The World as Will and Presentation

Arthur Schopenhauer

1818

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[Brackets] enclose editorial explanations. Small .dots. enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. Every four-point ellipsis indicates the omission of a brief passage that seems to present more difficulty than it is worth. Longer omissions are reported between brackets in normal-sized type. —Schopenhauer gives many quotations in Greek and/or Latin; they will be given in English, usually without mention of the other languages. —The division into Books, and their titles, are his; so (in the Books) is the division into numbered chapters, but not their titles, which are added in the present version, as are the occasional cross-headings in SMALL CAPITALS. Footnotes between [square brackets] are editorial; others are Schopenhauer's. In the 'Appendix' on Kant, the chapter-numbers as well as their titles are added in the present version.—The work consisted of two volumes, of which the second is a set of commentaries on the first. Most of the philosophical world's interest has been focussed on the first, which is all that is presented here. —The work's title has most often been given in English as The World as Will and Representation; the present version's 'Presentation' follows the 2008 translation by Richard E. Aquila (published by Longman). This has found favour with several writers on Schopenhauer, largely because 'Representation' inevitably carries the idea of a representation of something, which is flatly contrary to Schopenhauer's view. Aquila, whose generous help has contributed much to the present version, gives on his pages xii–xvi a different and subtler objection to 'Representation'. From now on, Schopenhauer will be referred to as AS.

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Glossary

accident: Translates *Accidenz*, a technical term meaning 'non-essential quality'.

affection: Translates *Affektion*. Although German dictionaries don't support this, it seems likely that sometimes when AS speaks of an *Affektion* of x, he means only a *state* of x.

disinterested: This text uses the word always in its actual, proper meaning. namely that of 'not *self*-interested'.

exists: This usually translates *da ist*, literally 'is there'.

GP: Used here as short-hand for 'Grounding Principle', which translates *Satz von Grunde*. In English this is usually called the 'principle of sufficient reason', following Leibniz's *raison* and *ratio*. Kant and AS use the German *Grund* (Leibniz did not write philosophy in German). The principle says that everything must have a reason or a cause.

identical: Translates *identisch*. There's no way to avoid this translation, but quite often AS doesn't mean 'identical' but 'closely alike'. Similarly with 'identity'. For example, 'identical things' in chapter 14.

individuation-maker: See the explanation early in chapter 23.

Knowledge: This word, with its initial capital, translates *Wissen*, which for AS is abstract knowledge that is exclusively in the province of reason. (He isn't rigorous about this, however. For example, in chapter 14 he says that history is a case of *Wissen*.) The uncapitalised 'knowledge' translates *Erkenntniss*, standing for knowledge generally, of which Knowledge is one species, the others relating to perception, intuition, experience etc.

liberum arbitrium indifferentiae: AS uses this Latin phrase in its meaning 'freedom to go either way'.

occult qualities: Hidden qualities; by AS's time the phrase had become a term of derision in the physical sciences, standing for mysterious 'forces' for which no explanation can be given.

peculiar: To say that property P is peculiar to individual x or species y is to say that only x or the members of y have P.

penetration: This means '*seeing* through' (German *Durchschauung*), not 'getting through' or 'piercing'.

per accidens: In AS's use of this scholastic technical term, to say that something happens to x *per accidens* is to say that its cause lies in x's circumstances, not its own essential nature.

petitio principii: The Latin name for the fallacy of *begging the question* = arguing for a conclusion which is one of the premises. The current use of the phrase to mean *raising the question* is a product of pandemic journalistic ignorance.

positive: Translates *positiv*, which enters into two very different contrasts: (i) the positive/negative contrast, and (ii) the contrast between institutions that are man-made (*positiv*) and ones that are somehow established by nature without human intervention. Where it is clear that (ii) alone is in play, *positiv* is translated by 'man-made'. In a few places there are indications of (ii) but 'man-made' doesn't work right.

Realität: When used as a concrete noun, this is left untranslated because the only tolerable translation for it is 'reality', and that is reserved for *Wirklichkeit*. For AS's distinction between these, see page 13, especially the footnote. When

Realität occurs as an abstract noun, it is translated by 'realness'.

shape: translates *Gestalt.* A better translation would be 'form', but that is used for AS's *Form*; and there are places—e.g. on page 27—where the two have to be kept apart.

speculative: Theoretical, often with an emphasis on nonnormative; 'speculative philosophy' on page 34 refers to the whole of philosophy other than ethics and aesthetics. **subject of:** Throughout this work, the 'subject of a cognitive state is not •what the state (belief, knowledge etc.) is *about* but rather •the thing that *is in* the state, the thing that believes, knows etc.

Upanishads: The part of the Vedas (see next item) that discuss meditation, philosophy and spiritual knowledge.

Vedas: A body of religious texts originating in ancient India.

Prefaces

Preface to the first edition

I'll tell you here how this book must be read in order to be understood. What is to be presented in it is a single thought; but try as I would, I couldn't find a shorter way of imparting it than this whole book. I hold this thought to be the one that has long been sought under the name of 'philosophy', so that historically educated people thought its discovery to be quite as impossible as the discovery of the philosopher's stone,¹ although as Pliny said: 'How many things have been judged to be impossible to do before they were actually done?'

Looked at from different angles, this one thought shows itself as what is called metaphysics, as what is called ethics, and as what is called aesthetics; and it would indeed be all of these if it were what I have said I take it to be.

A **system of thought** must always have an architectonic structure, i.e. one in which one part supports another and is not supported by it, so that ultimately the foundation supports all the rest without being supported by it, and the apex is supported without supporting anything. On the other hand, a **single thought**, however comprehensive it may be, must preserve the most perfect unity. If it lets itself be broken into parts so as to make it easier to communicate, these parts must have an organic structure, i.e. one in which

•every part supports the whole just as much as it is supported by it,

•there is no first part and no last,

•the whole thought gains distinctness through every part, and

•even the smallest part can't be completely understood

until the whole has been grasped.

Any **book**, however, must have a first and a last line, which makes it very unlike an organism, however organism-like **its content** may be; so in this case form and matter are in contradiction.

This being so, it is self-evident that the only way to penetrate the presented thought is to read the book twice, and indeed the first time with much patience; for which you'll need my gift of the information •that the beginning presupposes the end almost as much as the end does the beginning, and •that every earlier part presupposes the later almost as much as vice versa. I say 'almost': for it is not altogether so, and I have done my best to begin with things that have the least need to be clarified by what comes later, and in general I have honestly and conscientiously done what I could make the work clear and easy to understand. [Then a tiresomely complex sentence of which the gist is: readers will be apt to misunderstand this or that passage, clear as it is, because they'll see it as contradicting their own opinions or 'the opinions of the day', a mistake they wouldn't make if they saw how the passage relates to the rest of the work.] That is why I said that the first reading requires patience, created by confidence that on a second reading much or all of the work will appear in an entirely different light....

Another point: occasional repetitions are justified by the serious attempt to make a very difficult subject fully and even easily intelligible. And indeed the organic (not chain-like) structure of the whole does sometimes make it necessary

[[]A mythical substance said to be capable of many wonders, notably turning base metals into gold.]

to touch on the same point twice. This same structure and the very tight interconnection of all the parts hasn't allowed me to use the division (which I otherwise prize greatly) into chapters and sections, forcing me to make do with four main divisions—four points of view on the one thought, so to speak. In each of these four Books it is especially important that the reader's necessary attention to details not distract him from the main thought to which they belong, so that he loses sight of the progress of the exposition as a whole.—This, then, is the **first** and (like those that follow) unavoidable demand on the unsympathetic reader (unsympathetic to the philosopher,

precisely because the reader is himself a philosopher).

The **second** demand is this: that one read the introduction before the book, although it does not occur in the book but appeared five years earlier under the title On the Fourfold Root of the Principle of Sufficient Ground.¹ Without acquaintance with this introduction and preliminary run-through, true understanding of the present work is utterly impossible; the content of that treatise is presupposed throughout as if it were part of the book. [He goes on to say that if the Fourfold Root work hadn't appeared earlier, it ought to be a part of the first Book, which does in some ways show the lack of it. But AS didn't handle it that way, because that would be 'plagiarizing from myself', and also because it would perpetuate various defects in the earlier work arising from his having been 'too caught up in Kantian philosophy at the time, such as the concepts of categories, outer and inner sense, and the like', not that any of these are central to the present work.]....

But only if it is fully recognised through that treatise •what the GP [see Glossary] is and means, •what the extent and limits of its validity are, and •that this principle

•does not exist before all things, with the entire world existing only as a consequence and in accordance with it, as though a corollary of it, but rather that it
•is nothing more than the form within in which any object of whatever sort, always conditioned by the subject, is known everywhere insofar as the subject is a knowing individual

—only then will it be possible to enter into the method of philosophising that is being attempted here for the first time, utterly diverging from everything that has gone before.

My dislike for repeating my own words, or expressing the same content in other and worse words because the better ones have been taken, has led to a second gap in Book I of the present work, namely the omission of everything in the first chapter of my treatise *On Vision and Colours*, which would otherwise have occurred here verbatim. So an acquaintance with this earlier short work is also presupposed here.

Finally, the **third** demand to be made on the reader could be silently taken for granted. For it is nothing but acquaintance with the most important phenomenon to have occurred in philosophy in two thousand years—one that lies so near to us. I mean the chief works of Kant. Someone has said—and I agree—that their effect on a mind that they really speak to is like the operation for cataracts on a blind person. And continuing the comparison: my purpose is to put into the hands of those on whom that operation has been successful the spectacles that such people have to have.

Just because I take my point of departure from what the great Kant has accomplished, serious study of his works has enabled me to discover significant mistakes in them,

¹ [In that title the principle is called the *Satz vom zureichenden Grund*; but AS usually calls it the *Satz von Grunde*, the grounding principle, abbreviated in this version to GP, on which see the Glossary.]

which I have had to pick out and display as wrong, so that I could presuppose and apply what is true and excellent in his doctrine in a pure error-free form. I have done this in a separate Appendix, so as not to interrupt and confuse my own exposition with frequent polemics against Kant. Just as my work presupposes acquaintance with Kantian philosophy, so also it presupposes acquaintance with that Appendix. That makes it advisable to read that Appendix first, especially because its content has definite connections with Book I of the present work. [AS adds that the Appendix sometimes refers to the main work, from which he infers that the Appendix 'must also be read twice'.]

