudes with which one comes to thinking, most extensively Kant, whose question of how far the categories reach Hegel's logic takes up; this part is commented on in Ch. 13. The end of the Preliminary Conception, the three sides of the logical (§§ 79–82), is interpreted in Ch. 13.7; with what the course then begins and why, Ch. 14 asks, with Hegel's treatise on the beginning from the large logic. After that the book goes through Hegel's three doctrines, of being, of essence and of the concept, step by step and with the reasons Hegel himself gives. At the end of each doctrine a chapter looks

back on its movement; the comparison of the two paths is given in Appendix A in tables. The book appears in two volumes. The first contains the preface, the movement of thought, the Preliminary Conception and the doctrines of being and of essence; the second the doctrine of the concept, the afterword and the appendix with the comparison, the glossary and the literature.

Whoever has already thought the matter through himself once follows Hegel's course more easily, whose language and presentation have difficulties of their own; that is why the movement of thought comes first. Hegel's course is meant to remain Hegel's, even where its reason is weaker than the one the movement of thought finds. In this way the specialist recognizes it as Hegel, and every reader sees what stands in Hegel and what does not. Where Hegel's text does not show a transition, the course notes it; it does not attribute a reason of the movement of thought to Hegel.

Like Hegel's logic, the movement of thought has three parts with three stages each, and its stages mostly bear the same names as his: quality, quantity, measure, and so on. It has the sequence of stages from Hegel; it checks whether one can get from one to the next conclusively by thinking for oneself. That independent thinking necessarily leads to this sequence, it does not prove; it asks whether we can retrace Hegel's articulation and its transitions for ourselves.[6] It does not pursue his details: It is concerned with the overview, with the architecture of the whole, shown so that one retains it. One could carry it on into every detail of logic; that has not been done here, and for that reason it remains clear. To keep the two apart, the parts of the movement of thought are called Part D.1, D.2 and D.3 (first, second and third part of the movement of thought), Hegel's doctrines Part I, II and III or the doctrine of being, of essence and of the concept. When the movement of thought speaks of the first, second or third part, it means its own; in the Hegel part the same phrase means Hegel's doctrines. The comparison in the appendix, which sets the two side by side, always says it with an addition.

6 According to the Italian philosopher Giambattista Vico, one cognizes in the proper sense whose production one knows: "Latinis verum et factum reciprocantur, seu, ut scholarum vulgus loquitur, convertuntur," in Latin the true and the made correspond to each other or, as the schools commonly say, are interchangeable; "verum esse ipsum factum," the true is the made itself (*De antiquissima Italorum sapientia ex linguae Latinae originibus eruenda*, Naples 1710, Liber I, Cap. I, § I). According to Vico, man cognizes completely what he constructs himself, like the objects of mathematics; to cognize nature completely remains reserved for its creator. Hegel's pupil Johann Eduard Erdmann (1805–1892), where he departed from Hegel, considered it his duty to tie the lectures to an outline of his own, "of which I know for certain that I understand it" (DE: „von dem ich gewiss weiss, dass ich ihn verstehe") (*Grundriss der Logik und Metaphysik*, Preface of 1841, 3rd ed. 1848, p. IV).

It is recommended to read in the order of the book. The movement of thought helps later in understanding what is meant in Hegel; whoever has read it knows the transitions already in principle; the Preliminary Conception shows against which attitudes Hegel's logic sets itself. But everyone is free to skip the movement of thought and begin with Hegel at once, and likewise to skip the Preliminary Conception and begin with the doctrine of being; the course through Hegel's text presupposes neither. Conversely, the movement of thought stands on its own: Whoever reads only it has the whole path of logic without knowing Hegel's text. Only the comparison in the appendix presupposes both.

How the Hegel part is to be read. The part that follows Hegel's text is built in three layers, recognizable by the titles of the sections. The first is the course: the lead-in of each chapter and the sections with a descriptive title. They give each of Hegel's steps in ordinary words, what he starts from, what happens and why it goes on this way, with the reason Hegel gives for it. Each of these chapters goes its way with a case that accompanies it from the first step to the last, such as the light from which a day becomes, the ice cube in the pot, or the building of a house; Hegel's own examples stand beside it. A *Where we stand* at the end of many sections records what has been reached, and at the end of the course a table, "The Chapter at a Glance," sets its steps together with their case. The second layer is the applications, which show a step in a case outside logic. If an application hangs on a single step, it stands right after it; if it presupposes several steps, it stands after the course of the chapter. An application shows how an object is built and by what it sustains itself; whether it is what it ought to be, it does not show, for a logical form can be carried out on any content (Ch. 25.5, 27.12). Most chapters that lead Hegel's course have a paragraph **For one's own thinking.**: what one gains from the chapter for one's own practice, which error one learns to avoid, and a question with which one can test one's own thinking.