The philosophy of **Kant** is the only one of which a thorough acquaintance is directly presupposed by the present work. But a reader who has lingered in the school of the divine **Plato** will be better prepared and more receptive to hearing me. But if

a reader has also shared in the benefaction of the **Vedas** [see Glossary], access to which, opened up to us through the Upanishads [see Glossary], is in my view the greatest advance that this still young century [written in 1818] can boast of in comparison with earlier ones—so that I expect the influence of Sanskrit literature to be as deep \cdot in this century \cdot as the revival of Greek literature was in the 15th century,

he has already received and taken in inspiration from the ages-old Indian wisdom, and he is best of all prepared to hear what I have to say to him. For what I say will not come across to him—as to many others—as foreign and indeed hostile. If it didn't sound vainglorious, I would maintain that every one of the individual and out-of-context sayings that constitute the Upanishads can be derived as a consequence of the single thought I am going to communicate; but that \cdot single-thought emphatically *cannot* be found in the Upanishads.

jokingly confronts the protest that his pre-requirements for understanding his book are too demanding. He imagines the protest as being enlivened by the fact that the shops are crammed with philosophy books and Germany crammed with philosophers. He insults the protestors, calling them the sort of folk who would get nothing out of his work even if they did do all the required preliminary reading, and likening them to his bête noire Hegel, whom he jeers at as a supposedly 'great philosopher', but does not name. He jestingly gives such people advice concerning what they might do with his book now that they have bought it: use it to decorate a library shelf or a coffee table, or (without having read it) write a review of it, or just set the book back down. He ends by saying that all this is merely joking, and that] I have no serious reponse to such objections. I hope that these ·protesting· readers will give me some thanks for warning them in timely fashion, trying to save them from wasting a single hour with a book that •couldn't be useful to read without fulfilling the demands I have made, and that •should therefore be neglected entirely, especially since the odds are that it can't speak to them, and will always be intelligible to only the rare few, and must therefore calmly and modestly await those few whose uncommon mode of thinking finds it enjoyable. For even apart from the complications and exertion that the book imposes on the reader, what cultivated individual of today, whose knowledge approaches that splendid point where 'paradoxical'---or extremely surprising to encounter on almost every page thoughts that straightforwardly contradict what he has confirmed, once and for all, as true and settled? And then how unpleasantly deceived will many a reader feel if he meets here no discussion of what he believes ought to be pursued precisely here, because

This Preface ends with more than a page in which AS

his way of speculating coincides with that of a still living great philosopher, who has written truly touching books and has only the slight weakness that he takes everything he had learned of and approved prior to his fifteenth year to be fundamental thoughts innate to the human spirit. Who could bear all this? The reader who •has arrived at this Preface which dismisses him, •has paid cash for the book and •is asking: where is my compensation? I can only reply by reminding him that he knows how to use a book in many ways, even without reading it at all. It can fill a gap in his library just as well as many others, where, neatly bound, it is certain to make a good appearance. Or he can lay it on the dressing table of his learned lady friend, or on the tea table. Or indeed finally, which is certainly the best of all and as I especially advise, he can review it.

And so, after allowing myself the joke to which hardly a page in this altogether ambiguous life can be too serious to grant a place, I present the book with inner seriousness, •convinced that sooner or later it will reach those to whom it is (the only ones to whom it *can* be) directed, and •reconciled to the fact that it too will meet in full measure the fate that has always befallen the truth in every field of knowledge (and thus especially in the most important ones), namely being allotted only a short celebration of victory between the two long periods in which it is •first• condemned as paradoxical and •then• dismissed as trivial. The former fate tends to strike its author as well.—But life is short, and truth reaches far and lives long. Let us speak the truth.

Preface to the second edition

I consign my now completed work to humanity-not to those who live at my time or in my country-confident that humanity will find some value in it, even if that value is slow in being recognised, which is the fate of any sort of good thing. For what my mind has (almost against my will) been incessantly devoted to work on through a long life¹ can only have been •humanity, not •the fleeting generation occupied with the delusion of the moment. And the lack of interest in it during this time couldn't shake my belief in its value. For I constantly saw things that are false, bad, right down to absurd and crazy being generally admired and revered; and I had the thought that if those who are capable of recognising what is genuine and right can be seen occasionally during some twenty years, there might be others who are capable of producing it, so that their works then constitute an exception to the impermanence of earthly things....

Anyone who seriously takes up and pursues a topic that doesn't lead to material benefits shouldn't count on the interest of his contemporaries. But he will surely see that under the world's surface his topic becomes current and enjoys its day. And this is as it should be.² For the topic can't succeed unless it is pursued for itself. Because every **a** plan is a threat to **b** insight.³ Accordingly, as the history of literature testifies, anything of value has needed a lot of time to gain acceptance, especially when it is of the instructive rather than entertaining variety; and meanwhile falsehood glittered ·invitingly·. For uniting a topic with the ·superficial·

¹ [AS was 30 when the first edition was published; the second edition appeared 26 years later.]

² [*in der Ordnung* = 'in the order' (of things).]

³ [As we'll see later, this strange statement involves the contrast between **b** thinking a problem through, going where it takes one, and **a** working on a problem with a pre-set plan for what result one wants to reach.]

appearance of it is hard, where it isn't impossible. It is indeed the curse of this world of •hardship and •need that everything has to serve and be enslaved by them; which is why the world is not so made that any noble and sublime effort—like the search for light and truth-can thrive unobstructed within it and exist for its own sake. Rather, even when such a project achieves recognition by introducing the concept of it \cdot to the public, material interests and personal purposes will at once take it over as their instrument—or their mask. Accordingly, after Kant had brought philosophy back into repute, it too inevitably became the instrument of purposes-political ones from above, personal ones from below-although what this happened to was not philosophy (strictly so-called) but its double, which is mistaken for it. This should not disconcert us; for the vast majority of men are by nature quite unable to follow-indeed even to conceive-any but material aims. So the pure pursuit of truth is far too lofty and eccentric an endeavour to be sincerely engaged in by all, or many, or even a few. [AS develops this theme, railing against the charlatans who busily write and talk on philosophical topics but, having no interest in the truth, are motivated by concerns that are 'personal, official, ecclesiastical, political-in short, material'. He mocks the idea that through all this hubbub the truth will emerge without having been sought.] Truth is not a whore who throws herself on the neck of those who don't desire her. Rather, she is such a shy beauty that even one who sacrifices everything to her can't be certain of her favour.

Whereas governments make philosophy a means for their political purposes, scholars see in philosophy professionships a trade that feeds its man like any other; so they press after them with assurances of their good disposition, i.e. their intention to serve those •political• purposes. And they keep their word: not truth, not clarity, not Plato, not Aristotle, but the goals they have been appointed to serve, are their guiding star and become the criterion of truth, of value, of what is worth attending to, and of the opposites of these. So anything that doesn't square with those goals—and it may be the most important and extraordinary thing in their discipline—is either condemned or (where that seems hazardous) suffocated by unanimous silence. Look at their united zeal against pantheism! Will any simpleton believe that this comes from conviction?

And how could philosophy degraded into a way of earning a living *not* degenerate into sophistry? Because this is inevitable, and the rule 'Whose bread I eat, his song I sing' has always applied, the ancients regarded *earning money through philosophy* as the mark of the sophist. But now there's the added fact that since in this ·modern· world nothing but mediocrity is to be expected—or can be asked for and had for money—we have to make do with it as well ·as sophistry·. From this we then see, in all the German universities, beloved mediocrity trying to establish a still quite non-existent philosophy by its own means, and indeed in accordance with a pre-set measure and goal—a spectacle that it would be almost cruel to mock.

While philosophy has to this extent long had to serve solely as a means for public and for private purposes, I have (undisturbed by it) pursued the train of my thoughts for more than thirty years; simply because I *had* to—could not do otherwise—driven by an instinct that was also supported by the belief that when one man has had a true thought and cleared up some obscurity, this will eventually be grasped

[[]At this point, AS puzzlingly switches from the first-person singular to (in a few cases) the first-person plural and (in many more cases) to the impersonal *man* = 'one'. The only way to make the passage read well is to stay with 'I' and 'me' thoughout, which is what the present version does.]

by another thinking mind, will speak to it, gladden it, and console it.¹ I am addressing myself to such a mind, just as others like me have spoken to me, bring me consolation in this dreary life. In the meantime, I pursue my subject for its own sake and on its own terms. But the strange thing about philosophical meditations is that what brings benefit to others is a something that one person has thought through and examined for himself, not **b** something that he initially *in*tended for the benefit of others. The a former is marked above all by its thoroughgoing honesty. For no-one tries to deceive himself or pass off rubbish on himself; so all sophistry and mere verbiage drop out, so that every sentence immediately repays the trouble of reading it. Accordingly, my works so clearly bear the stamp of honesty and openness on their brow that they contrast glaringly with the works of the three famous sophists of the post-Kantian period. I am always to be found engaging in *reflection*, i.e. rational deliberation and honest communication, never in inspiration, otherwise known as 'intellectual intuition' or 'absolute thought'--its rightful name being 'windbaggery'² or 'charlatanism'.³

Working in this spirit, while continuing to see the false and the bad being generally recognised—indeed, windbaggery and charlatanism highly revered—I have long since willingly done without the approval of my contemporaries. A body of contemporaries that has for twenty years raved about a Hegel (that intellectual Caliban!) as the greatest of philosophers—so loudly that it reverberated through all Europe—couldn't possibly cause someone who has seen this happen to hanker after its approval! It has no more laurels to bestow; its approval has been prostituted, and its reproach can mean nothing. That I am serious about this can be seen from this: if I had ever sought the approval of my contemporaries, I'd have had to delete twenty passages that flatly contradict all their views—indeed are bound in part to offend them. But I would count it as dereliction on my part to sacrifice even a syllable to that approval. My guiding star has been quite seriously the truth. Following it, I can initially seek only my own approval, entirely turned away from •an age sunk deep with respect to all higher intellectual efforts and from •a demoralised....national literature in which the art of combining high words with low thoughts has reached its pinnacle. Of course I can never escape from the mistakes and weaknesses necessarily attaching to my nature, but I shan't augment them with unworthy compromises.

As for this second edition, I'm glad to find that after 25 years there is nothing I want to retract, meaning that my basic convictions have maintained themselves-at least in myself! The alterations in the first volume, which contains the whole text of the first edition, never affect the essentials. Rather, some concern a few secondary matters, and more consist in usually brief explanations scattered here and there. Only the 'Critique of Kantian Philosophy' has received significant corrections and extensive additions. [He embarks now on a very long explanation of his decision to add a second whole volume: Its content couldn't be melded with the first volume, because the writing styles are different; but the two are complementary halves of a single whole:] If the first volume has the advantage over the second that only the fire of youth and the energy of initial conception can bestow, the second will surpass the first through its maturity and completeness in working out thoughts. [And much more along the same lines. He advises the newcomer to his philos-

² Fichte and Schelling

³ Hegel

ophy to read the first volume all through once, before turning to the second; and explains that the chapter-numbers in the first volume were introduced in this second edition, so as to facilitate cross-references from the second volume.]

In the preface to the first edition I declared that my philosophy starts from the Kantian philosophy and thus presupposes a thorough knowledge of that; and I repeat that here. For Kant's doctrine produces in every a mind that has grasped it a fundamental change so great that it amounts to an intellectual rebirth. It alone eliminates the *realism* that is innate to the mind, stemming from the basic character of the intellect. Neither Berkeley nor Malebranche suffices for this, for they stay too much in generalities, whereas Kant goes into particulars, doing this in a manner that •has no parallel either before Kant or after him, and •has a quite unique-one might say immediate-effect on the mind, which undergoes a complete clean-out, after which it views all things in a different light. Only through this does it become receptive to the more positive insights that I offer. **b** Someone who hasn't mastered Kantian philosophy, whatever else he may have studied, has remained in a kind of state of innocence—caught up in the natural and childish realism that we are all born into and that equips us for everything *except philosophy*. So **b** this person relates to **a** the other as a child to an adult. This truth sounds paradoxical nowadays, which it wouldn't have done in the first thirty years following the appearance of the Critique of Pure Reason; that is because

•a generation has since grown up that doesn't really know Kant, for that requires more than a fleeting, impatient reading, or a second-hand report; and this in turn comes from the fact that •bad education has led this generation to waste its time on the 'philosophical' output of •ordinary minds that have no calling for philosophy, or indeed of •windbagging sophists who have been irresponsibly boosted as philosophers.

•Hence the confusion in initial concepts, and in general the indescribable crudeness and plodding, that can be seen emerging from the affectation and pretentiousness in the philosophical efforts of the generation thus educated.

Anyone who thinks he can get to know Kant's philosophy from other people's accounts of it is utterly mistaken. I must indeed seriously warn against reports of this kind, especially recent ones: in the last few years I have encountered, in the writings of Hegelians, accounts of the Kantian philosophy that are downright fantastic. How could minds already twisted and spoiled in their early youth by Hegelry be capable of following Kant's profound investigations? They are early accustomed to taking the shallowest verbiage for philosophical thoughts, the most pathetic sophisms for mental acuity, and the most stupid foolishness for dialectics.... What they need is not a critique of reason. nor any philosophy; what they need is a *medicine for the mind*, starting with—as a purgative—something like a *a short course in common*sensery¹; and then we'll see whether for them there can ever be talk of philosophy.

So it will be useless to look for the Kantian doctrine anywhere but in Kant's own works; but these are throughout instructive, even where he goes astray, even where he is mistaken. All real philosophers can be known only from their own writings, not from the reports of others; and Kant's originality makes this especially true of him. For the thoughts of those extraordinary minds can't survive being filtered through commonplace heads. [He launches into

[[]He says this in joke French: un petit cours de senscommunologie.]

jeering contrasts between the two kinds of minds, expresses amazement that 'the public' prefers the reports of intellectual inferiors to the splendours of the originals, and mockingly invokes the educational theory that children learn best from children.]

Now a word for the philosophy professors. I have long had to admire

- •the sagacity, the accurate and delicate tact, with which they have recognised my philosophy, right from its first appearance, as something entirely at odds with their own endeavours, indeed as truly dangerous to them....,
- •the sure and acute politics through which they quickly found the only correct way to deal with it,
- •how unanimously they followed that procedure, and
 •the persistence with which they stayed true to it.

This procedure-which, incidentally, has the further advantage of being very easy to follow-consists in keeping something hidden by completely ignoring it.... The effectiveness of this silent treatment is heightened by the rapturous clamour with which these people celebrate the births of one anothers' intellectual offspring; the public have to see and take note of the air of importance with which they congratulate themselves on the event. Who could fail to recognise the effectiveness of this procedure? Yet there is no objection to the principle 'first live, then philosophise' [he cites this in Latin]. These gentlemen want to live, and indeed to live on philosophy: they have been directed to it, along with wife and child..., and they have staked everything on it. Now, my philosophy is utterly unfit for anyone to live on it. (i) For one thing, it lacks the first essential requirement of a well-paid chair of philosophy, namely a speculative [see Glossary] theology, which is supposed—despite that bothersome Kant with his critique of reason—to be the main theme of all philosophy, even if that gives philosophy the task of speaking of things it can know absolutely nothing about. **(ii)** Again, my philosophy doesn't affirm the fable, so shrewdly devised by philosophy professors and now indispensable to them, of a *reason* that knows, perceives, or apprehends immediately and absolutely. Someone has only to foist this on his readers at the outset and then in the most comfortable manner in the world to ride off, as if in a four-horse carriage, into the realm beyond all possible experience, entirely and forever shut off by Kant from our knowledge. What one finds there, immediately revealed and elegantly prepared, are the basic dogmas of modern, Judaicising, optimistic Christianity. So we have

•my meditative philosophy, lacking in those essential prerequisites, with no aim and no sustenance, which has for its North Star the truth alone—the naked, unpaid, unbefriended, often persecuted truth—and steers straight towards it without looking to the right or the left, and

•the good, nourishing university philosophy which, laden with a hundred intentions and a thousand aims¹, cautiously tacks its way along its route, always before its eyes the fear of the Lord, the will of the government ministers, the ordinances of the state church, the desires of the publisher, the favour of students, the friendship of colleagues, the course of daily politics, the current orientation of the public, and so on.

•What do these have to do with one another? What does my quiet, serious inquiry into the truth have in common with heated scholastic wrangling from lecterns and student benches, the deepest incentives for which are always

[[]mit hundert Absichten und tausend Rücksichten]

Prefaces

personal goals? Nothing! Rather, the two types of philosophy are different from the ground up. For this reason there is no compromise on my part and no camaraderie, and nobody profits from me except perhaps someone who seeks only the truth, and so none of today's philosophical parties. For they all proceed according to their aims [*Absichten*], while I have mere insights [*Einsichten*] to offer, which don't square with any of the aims because they are not modeled after any of them. My philosophy won't be suitable for a professorial chair until times have utterly changed.

What a fine thing it would be \cdot (he imagines his opponents thinking sarcastically). if such a philosophy—that cannot provide one with a living-were allowed into the open and attracted general attention! So this had to be prevented, and everyone had to unite in opposition to this philosophy \cdot by joining the conspiracy of silence about it. One doesn't have such an easy game of it with challenges and refutations. [AS goes on to say that it wouldn't have been prudent to answer back against his philosophy, because that would make it widely known and might interfere with the public's taste for the 'lucubrations' [look it up] of the philosophy professors. So he advises his opponents to stick with the 'system of silence' for as long as it works, until (he says puzzlingly) 'ignoring it turns into ignorance, when it will be time to give it up'. He thinks it will last for the rest of his lifetime at least, especially if the professors are strict in their supervision of young people. About the very long haul he expresses

optimism:] Even if it seems impossible that the voice of the individual could ever penetrate the chorus of the deceivers and the deceived, the genuine works of every age have a special, silent, slow, and powerful influence; and eventually, as if by a miracle, they are seen to rise out of the turmoil like a balloon that soars from the thick atmosphere of this earthly space into purer regions, and stays there, with no-one able to pull it back down.

Preface to the third edition

That which is true and genuine would more easily win a place in the world if those who couldn't produce such a thing weren't sworn to preventing its emergence. Through this circumstance, much that should have benefited the world has been impeded and delayed, if not downright strangled. For me the result has been that, although I was only 30 years old when the first edition of this work appeared, I have not seen this third edition until my 72nd year. [AS died less than a year later.] I find consolation for this in Petrarch's words: *Si quis, toto die currens, pervenit ad vesperam, satis est.*¹ I have at last arrived, and have the satisfaction of seeing, at the end of my career,² the beginning of my effectiveness, in the hope that, in accord with an old rule, it will last long because it was late in beginning.

The reader will find in this third edition nothing missing of what the second contains; and it includes 136 pages of additions....

¹ ['He who runs the whole day and arrives at the evening has done enough.']

² [The German could also mean 'at the end of my race'; the word is *Laufbahn*.]

Book I. The world as presentation. First consideration Presentation as subject to the GP The object of experience and science

Sors de l'enfance, ami, réveille-toi!¹ —Jean-Jacques Rousseau

1. Getting started on one side

The world is my presentation—this is a truth that applies to everything that lives and knows, though only the human being can bring it into reflective abstract consciousness; and when he really does this, philosophical thoughtfulness has come to him. It is then clear and certain to him that he knows no sun and no earth, but always only an eye that sees a sun, a hand that feels an earth; that the world around him exists [see Glossary] only as presentation, i.e. only in relation to something else, the presenter, which is himself.

If any truth can be announced *a priori*, it is this. For it is the expression of the most general form of all possible and conceivable experience, a form that is more general than all the others—more general than time, space and causality—for they all presuppose it; and whereas

•each of these forms—all of which we have recognised as so many particular applications of the GP [see Glossary]—applies to only one particular class of presentations,

•the object/subject division is the form common to all those classes; it is the only form under which any presentation, of whatever kind it may be—abstract or intuitive, pure or empirical—is possible and conceivable.

Thus no truth is more certain, more independent of all others, and less in need of proof than this, that everything that exists to be known—and so this entire world—is only object in relation to the subject, perception for the perceiver, in a word, *presentation*. Of course this applies not only to

•every past and every future, as it does to the present, and to

•what is furthest away, as it does to what is near;

because it applies even to time and space, in which alone this is all distinguished [he means: which are presupposed in the past-present-future and near-far distinctions]. Whatever can and does belong to the world is inexorably permeated by this fact of being conditioned by the subject, and exists only for the subject. The world is presentation.