It stands at the end of the course, mostly after the applications and before the deepenings; in Ch. 16 to Ch. 18 applications still follow it. The retrospects ask at the beginning what one can now do and have the paragraph only in part. The chapters "Words and Questions" as a rule do not have it. Ch. 15 has it, because a test can be gained already from its words; in Ch. 20 a paragraph **Beyond↑ Hegel.** stands in its place, which releases the questions for reading for every pair of concepts of one's own thinking. Where a transition has no yield of its own, the paragraph is missing. Ch. 43 at the end of the Hegel part arranges what has been gained in this way: what logic gives for thinking, for the testing of truth and for science. The third layer is for specialist readers: Sections with the title "On the Text" check against Hegel's own text whether the course reads it correctly; they interpret the step against Hegel's wording and say in the sentence who speaks

(the paragraph, the remark, an addition, the large logic, a lecture); sections with the title “Deepening” at the end of a chapter add what the large logic or the research offers beyond the course.

Whoever reads the course and the applications has everything needed for understanding; nothing there presupposes the third layer. Whoever reads for the first time does best to skip it, so that the progression of the thought is not broken off; whoever wants to deepen a step or check it against Hegel’s text itself, looks there.

A bold word at the beginning of a paragraph says what kind of paragraph follows: **Example.**, **Objection.** and **Reply.** or **Qualification.**; **Reading↑.** stands before an interpretation of Hegel’s own reason or wording, where a step is terse or obscure; a reason of its own for a step, in place of Hegel’s reason or beside it, the book gives in the retrospect at the end of the doctrine or, marked as a supplement of the book, in the course; thus compossibility, the compatibility of several possibilities with one another, stands as an intermediate stage in the course (Ch. 23.3), because Hegel’s large logic gives the hold for it, and it says there itself that it is an intermediate stage of this book. **What remains open.** stands before what does not hold even so, with a sentence on what is nevertheless established.

For specialist readers. stands before paragraphs that fall back on the third layer; whoever reads for the first time may skip them. **Excursus for physicists.**, likewise for mathematicians or chemists, stands before paragraphs that compare a statement of Hegel’s about nature with the present state of the field; whoever follows the course may skip them, the correction the course needs stands in the course itself. In Ch. 13, **Kant read more strongly.** stands before Kant’s own, stronger version of a thought against which Hegel objects.

In the movement of thought, objection and reply stand in italics. Only there do experiments stand, numbered and with a heading of their own: paragraphs in which the reader checks a step on himself, mostly where a question begins or a stage comes to its limit, often by the fact that something does not succeed for him. In them the book addresses the reader, because his own carrying out is the evidence. An experiment is a test, not a proof; the movement of thought holds without it as well. At the beginning of a paragraph stands KF, the abbreviation of the author, where one would otherwise not be sure who is speaking and might take my own thesis for Hegel’s: for an extension, a reference to the present day, a criticism of Hegel or a very wide interpretation. Where the sentence itself already says that the book is judging here (“this book reads …”, “we follow …”), it does not need the mark; it therefore stands rarely, and mostly the heading or the sentence says who speaks. The judgments in Appendix A are throughout

mine; there no mark stands. Explanatory sentences, plain examples and obvious readings do not carry the mark; there Hegel is being retraced, the thought is his, the formulation I answer for.

Hegel's text is numbered in paragraphs, and it is cited that way: "§ 99" means paragraph 99 of the small logic, "§ 99 Remark" the remark Hegel himself added. "§ 99 Addition" means the explanation that his pupils compiled after his death for the edition of his works from transcripts of his lectures, for the small logic Leopold von Henning (1840), for the philosophy of nature Carl Ludwig Michelet (1842),[7] for the philosophy of spirit Ludwig Boumann (1845), who also drew on Hegel's own lecture notebooks, for the philosophy of right Eduard Gans (1833); it is often more vivid than the paragraph, but not from Hegel's hand. Where an addition fits what Hegel himself says, it is cited like his text; only where it contradicts Hegel's own text, has no support in the surviving transcripts, or a thought hangs on it alone, a note stands at the place. In the course and in the applications mostly these paragraph references stand; if only the large logic gives Hegel's reason, its page stands with it. The movement of thought manages without such references; only in a few places does it name Hegel or refer to the part that follows him.

In the footnotes and in the third layer three kinds of references are added. The large logic, Hegel's detailed *Science of Logic*, is cited with volume and page of the works edition at Suhrkamp, abbreviated TWA: "TWA 5, 126" is volume 5, page 126. A Kolleg is the lecture Hegel gave in one semester; what listeners wrote down in it, the transcripts, stands in the Collected Works at Meiner, abbreviated GW. The names of researchers too stand in the course, as a rule, only in the footnotes. More detail is given in the reference section at the end of this preface.

Other↑ places in the book are referred to with "Ch.": "Ch. 18" means the chapter, "Ch. 18.4" a section in it.