This truth is in no way new. It was already present in the sceptical reflections that Descartes started from. Berkeley was the first to assert it decisively; which won him undying merit in philosophy, even if the rest of his doctrines cannot stand. Kant's first mistake was his neglect of this proposition, as I explain in the Appendix below.

[AS adds a few remarks on how the proposition in question was 'the fundamental principle of the Vedanta philosophy', citing an English work that reported this and summed it up in words which he says 'adequately express the conjunction of empirical realness [see Glossary] and transcendental ideality.]

Thus in this first Book we'll consider the world only from

[[]Meaning: 'Leave your infancy, my friend, awake!'.]

that one side, only so far as it is presentation.... But the one-sidedness of this consideration will be made up for in Book II, •through a truth that is not as immediately certain as the one that we are starting with here, and that we can be led to only by deeper research, more difficult abstraction, separating where there is difference and uniting where there is identity; •through a truth that is bound to be very serious and impressive to everyone, namely that the very same person •who says 'The world is my presentation'can and must also say: 'The world is my will.'

Before coming to that, we have to •attend unswervingly to the side of the world from which I started, the side of knowability, and thus without reluctance to •consider all available objects—indeed even one's own body—only as presentation, calling them all mere presentation. What I am setting aside here is only *will*, which alone constitutes the other side of the world. For just as the world is on one side through and through presentation, so it is on the other side through and through will. But a *Realität* [see Glossary] that is neither of these, but an object in itself (to which even Kant's 'thing in itself' regrettably degenerated in his hands), is a fanciful non-thing and the assumption of it it is a will-o'-the-wisp in philosophy.

2. Subject/object; one/many. The GP

That which knows everything and is known by nothing is the *subject*. It is thus the bearer of the world, the pervasive, constantly presupposed condition of everything that appears, of every object; for whatever exists, exists only for the subject. Everyone finds himself as this subject, but only as something that knows, not as an object of knowledge. His body is indeed an object, and so from this standpoint we call it *presentation*. For the body is an object among objects and falls under the laws of objects, although it is an immediate object.¹ Like all objects of perception, it lies in the form of knowledge, in time and space, through which plurality exists. But the subject—knowing, never known—does not also lie in this form; rather, it is always presupposed by the form. So it does not involve plurality or its opposite, unity. We never know it; wherever anything is known it is the subject that knows.

The world as presentation, then,....has two fundamental, necessary, and inseparable halves. One is the object: its form is space and time, and through these plurality. But the other half, the subject, is not in space and time, for it is whole and undivided in every presenting being. Therefore a single subject combines with its object to make up the world as presentation...; and if it vanished, the world as presentation would be no more. So the halves are inseparable, even in thought. For each of the two has meaning and existence only through and for the other, exists with it and vanishes with it. Their boundaries are in immediate contact: where the object begins, the subject ends. The common status of the boundary can be seen in the fact that the essential and therefore general forms of every object-time, space, and causality-can be found and fully known from the subject without any knowledge of the objects, i.e. in Kant's language, they lie a priori in our consciousness. Discovering this is one of Kant's main achievements, and a very great one.

I now go further and maintain that the GP is the common expression for all of the object's forms that we are aware of

¹ [The idea behind this clause is that my sense-perception of anything x comes through—is mediated by—x's effect on my body, whereas my perception of my body is not mediated in that way.]

a priori, and that therefore whatever we know in a purely *a priori* way is nothing but the content of the GP and what follows from it; so that it expresses the entirety of our *a priori* certain knowledge. In my treatise on the GP, I have shown in detail how every possible object falls under this principle, i.e. stands in a necessary relation to other objects, on one side as determined, on the other as determining. This goes so far that the entire existence of all objects—so far as they are objects, presentations and nothing else—comes down to their necessary relation to one another; that's all it is, so it is entirely relational. More about this soon... I am assuming here that everything I said in that treatise is known by the reader and familiar to him; if it hadn't been said there, it would have to have been included here.

3. The ground of being

The main distinction among all our presentations is between intuitive and abstract ones. The latter constitute only *one* class of presentations, concepts; and the only possessors of these on earth are human beings, whose capacity for them—distinguishing them from all animals—has for ages been called *reason*. I will consider these abstract presentations later on, but first I shall speak exclusively of *intuitive presentation*. This encompasses the whole visible world, or the sum total of experience, together with the conditions of its possibility. It is, I repeat, a very important discovery by Kant that

> these very conditions, these forms themselves....can not only be •thought abstractly, apart from their content, but also •immediately perceived; and that this perception is nothing like a mental image borrowed from experience by copying it, but is so far from depending on experience that the dependence goes the

other way: the properties of space and time, as objects of *a priori* knowledge, apply to all possible experience as laws to which it must everywhere conform.

For this reason, in my treatise on the GP I treated time and space—viewed *purely*, without contents—as a special and self-subsistent class of presentations.

Equally important is something else Kant discovered about those general forms of all perception, namely that they can be known on their own and independently of experience, as can their status as laws; which is the source of mathematics, with its infallibility. And it is a no less remarkable property of time and space that the GP, which

•determines experience as the law of causality and motivation, and

•determines thought as the law of grounding for judgments,

appears here in an entirely unique shape in which it

•has a role in the succession of time's moments and in the mutual interrelations of the parts of space,

to which I have given the name ground of being.

Anyone who clearly understands (from my introductory work on it) that the GP has exactly the same content through all the various forms it takes, will also be convinced of the importance—for insight into his own innermost nature—of the simplest of its forms, which we have seeen to be *time*. Just as

•in time every moment exists only by annihilating the preceding moment, only in turn to be as quickly annihilated itself, and just as

•past and future (apart from what follows from their content) are as null as any dream, while the present is only the unextended and insubstantial boundary between the two, in just the same way •we will also recognise the same nullity in all the other forms of the GP, and we will see that

•like time, so also space, and

•like space, so everything that is in both space and time, and thus everything that proceeds from causes or motives

has only a relational existence, and exists only through and for something else that is just like it, i.e. something that exists in the same ·relational· way.

In its essentials this view is old: Heraclitus lamented the eternal **flow** of things in it, \cdot i.e. in the empirically given world \cdot ; Plato denigrated that world as something that is always **becoming** but never *is*; called it mere **properties** of the one and only enduring substance; Kant, calling it mere **phenomenon**, contrasted what is known in this way with 'the thing in itself'. Finally, the ancient wisdom of the Indians says: 'It is the Maya, the veil of deception, that envelops the eyes of mortals and lets them see a world of which one cannot say that it exists and cannot say that it doesn't, for it is like a dream, like the reflection of sun on the sand that the wanderer takes from afar to be water, or a rope thrown down that is seen as a snake.'... But what they all intended, what they all speak of, is nothing but my present topic of the world as presentation, subject to the GP.

4. Time and space in relation to matter

Anyone who has recognised the mode of the GP that makes its appearance in pure time as such, and that underlies all counting and calculating, has thereby also recognised the entire nature of time. It is nothing beyond just that mode of the GP, and has no other character. Succession is the form of the GP in time; succession is the entire nature of time.

And anyone who has recognised the GP as it holds sway in mere, purely perceived space has thereby taken in the entire nature of space. For space is nothing but the possibility of the mutual determination of its parts, which is called *location*. The detailed treatment of this, and the formulation of its results in abstract concepts (for convenience of use) is the sole content of geometry.

In just the same way, anyone who has recognised the mode of the GP that holds sway

•over the content of time and space,

•i.e. over what is perceptible in them,

•i.e. over matter,

has thereby recognised the law of causality, thus recognising the entire nature of matter as such. For matter is through and through nothing but causality, as everyone sees as soon as he reflects on it. Its *being* is its *action*; no other being is even thinkable for it.... The effect of one material object x on another y is recognisable only so far as y affects the immediate object differently from before; that is all there is to it. Cause and effect is thus the entire nature of matter: its being is its action. (It is therefore most fitting that in German the totality of what is material is called *Wirklichkeit*, a word that signifies much more than *Realität.*¹) *What* it affects is always, again, matter. Thus its entire being and nature consists in the law-governed alteration that one of its parts brings about in another; so that it is entirely relational, by way of a relation that applies only within its boundaries—as

[[]AS's point here is that *Wirklichkeit*, which is standardly (and will be here) translated as 'reality' starts with *Wirk*, which is also an ingredient in *wirken* = 'to have an effect', in *wirkend* = 'effective', and in *Wirkung* and *Wirken*, both = 'action'. To respect the line he is drawing (though it's not clear that it does much work in his thought), the present version—as explained in the Glossary—will translate *Realität* when used used as an abstract noun by 'realness', and will leave it untranslated when it is used as a concrete noun.]

with time, so with space.

Time and space can be perceptually presented on their own and apart from matter; but not matter apart from them. Its essential form presupposes space, and the action in which its entire being consists always involves an alteration, and thus takes place in time. But it's not merely that time and space are each separately *presupposed* by matter; the union of the two constitutes its nature, because that (I repeat) consists in causality. [AS now offers a complex and difficult passage, the gist of which is that there is some interplay between space and time, and that if this didn't exist] there would be no causality and, since this constitutes the true nature of matter, also no matter.

The law of causality obtains its meaning and necessity from the fact that the nature of alteration consists not in

•mere change in the state of affairs, period, but rather in

•there being at one spatial position now one state of affairs and then another, and there being at one time different states of affairs in different locations.

Only this mutual limitation of time and space gives both meaning and necessity to a rule by which alteration must proceed.

What is determined by the law of causality is thus not •the succession of states of affairs in mere time, but •this succession with respect to a particular space; and not •the existence of a state of affairs in a particular place, but •its existence in this place at a particular time. Thus alteration—i.e. change that occurs in accordance with causal law—always concerns a particular part of space and a particular part of time *together* and in union. So causality unites space and time. But we have found that the entire nature of matter consists in action, and thus in causality. Consequently, space and time have also to be united in matter, which must harbour the properties of time and of space together, however opposed those properties are. It is matter that unites •the insubstantial flow of time with •the rigid, unchangeable persistence of space, getting its infinite divisibility from both. Accordingly, we find that matter first introduces *simultaneity*, which can't be found

•in time alone, which knows no juxtaposition, or

•in space alone, which knows no before, after, or now. The simultaneity of a number of states of affairs is really what constitutes the nature of reality, for only through it can there be *duration*,¹ which can be recognised only in a change of something that endures through the change. But also change takes on the character of alteration only if something endures through it, because alteration is change of quality and form in an enduring substance, i.e. matter. If there were only space, the world would be rigid and immovable: no succession, no alteration, no action; and in the absence of action, no presentation of matter. If there were only time, everything would be fleeting: no persistence, no juxtaposition, and thus no simultaneity, consequently no duration; so again no matter. Matter first emerges with the uniting of time and space, i.e. with the possibility of simultaneity and thereby duration, and by this in turn of the persistence of substance through alteration of states of affairs. Having its nature in the union of time and space, matter bears the stamp of both throughout.

•It bears witness to its origin in space partly through its essential form, but especially through its persistence (substance).... (Time provides for change, but not for something enduring through change.)

[[]*Dauer*; it could be translated as 'permanence'.]

•It reveals its origin in time by way of quality (property), without which matter never makes an appearance. The properties of a bit of matter are always causality, action on other bits of matter, which involve *alteration* (a temporal concept).

The lawful character of this effectiveness is always with reference to space and time together, and is meaningful only through that. The lawlike status of causality extends only so far as the determination of what the state of affairs has be *at this time in this place*. Our *a priori* recognition of matter as having certain properties—the filling of space, i.e. impenetrability, i.e. reality, followed by extension, infinite divisibility, persistence, i.e. indestructibility, and finally movability—comes from the fact that its fundamental characteristic derive from the forms of our knowledge, of which we are aware *a priori*. In contrast with this, although *weight* is exceptionless, our knowledge of it counts as *a posteriori* ·because it doesn't rest on any form of our knowledge....

But just as any object exists for the subject only as its presentation, so every particular class of presentations exists only for a correspondingly particular characteristic of the subject, known as a knowledge faculty. Kant called the subjective correlate of time and space, as empty forms on their own, 'pure sensibility', a label that we may retain because Kant opened up this path, though it isn't quite right, because sensibility presupposes matter. The subjective correlate of matter (or of causality, for they are one and the same) is the understanding, and that's all that the understanding is. Its single function, its sole power, is knowledge of causality; and it is a great power-with enormous scope and great variety of applications, yet unmistakably one power throughout them all. Conversely, all causality, thus all matter, hence the whole of reality, exists only for the understanding, through the understanding, in the understanding. The first, simplest, always-working activity of the understanding is perception of the real world: this is wholly knowledge of causes on the basis of effects; so all perception is intellectual. For this to be achieved, there has to be some effect that is immediately recognised, to serve as a starting-point. This is the effect on the animal body. Such effects are the subject's immediate objects; perception of all other objects is mediated by them. Getting from the immediate object to the rest of the world does not involve inference, reflection, or choice, but happens immediately, necessarily, and surely. The understanding—with a single stroke, and through its one simple function-transforms dull, mute sensation into perception. What the eye, the ear, the hand senses is not perception; it is mere data. Once the understanding passes from effect to cause, the world is there as a perception spread out through space, changing its form but persisting through all time with respect to its matter; for the understanding unites space and time in the presentation of matter, i.e. efficacy. This world as presentation only exists for the understanding, just as it only exists through the understanding. [Now a passage citing empirical examples of 'how the understanding creates perception out of data', saying that the topic is treated more fully in 'the second edition of the treatise on the GP', a treatment that is not given here because 'I have almost as much reluctance to copy myself as to copy others'. Despite that disclaimer, AS does go on to give further 'irrefutable proofs that all perception is not merely sensual but intellectual'. He says that all experience presupposes the law of causality, so that there's no question of basing acceptance of that law on experience, a view that led to Humean scepticism which AS says he is now refuting for the first time.]

5. Disputes about the realness of the external world

But beware of the great misunderstanding of thinking that, because perception is mediated by knowledge of causality, the cause-effect relation holds between object and subject; in fact, that relation holds only between the immediate and the mediated object, and thus always between objects. The foolish dispute about the realness of the external world-in which dogmatism and scepticism stand opposed-rests on just that mistaken presupposition. Dogmatism shows up sometimes as realism, sometimes as idealism. Realism posits the object as cause, and its effect as something in the subject. Fichtean idealism makes the object an effect of the subject. But—something that cannot be emphasised enough-between subject and object there is no relation at all in accordance with the GP, so neither reaalism nor idealism could ever be proved, and scepticism has made successful attacks against both.

Just as the law of causality *precedes* perception and experience as their condition, and therefore cannot (as Hume supposed) be learned *from* them, so object and subject altogether precede all knowledge, and thus the GP as well, as their prior condition. [He goes on to say, in a complicated way, that allowing the GP to get *between* subject and object (so to speak) has led to 'the dispute about the realness of the external world'. He explains:] On the one hand, dogmatic **realism**, taking the presentation to be an effect of the object thus separating two things that are really one—assumes a cause entirely distinct from presentation, an 'object in itself that is independent of the subject. Something utterly unthinkable; because as an object it always presupposes the subject and thus always remains only a presentation to it. Labouring under the same mistaken presupposition, **scepticism** counters with the claim that in the presentation one has always only the effect, never the cause, so that one never knows the **a** *being* of objects but only **b** ·the effects of· their *action*. But **a** the former might have no resemblance to **b** the latter; and anyway ·(the sceptic argues)· it would be a mistake to infer anything about the object from its effects, because the law of causality is drawn from experience, the realness of which is now being taken to rest on it.

Both sides in this dispute need to be told (i) that object and presentation are the same thing; (ii) that the being of a perceptible object is just its action [Wirken]; (iii) that it is just in the latter that any thing's reality [Wirklichkeit] consists, and the demand for an existence of the object outside the subject's presentation, and for an essence of the real thing different from its action, has absolutely no meaning and is a contradiction; (iv) and that therefore our knowledge of how a perceptible object acts is our entire knowledge of it, because there is nothing else in it for us to know. [AS develops this at considerable length, mainly repeating things already said. He attributes the common failure to get these things right to a mis-handling of the GP. What the GP says is that all presentations = objects are connected with one another, but says nothing about connecting objects with subjects or with any other (fictitious) kind of non-objects.]

If we look more closely into the source of this question about the realness of the external world, we find that—in addition to the mistaken application of the GP to what lies beyond its domain—there is at work also a particular confusion¹ with regard to the forms of that principle: the form of it that applies only to concepts = *abstract* presentations gets carried over to *perceptual* presentations = real objects; and

¹ [Verwechselung = wrongly switching]

a ground of knowledge is demanded with respect to objects that can have no other ground than one of becoming.

•The GP governs abstract presentations—the concepts that get connected in judgments—in such a way that every judgment has its value, its validity, and entire existence (here called truth) simply and solely through its reference to something beyond it, its ground of knowledge, to which recourse has always to be made.

•By contrast, the GP governs real objects, perceptual presentations, as a principle of the ground not of *knowing* but rather of *becoming*, as the law of causality. Every object has paid its dues to the GP just by coming into being as the effect of a cause; the demand for a ground of knowing has no validity or sense here, but pertains to an entirely different class of objects.

So the perceptual world arouses neither scruple nor doubt in the observer, so long as he stays with it; there is neither error nor truth here; these are confined to the domain of the abstract, of reflection....

[AS now embarks on a few pages on the topic of dreaming. He maintains, not very originally, that we distinguish what we call dreams from what we call waking life on the basis that the former don't fit smoothly into the latter, and concludes that so-called waking life might, for all we can prove to the contrary, be a long dream. He quotes literary sources saying the same thing. Then he returns from this 'empirical' topic to the 'theoretical' one he was busy with before this interlude:] As we have so far considered the question of the realness of the external world, it has issued from an aberration on the part of reason that goes so far as to amount to selfmisunderstanding, and to that extent we could only answer the question by clarifying its content. Upon examination of the entire essence of the GP, the relation between object and subject, and the real character of sense perception, the question was bound to become self-nullifying, because it no longer had any meaning at all. But the question also has another origin, entirely distinct from the purely speculative one so far stated, a properly empirical origin, although it is also repeatedly put with speculative intent, and it has in its empirical meaning a much more intelligible sense than it had in the former case. This second origin starts from the fact that we have dreams, which generates the question is all life perhaps a dream?—or more specifically, is there a sure criterion for distinguishing dreams from reality? mental images from real objects? The proposal that dreams have less vivacity and clarity than does actual perception deserves no consideration at all. For as yet nobody has held the two together for comparison; one could only compare the recollection of dreams with present reality.-Kant resolves the question thus: 'What distinguishes life from dreams is the interconnection of presentations in accordance with the law of causality.' But all the details in dreams likewise cohere in accordance with the GP in all its modes, and the connection is broken only between life and dreams, and between individual dreams. Kant's answer could therefore only amount to this:

> The long dream (life) maintains a pervasive internal connection in accordance with the GP, but no such connection with the short dreams; however, every one of the latter maintains the same internal connection. Thus the bridge is broken between the long and short, and that is how we distinguish them.

But it would be very difficult—often *impossible*—to employ this criterion to settle whether something was dreamt or actually happened. For we aren't in a position to follow, link by link, the causal interconnection between all experienced events and the present moment, although we don't on that

account declare them to be dreams.... The only sure criterion for distinguishing dreams from reality is nothing other than the entirely empirical one of *awakening*, by which the causal connection between dreamed events and those of waking life is of course expressly and perceptibly broken. Superb confirmation of this is provided by a comment made by Hobbes in Leviathan, chapter 2, namely, that even after awakening we easily take dreams for reality when we have unintentionally gone to sleep while clothed, or even more easily when-in addition to that-some plan or undertaking has taken possession of all our thoughts, occupying us in a dream just as if we were awake. For in such cases, awakening is almost as little noticed as was the state of falling asleep; dream and Realität coalesce and intermingle. Then we of course have no choice but to apply the Kantian criterion. But if, as is often the case, the presence or absence of causal interconnection with the present can simply not be determined, then it has to remain forever undecided whether some incident was dreamt or actually happened. [AS says that the close affinity between life and dreams 'has already been acknowledged by many great minds', and he quotes examples from the Vedas and Puranas, Plato, Shakespeare, and Calderon. He continues:] Following these passages from poets, perhaps you won't begrudge me my own use of metaphor:

> Life and dreams are pages from one and the same book. Reading in context is what we call actual life. But when the current hour for reading (the day) has ended, and the time for recuperation has arrived, we still often leaf idly through the book, turning this or that page without order: often it is a page already read, often one still unfamiliar, but always from the same book. A single page read in this way is, of course, removed from the context of continuous reading. Yet

it will not seem for that reason so very deficient with respect to the latter, when we consider that the whole of a continuous reading itself begins and ends with as much spontaneity, and is accordingly to be viewed as only a longer single page.