In the movement of thought as in Hegel's course, each chapter presupposes the one before. Each of Hegel's three doctrines begins with a chapter "Words and Questions," which explains the words with which Hegel describes the doctrine and names the questions the following chapters pursue. These chapters are, like the explanations of words in the course, a tool: They make Hegel's language usable, so that one can follow his pointing; the thought itself stands in the chapters after them. Each doctrine ends with a retrospect that presents the movement of the chapters in context, develops the transition into the next doctrine and takes

7 For the philosophy of nature, Michelet drew not only on the transcripts of the Berlin lectures but also on Hegel's own Jena lecture manuscript of 1805/06. What comes from it goes back to Hegel's own hand, but it reflects a state some twenty-five years older than the Encyclopedia of 1830 (M. J. Petry, *Hegel's Philosophy of Nature*, vol. 1, London/New York 1970, p. 123).

up thoughts of the movement of thought where they help understanding. In Part III the three sections (subjective concept, objectivity, idea) each have such an opening chapter and a retrospect; there follow a chapter on Hegel's ways of speaking and how this book reads them (Ch. 40), the retrospect on the whole of logic (Ch. 41) and the step to nature (Ch. 42). Whoever has little time reads, of the retrospects and closing chapters, the brief version at the beginning; it does not presuppose the chapters before. A single chapter of the course shows the table at its end at a glance.

Hegel is read with goodwill. Where a formulation is awkward or obscure, the good thought that can stand behind it is sought first ("what is probably meant …"); only when a step does not hold even then, is that said. Where the course and Hegel's wording diverge, the sections "On the Text" note it; who is right, Hegel or the retracing, is not thereby settled.

What follows is for reference and for later: the way of citing in detail, a remark on the beginning, the neighboring books, and two questions to which the book answers only at its end. Whoever wants to begin reads on at Ch. 1, whoever wants to start with Hegel at once, at Ch. 13, whoever wants to start with the doctrine of being at once, at Ch. 15.

Who speaks here and how citations work. At every place it should be recognizable on whose account a thought goes.

Hegel's printed text. The *Encyclopaedia of the Philosophical Sciences* is cited in the third edition of 1830 by paragraphs. A paragraph without indication of the volume always means its first part, the small logic (§ 115). For the second and third parts, the philosophy of nature and of spirit, the volume is given (Encyclopaedia vol. 2, § 267). The large logic is drawn on where it says more or something different, and is cited with volume and page of the Theorie-Werkausgabe at Suhrkamp, whose volumes 5 and 6 it fills (TWA 6, 41). Volume 5 gives the doctrine of being in the second edition of 1832, volume 6 the doctrine of essence (1813) and of the concept (1816). It is cited from this edition because everyone can reach it, printed as well as digital, while the Collected Works stand mostly in libraries; it gives Hegel's printed works in the wording of the last edition he supervised, in modernized spelling (before the reform of 1996, hence "daß"), and unlike the Collected Works it contains the additions. Encyclopaedia and philosophy of right can be found in every edition anyway through the paragraphs. Where the version matters, the critical edition of the Collected Works stands beside it, GW 11 for the first edition of 1812/13 and GW 21 for the doctrine of being of 1832. Other writings of Hegel are cited from the same edition.

Hegel's oral delivery. The transcripts of the lectures are cited with transcriber, lecture course and passage in volume 23 of the Collected Works at Meiner (transcript Kehler, lecture course 1825: GW 23.1, p. 393). Hegel often speaks there more vividly than in print, but is transmitted by a foreign hand; where transcript and print diverge, it is noted. The same holds for the additions; if a paragraph has several, they are numbered (§ 24 Addition 2).

The interpreters are named, whether Hegel's pupils (Erdmann, Michelet, Rosenkranz, Werder) or present-day commentators (Stekeler, Maybee, Iber, etc.). An interpretation without a name would be an interpretation that passes itself off as Hegel. In the sections "On the Text," **Interpreters↑.** stands before what others contribute to a passage or object against it, and **Another reading.** before an interpretation that stands beside that of the course.

In the sections "On the Text" and "Deepening," short references stand in the text, longer ones in footnotes.

On the translation of quotations: The quotations from Hegel and other German-language authors have been translated for this edition from the German wording, in the terminology of this book, rather than taken over from an existing translation. Where several authoritative translations exist, each interprets differently; the translation here follows the interpretation of this book. So that the rendering can be checked, the German wording is given alongside: in parentheses after the quotation, and for longer quotations in a separate paragraph below it or in the footnote that documents the quotation. Very short phrases (under four words) appear without the original, and quotations that already stand in another language in the German text are left unchanged.

The beginning. To begin without presupposition does not mean to begin on an empty surface. For the beginning Hegel demands the "resolve to want to think purely" (DE: „Entschluß, rein denken zu wollen") (§ 78 Remark), that is, to abstract in thinking from everything particular; nothing is abolished by that. Whoever writes or reads logic has a body, a history, a language and a practice in which judging and ordering have long been going on, and keeps them. Logic therefore fetches nothing out of nothing. It arranges, starting from the simplest, what we practice anyway, and must let itself be measured by whether its transitions can be checked and whether we recognize our thinking in it. Why it begins with being and what the resolve contributes to that, Ch. 14 says.

Doubt is not bypassed in this. It is taken into science: A skepticism that preceded it would, according to Hegel, be a "superfluous path," because "the dialectical itself is an essential moment of affirmative science" (DE: „das Dialektische selbst ein wesentliches Moment↑ der affirmativen Wissenschaft ist") (§ 78 Remark). The path to science was gone expressly by the *Phenomenology of*