Thus while individual dreams are distinguished from actual life by the fact that they do not fit into the interconnected experience that runs constantly through the latter, and awakening marks this difference, precisely that interconnected experience belongs to actual life as its form, and dreams have equally their own interconnection to display as well. Adopting a standpoint for assessment outside of both, no particular difference is found in their nature, and one is forced to concede to the poets that life is a long dream.

The question of the realness of the external world could hardly have so persistently occupied philosophers if it didn't have some element of truth, and if some true thought and meaning didn't lie at its heart as its real source. And in that case we must assume that those perverse and unintelligible forms and questions—all the misunderstandings of the GP and so on—•arose from the attempt to think about and express •in words• the element of truth that lies at the bottom of the question. This at least is my opinion; and I think that the true expression of that deepest meaning of the question, which the question itself failed to capture, is this:

> What is this perceptual world besides being my presentation? Although I am conscious of it in only one way, namely as presentation, is it really like my own body, of which I am conscious in a double way, on the one hand *presentation*, on the other hand *will*?

Book II of this work will be devoted to clarifying this question and answering it in the affirmative. The consequences of that will occupy the remaining portions of the work.

6. Understanding

In the meantime, in this first Book we are considering everything only as presentation, as object for the subject. And like all other real objects, we are viewing our own body, the starting-point of everyone's perception of the world, merely from the side of its knowability, where it is only a presentation. To be sure, everyone's consciousness, which already balked at describing other objects as mere presentations, is even more resistant to the claim that their own body is a mere presentation. [He gives a somewhat obscure reason for this, then brushes it aside:] In the meantime this resistance must be put to rest in the expectation that the considerations to follow will complement the present one-sidedness and lead to complete knowledge of the world's nature.

Here, then, the body is an immediate object for us, i.e. the presentation that constitutes the starting-point for the subject's knowledge: with immediate recognition of its alterations, it precedes the application of the law of causality, and so provides that law with its initial data. The whole nature of matter consists, as I have shown, in its action [*Wirken*]. But effect [*Wirkung*] and cause exist only for the understanding, which is nothing more than their subjective correlate. But the understanding could never find application if there were not something else from which it starts. That is the role of merely sensory sensation, the immediate awareness of alterations in the body by virtue of which the body is an immediate object. So the possibility of the perceptual world's knowability lies in two conditions.

(i) The first, if we are to express it **objectively**, is the capacity of bodies to affect one another, to produce alterations in one another. Without this general property of all bodies, perception would not even be possible by means of an animal body's sensibility. To express this first condition **subjectively**, we would say that the understanding makes perception possible in the first place. This is because the law of causality, the possibility of effect and cause, originates from the understanding and is valid only for it, so that the perceptual world exists only for it and through it.

(ii) The second condition is the sensibility of animal bodies, or the role of certain bodies as the subject's immediate objects. [AS expands on this, distinguishing a the 'mere sensory sensation' we get from our bodies from b our awareness of our bodies as objects in space with shape and structure. What makes b possible is the interplay between our bodies and other bodies in space; and our grasp of that is *not* immediate, but comes from the understanding's application of the law of causality. He concludes:] This qualification thus needs to be understood when we call the body an immediate object.

In any case, (I repeat), all animal bodies are immediate objects, i.e. starting-points for perception of the world by the subject that does all the knowing and is therefore never known. Thus

- •the distinctive characteristic of **animal** life is knowledge, with movement spurred by motives that are determined by knowledge; and
- •the distinctive characteristic of **plant** life is movement spurred by stimuli.

Inorganic matter's only movement is produced by causes properly so called, using the term in its narrowest sense....

So all animals, even the most lowly, have understanding; for they all recognise objects, and this recognition acts as a motive to determine their movements. The understanding is the same in all animals and in all humans, having everywhere the same simple form:

knowledge of causality, passage from effect to cause and from cause to effect, and nothing beyond that. But there are enormous differences in the understanding's degree of acuteness and the extent of its sphere of knowledge, with many levels ranging from the lowest,

•which recognises only causal relations between the immediate object and mediated ones, and so, by moving from effects undergone by bodies to their causes, sees those causes as objects in space; up to

•the higher levels of knowledge of the causal interconnections of merely mediated objects, leading to

•an understanding of the most complex concatenations of causes and effects in nature.

For even that last still belongs to understanding and not to reason, whose abstract concepts can serve only for **taking up** what is immediately understood, fixing it and tying it together, never for **producing** actual understanding. Every natural force and law of nature, and every example of these, must first be immediately recognised by the understanding, intuitively grasped, before it can enter *in abstracto* into reflective consciousness for reason. Intuitive, immediate grasp by the understanding brought

- •Hooke's discovery of the law of gravitation and the tracing of so many and such major phenomena to this one law, as was then confirmed by Newton's calculations;
- •Lavoisier's discovery of oxygen and its important role in nature; and

•Goethe's discovery of the origin of physical colours. All these discoveries are nothing but a correct immediate

All these discoveries are nothing but a correct infinediate passage from the effect to the cause, at once followed by a recognition of the identity of the force of nature that expresses itself in all causes of the same kind. And this whole insight differs only in degree from that single function of the understanding, by which an animal perceives the cause affecting its body as an object in space. Every one of those great discoveries is....the work of an instant, an *apperçu*, a flash of insight, not the result of a process of abstract reasoning, which would only serve to make the immediate knowledge of the understanding permanent for thought by bringing it under abstract concepts,

The acuteness of the understanding in apprehending causal relations among among objects that we know only mediately is at work not only in **a** natural science (all of whose discoveries are due to it), but also in **b** practical life. [He comments on the labels that are suitable for it in the two contexts, but says that there's no sharp line to be drawn here, because:] it is all one and the same function of the same understanding that is already active in all animal perception of objects in space and that

- **a** sometimes, at the point of its greatest acuteness, assiduously investigates unknown causes for given effects in natural phenomena, and so provides reason with material for conceiving of general rules as natural laws, and sometimes—by applying known causes to get intended effects—devises complicated ingenious machines; and
- **b** sometimes, applied to motivations, either sees through and frustrates subtle intrigues and machinations, or even manipulates the persons who are caught up in them and sets them in motion, directing them to its purposes just as it pleases, like directing machines with levers and gears.

Lack of understanding is in the true sense *stupidity*. It is just dullness in applying the law of causality, incompetence in immediately grasping the interconnections of cause and effect, motive and action.... A stupid person has no insight into the connection of natural phenomena, when they follow their own course or when they are intentionally combined to generate machinery. Such a man readily believes in magic and miracles.

A stupid person doesn't notice that various persons, seemingly independently of one another, are in fact acting in prearranged concert, so that he is easily mystified and outwitted. He doesn't detect the motives concealed behind advice he is given, the things he is told, etc. In all this he lacks just one thing—keenness, speed and ease in applying the law of causality; that is, he is lacking in his power of understanding....

Human beings differ greatly in how sharp their understanding is, but between the various species of animals the differences are even greater. With all of them, however, even the ones nearest to plants, there is enough understanding for •the passage from the effects in the immediate object to mediated objects as their causes, and thus for •perception, for apprehension of an object. For this is what makes them *animals*, giving them the possibility for movement in accordance with motives, and through that the possibility of seeking or at least seizing nourishment; whereas plants have only the capacity for movement in response to stimuli, whose immediate effects they need to *await*, or else wither away, unable to pursue or sieze them.

We admire the great sagacity of the most perfect animals, as in the case of dogs, elephants, or apes.... We can estimate rather exactly, in the case of these clever animals, how much is in the power of understanding unaided by reason, i.e. abstract conceptual knowledge; but we can't so easily know this in ourselves, because understanding and reason are always mutually supportive. We sometimes find expressions of animal understanding **a** above our expectation, sometimes **b** below it. **a** We are surprised by the sagacity of the elephant that, having crossed many bridges on its journey to Europe, now hesitates to set foot on one over which it sees the usual train of people and horses crossing, because it seems to it too flimsily built for its weight. On the other hand, **b** we marvel at the fact that clever orangutans, having found a fire at which they are warming themselves, don't keep it going by replenishing the wood: proof that this requires deliberation, which can't happen without abstract concepts. The fact that

knowledge of causes and effects, as the understanding's general form, is *a priori* present even in animals is already utterly certain from the fact that this knowledge is—for them as for us—the antecedent condition of all perceptual knowledge of the external world.... But in assessing the understanding of animals we need to watch out for instances of *instinct*, a property as entirely distinct from understanding as it is from reason, though it is often similar in effect to the combined activity of the two. Discussion of instinct does not belong here, but will find its place in our consideration of the harmony or so-called teleology of nature in chapter 28 in Book II.

Lack of understanding is *stupidity*. I will later recognise failure to apply reason to practical matters as *foolishness*, lack of judgment as *naivety*, and finally partial or complete lack of memory as *madness*. But of each of these in its place.

What is accurately grasped through reason is truth, that is, an abstract judgment on sufficient grounds. What the understanding accurately recognises is *Realität*, i.e. accurate inference from the effect in the immediate object to its cause. Standing opposed to truth is error, as a deception of reason; opposed to *Realität* is illusion, as a deception of the understanding. (More detailed discussion of all this can be found in the first chapter of my treatise on vision and colours.)

Illusion occurs when a single effect can be produced by two different causes, one of which is often involved, the other rarely. Having no data to show which cause is at work in a given case, the understanding always assumes that it is the usual cause, which it sometimes isn't; And in that case, because the understanding's activity is not reflective or wordy but direct and immediate, the false cause confronts us as an object of perception; this is just false semblance. [He cites examples, including 'the stick submerged in water that appears to be broken' and 'the seemingly greater size of the moon on the horizon than at the zenith'. The moon phenomenon, he says, is demonstrably 'not a matter of optics' but rather] a matter of the understanding, which assumes greater distance to be the cause of the weaker glow of the moon and all the stars on the horizon, and thus takes the moon to be larger on the horizon than at the zenith....

And all such deceptive illusions confront us in immediate perception, which no thinking-through by reason can remove. All that *that* can do is to prevent error (i.e. a judgment without sufficent ground) by coming up with a contrary true judgment, such as the judgment that the weaker glow of the moon and stars on the horizon comes not from their greater distance but from the denser atmosphere. But even when one knows this, the illusion remains irremovable—in this and all the other cases....

7. Two wrong starting-points

With reference to my exposition up to here, it must be noted that I started not from the object or the subject, but from the presentation, which contains and presupposes them both; for its primary, universal and essential form is the separation of subject and object. So I have first considered this form as such; and then the subordinate forms of time, space and causality. The latter belong exclusively to the object, and yet—as they are essential to the object as such, and as the object is essential to the subject as such—they can be discovered from the subject, i.e. they can be known *a priori*... All these forms can be traced back to one general expression, GP, as I have explained in the introductory essay.¹

This procedure makes my philosophical method utterly different from that of all previous systems. For they all start either from the object or from the subject, and therefore try to explain the one from the other, and this according to the GP, whereas I deny the validity of this principle with reference to the relation of subject and object, and confine it to the object.

·A DERISIVE ASIDE·

It may be thought that the philosophy of identity which has appeared and become generally known in our own day doesn't come under either of the alternatives I have named: for it starts not from the subject or the object, but from the absolute, known through 'intellectual intuition,' which is neither object nor subject, but the identity of the two! Finding myself entirely devoid of all 'intellectual intuition', I shan't venture to speak of this revered identity, and this absolute. But going by the proclamations of the 'intellectual intuiter' that are open to everyone-even to profane persons like myself—I must yet observe that this philosophy is not exempt from the errors I have mentioned. For it does not escape these two opposite errors in spite of its identity of subject and object, which is not thinkable but only 'intellectually intuitable' or to be experienced by losing oneself in it. On the contrary, it combines both errors in itself; for it is divided into two parts: (i) transcendental presentationalism, which is just Fichte's doctrine of the ego, teaching that the object is

¹ [This refers to AS's previous work on the GP mentioned on page 2.]

produced by or evolved out of the subject, in accordance with the GP; and **(ii)** the philosophy of nature, which teaches that the subject is produced gradually by the object, by a method called 'construction', about which I understand very little but enough to know that it is a process according to various forms of the GP. I renounce the deep wisdom contained in that 'construction'; since I entirely lack 'intellectual intuition', all the expositions that presuppose it must for me remain as a book sealed with seven seals. This is so truly the case that I have never been able to find in this doctrine of profound wisdom anything but atrocious and wearisome bombast.

\cdot STARTING FROM THE OBJECT \cdot

The systems starting from the object always had the entire world of perception and its constitution as their topic. Yet the object they take as their point of departure is not always that world or its basic element, matter; rather, they can be classified on the basis of the four classes of possible objects set forth in the introductory treatise [see footnote on this page]. Thus one can say that

- (i) the real world was the starting-point for Thales and the Ionians, Democritus, Epicurus, Giordano Bruno, and the French materialists;
- (ii) abstract concepts were the starting-point for Spinoza (on account of his conception of substance, which is purely abstract, and exists only in his definition) and before him the Eleatics;
- (iii) time, and consequently numbers, were the startingpoint of the Pythagoreans and the Chinese philosophy of the I Ching; and finally
- (iv) acts of will motivated by knowledge have been the starting-point of the scholastics, who teach a creation out of nothing through an act of will by an otherwordly personal being.

The objective procedure is most consistently and fully developed when it appears as materialism proper. This takes matter, and with it time and space, as existing completely independently, and ignores the relation to the subject in which alone all this exists. It also takes up the law of causality as the directing principle for its procedures, regarding it as a self-exsistent rule for things, an eternal truth, consequently ignoring the understanding, though causality exists only in it and for it. It then tries to find the initial simplest state of matter, so as to develop all other states of matter out of it, rising from the merely mechanical to the chemical, and then to polarity, vegetation, and animality. And the last link in its chain would be animal sensibility, knowledge that would consequently appear as a mere state of matter, a state it is brought into by causality. If we follow materialism this far, arriving at perceptual presentations, [we find that we have been making fools of ourselves, AS says. The supposed 'last link' was preupposed by the starting-point, matter, so that the laboriously constructed chain was really a circle. He makes fun of this procedure, and then more soberly repeats his doctrine's implication that moving from matter to knowledge is going backwards.]

The claim that knowledge is a state of matter can be opposed with equal right by the claim that all matter is only a state of the subject's knowledge, as a presentation to it. Yet the basic goal and ideal of all natural science is a fully developed materialism. That this is obviously impossible (as we now recognise) is confirmed by another truth that will emerge much later on in this work, namely that all science in the strict sense of the word—by which I understand systematic knowledge under the guidance of the GP—can never reach a final goal or give a completely satisfactory explanation; because it •never gets to the innermost nature of the world, •can never get beyond presentation, and fundamentally •only teaches us to recognise how one presentation relates to the others.

Every science starts from •the GP in some one of its forms as an organising principle, and •the particular object that is its topic of inquiry. Thus, for example,

- •geometry has space as its topic, the ground of being¹ in space as its organising principle;
- •arithmetic has time as its topic, and the ground of being in time as its organising principle;
- •logic has as its topic combinations of concepts as such, and the ground of knowledge [see page 17] as its organising principle;
- •history has the past deeds of human beings, in the large and en masse, as its topic, the law of motivation as its organising principle; and now
- •natural science has matter as its topic, and the law of causality as its organising principle.

Thus, its goal and purpose is—under the guidance of the principle of causality—to **reduce** all possible states of matter to others, and in the end to a single one; and then in turn to **derive** them all from others, and in the end from a single one. Two states therefore stand at the opposite extremes of natural science: **a** the state of matter where it is furthest from being the subject's immediate object, and **b** the state where it *is* the subject's immediate object. That is, **a** the deadest, crudest matter, the most basic stuff, and **b** the human organism. Natural science pursues **a** the first as chemistry, **b** the second as physiology. But so far neither extreme has been reached; the only successes have been in the territory between them. And the prospect \cdot of reaching either extreme \cdot is indeed rather hopeless. [He explains that the project of **a** the chemists is to reduce the number of basic

substances ('now around sixty'), the final aim—which he says is pointed to by 'the law of homogeneity', a phrase he does not explain—being to get it down to *one*:] an initial chemical state of matter that underlies all the others and belongs to matter as such, all the other states of matter being not essential to it but merely contingent qualities •of some portions of matter•. But it is impossible to see how this one could ever have undergone chemical alteration before there was any second state to affect it.... This contradiction—arising of itself, and neither avoidable nor resolvable—can properly be regarded as a chemical *antinomy*. Found as it is at the first of the two extremes pursued by natural science, a counterpart to it will appear soon at the second extreme.

There is just as little hope for reaching \mathbf{b} the other extreme of natural science, since it is becoming ever more evident that something chemical can never be reduced to something mechanical, nor something organic to something chemical or electrical....This will be discussed in more detail in Book II.

The difficulties that I here mention only in passing confront natural science in its own domain. Taken as a philosophy, it would be materialism; but we have seen that this is born with death in its heart, because it ignores the subject and the forms of knowledge, which are just as much presupposed by the crudest matter that materialism might start with as by the organism it wants to arrive at... We can *talk* about 'suns and planets without an eye that sees them or an understanding that recognises them'; but with respect to presentation, these words are a blatant contradiction. On the other hand, the law of causality and the investigation of nature based on it lead us to the sure conclusion that every more highly organised state of matter was temporally preceded by a cruder one:

¹ [For more on 'ground of being' see chapter 3.]

•animals preceded human beings,•fish preceded terrestrial animals,

•plants preceded those, and

•inorganic matter came before anything organic.

So the original mass had to pass through a long series of alterations before the first eye could open. And yet the existence of this whole world depends on the first eye that opened, even if it were that of an insect. For such an eye is a necessary condition of the possibility of knowledge, and the whole world exists only in and for knowledge, and without it is not even thinkable. The world is entirely presentation, and as such demands the knowing subject as the supporter of its existence. Indeed that long temporal series—filled with countless changes through which matter rose from form to form, until there finally arose the first knowing animal—this entire time itself is indeed only thinkable within the identity of a consciousness whose succession of presentations and whose form of knowledge it is, and apart from which it altogether loses all meaning and is nothing at all.

So we see on the one hand

necessarily, the existence of the entire world as dependent on the first sentient being, however imperfect it may be;

and on the other hand

equally necessarily, this first sentient animal as utterly dependent on a long chain of preceding causes and effects into which it enters as one tiny link.

One might indeed call these two contradictory views, to each of which we are led with equal necessity, an *antinomy* in our faculty of knowledge, a counterpart to the one that we have just seen at the first extreme of natural science; whereas Kant's fourfold 'antinomy' will be shown, in the critique of his philosophy in the appendix to the present work [chapter 96], to be a groundless game of mirrors.

The contradiction that has now necessarily arisen finds its resolution in the fact that—to put it in Kant's terms—time, space, and causality apply not to the *thing in itself* but only to its phenomenon, of which they are the form. This is to say-putting it in my terms-that the objective world, the world as presentation, is only the **external** side of a world that also has a quite different side that is its innermost nature, its core, the thing in itself. I will consider this in Book II, naming it after its most immediate objectification, will. But the world as presentation, which is our only topic here, does indeed arise with the opening of the first eye, without which medium of knowledge it cannot exist and thus cannot have previously existed. But without that eye, i.e. apart from knowledge, there was no previously, no time. This doesn't mean that time began \cdot with that first eye \cdot ; all beginnings are within time.

But since •time is the most general form of knowability to which all appearances conform through the bond of causality, the first case of knowledge does indeed involve •it with its entire infinitude in both directions, and the appearance filling this initial present must be recognised as causally connected with and dependent on a series of appearances stretching infinitely into the past. But that past is as much conditioned by this first present as the latter is by it; so that, like the first present, so also the past from which it originates depends on the knowing subject and is nothing without it; although necessity dictates that this first present is displayed not as *first*—i.e. as having no past for its parent, and as the beginning of time-but as following from the past in accordance with the ground of being in time; just as the appearance filling it is displayed as an effect, in accordance with the law of causality, with earlier states of affairs filling that past....

The depiction we have arrived at, pursuing materialism

as the most consistent of the philosophical systems starting from the object, shows •the inseparable interdependence of subject and object and at the same time •their ineliminable opposition. Recognition of this leads us to stop seeking the innermost nature of the world, the thing in itself, in either of those two elements of presentation—i.e. in either the subject or the object—but rather in something entirely distinct from presentation, not burdened with that kind of original, essential, and thus indissoluble opposition.

\cdot Starting from the subject \cdot

The procedure just discussed of a starting from the object so as to have the subject arise from it stands in contrast to the procedure of **b** starting from the subject from which the object is to sprout. Whereas a the former was frequent and widespread throughout all previous philosophy, there is only a single example to be found of **b** the latter, and a very recent one at that, namely the pseudo-philosophy of J. G. Fichte. I have to take note of it in this respect [he means: because of its status as the polar opposite of materialism], however little real value and content this doctrine had in itself. It was really nothing but shadow-boxing, but-delivered with an air of deepest seriousness, measured tone, and lively enthusiasm, and defended with polemical eloquence against weak opponents-it was able to shine, and seemed to be something. But the genuine seriousness that keeps truth steadily before its eyes as its goal, unaffected by external influences, was lacking in Fichte as in all philosophers who, like him, adapt to circumstances.¹ Of course it could not be otherwise for them. A ·real· philosopher seeks to escape from a kind of perplexity that Plato called 'wonderment' and 'a most philosophical emotion'. But what distinguishes a fake

philosophers from **b** genuine ones is that for **b** the latter the perplexity grows out of how the world looks, whereas for a the former it comes only from a book, a system that he finds ready to hand. That was the case with Fichte, who became a philosopher only by way of Kant's 'thing in itself, without which he would most probably have pursued entirely different matters-with far better success, because he did have significant rhetorical skill. If he had penetrated somewhat into the sense of the book that made him a philosopher, the Critique of Pure Reason, he would have understood that its main doctrine was, in spirit, that the GP is not what scholastic philosophy calls an 'eternal truth'; that is, it does not have unconditioned validity before, beyond, and above the whole world, but only a relative and conditioned validity with respect to appearances alone. [AS enlarges on this, repeating things he has already said more than once, and then returns to his scolding;] But Fichte hadn't an inkling of any of this. His only interest was in proceeding from the subject, which Kant had opted for \cdot only \cdot so as to show the error of the previous way of proceeding from the object and turning the object into a thing in itself. But Fichte took proceeding from the subject to be the point of Kant's book, and supposed that if he were to outbid Kant in this respect he would also improve on him. So he duplicated the mistake that earlier dogmatism made in the opposite direction, the very one that led Kant to write his critique. So nothing was changed with respect to the main point, and the old fundamental mistake of assuming a relation of ground and consequence between object and subject remained as before.... Just as if Kant never existed, the GP is for Fichte still what it was for all the scholastics, an

¹ [*sich in die Umstände schickenden Philosophen*; one translator has rendered this as 'philosophers who concern themselves with the questions of the day', which has something to be said for it.]

eternal truth. That is, just as eternal fate held sway over the gods of the ancients, 'eternal truths' still held sway over the God of the scholastics: metaphysical, mathematical, and metalogical¹ truths, including for some even the validity of the moral law. These 'eternal truths' didn't depend on anything; but God as well as the world existed by their necessity. Thus according to the GP (which is supposedly one of these eternal truths) the I is for Fichte the ground of the world—of the **not-I**—of the object, which is just its consequence and botched-up product. So he took care to avoid further testing or examining of the GP. What form of the GP did Fichte follow in deriving the **not-I** from the **I** (as a spider spins its web out of itself)? It has to be the GP with respect to being in space; for it is only with reference to space that some kind of sense and significance is retained by those laboured 'proofs' of how the I produces and fabricates the **not-I** from out of itself, this being the content of the most senseless—and just for that reason the most boring—book ever written.

So this Fichtean philosophy—otherwise not worth a mention—is interesting to us only as a recent converse of the ages-old materialism that was the most consistent way of proceeding from the object, as Fichte's was of proceeding from the subject. As materialism overlooked the fact that the subject was already immediately assumed with the simplest of objects, so Fichte overlooked the fact that with the subject (whatever he might want to call it) he had already assumed the object, because no subject is thinkable without one; and he also overlooked the fact that any *a priori* derivation, indeed any deduction at all, rests on a necessity, but all necessity rests solely on the GP. [AS develops this thought briefly but obscurely, then returns to his point about the two

errors that are 'converses' of each other.]

My procedure differs totally from both of these contrary blunders, because I proceed neither from the object nor from the subject but from presentation as the first fact of consciousness, for which the first and most essential fundamental form is division into object and subject, with the form of objects being the GP in its various shapes [see Glossary], each of which dominates its own class of presentations so completely that knowledge of that shape gives one knowledge of the nature of the entire class as well.... Before coming in Book II to aspects of this that concern every living being, we have first to consider the class of presentations that belongs to human beings alone, the matter of which is concepts and the subjective correlate of which is reason, just as the subjective correlate of the presentations so far considered was understanding and sensibility, which ·unlike reason· are also attributable to all animals.

8. Reason

As if going from the direct light of the sun into the borrowed light of the moon, we now move from **a** the perceptual, immediate *presentation* which stands by itself and is its own warrant over to **b** *reflection*, to abstract discursive concepts of reason, all of whose *content* comes from and has reference to that perceptual kind of knowledge. As long as we confine ourselves to **a** the purely perceptual, all is clear, firm, and certain. There are no questions, doubts, or errors; we don't want anything more, can't have anything more; we find rest in perception, and satisfaction in the present. Perception is self-sufficient: whatever arose purely from it and stayed true to it can—like genuine works of art—never be wrong

[[]used here as a technical term from the writings of one Catholic theologian.]

or with any passage of time refuted; because what it offers is not an opinion but the thing itself. But with **b** abstract knowledge—with reason—doubt and error appear at the theoretical level, and concern and regret at the practical level. Whereas with perceptual presentation **illusion** momentarily distorts reality, with abstract presentations **error** can

•hold sway for millennia,

•throw its iron yoke over entire peoples,

stifle the most noble stirrings of humanity, andallow even those whom it can't deceive to be fettered by its slaves and dupes.

Error is the enemy against which •the wisest minds of all times have conducted an unequal struggle, and mankind's only possessions are what •they have won from it. So it is good that we call attention to it, because we are already walking on the ground that is its domain. It is often said that

> one should track down the truth, even where no use can be seen for it, because some indirect use may show up where it is not expected;

and I want to add to this that

one should be just as diligent in uncovering and rooting out every error, even where no harm can be seen in it, since some indirect harm may show up where it is not expected;

for every error carries a poison within itself. What makes human beings lords of the earth is mind, knowledge, so there are no harmless errors.... And as a consolation to those who put their strength and life into the noble and difficult struggle against error, I can't help adding that—although while the truth is not established, error can pursue its game, like bats in the night—no truth that has been recognised and clearly and fully pronounced will again be suppressed, leaving old errors to re-take their old territory; expecting them to do so is like expecting bats to drive the sun back to the east! That is the power of truth, whose victory is hard and laborious, but for that reason can't be snatched from it once it has been won.

In addition to the presentations that have been so far considered....another cognitive power has arisen in human beings, alone among all inhabitants of the earth; an entirely new consciousness has dawned, called reflection. That name for it is apt, because it is in fact a re-appearance¹ of, and a derivative from, perceptual knowledge, though it has taken on a fundamentally different nature and character from perceptual knowledge, knows nothing of its forms, and even the GP-which holds sway over all objects-has in this case an utterly different shape [see Glossary]. This new and more powerful consciousness-this abstract reflection of whatever is intuitive in the non-perceptual concept of reason—is what gives human beings that character of thoughtfulness that so thoroughly distinguishes their consciousness from that of animals, and through which their entire earthly way of life turns out so differently from that of their unreasoning brothers. They surpass them by far in power and in suffering. Animals live only in the present; human beings live at the same time in the future and the past. Animals satisfy their momentary needs; human beings make elaborate arrangements for their future, indeed even for times they won't themselves experience. Animals are wholly captives to the impression of the moment, to the effect of the strongly felt motive; human beings are determined by abstract concepts, independently of the present; so they carry out projects that have been thought out in advance, or act in accordance with maxims, without regard for the environment or the chance

[[]Wiederschein, which might be translated as 'reflection', but obviously not here.]

impressions of the moment. For example, they

•can serenely make elaborate arrangements for their own death,

•can dissemble beyond any chance of being caught out, and carry their secret to the grave, and lastly

•have a real choice among several motives.

•Elaborating that last point ·: it is only in abstracto that motives, sitting side by side in present consciousness, can afford the knowledge that they are mutually exclusive, and so measure themselves against one another with respect to their power over the will. The one that wins this contest and produces a result is the reflectively considered decision of the will, and is a sure indication of that will's character. By contrast, present impressions control the animal: only the fear of present compulsion can curb its desire, until eventually this fear has become custom, and as such continues to determine it; this is called training. Animals sense and perceive; human beings also think and know. Both ·perform acts of the · will. Animals communicate their sensations and attitudes through bearing and sounds; human beings communicate their thoughts-or conceal their thoughts-through language. Language is the first offspring and the necessary instrument of their reason, which is why speech and reason are signified by the same word in the Greek and Italian languages....

[In this next sentence, *Vernunft* is the standard word for 'reason'; *Vernehmen* can be translated as 'hear', but can mean more than that, as AS will explain; and *Hören* simply means 'hear'.] The term *Vernunft* comes from *Vernehmen*, which is not synonymous with *Hören*, but refers to the internal awareness of thoughts communicated by words. Solely through the help of language, reason brings off its most important achievements, namely

•the concerted action of several individuals,

•the goal-directed collaboration of many thousands,

civilization,
the state;
and in addition to those,
science,
the storing up of earlier experiences,
the uniting of common properties in one concept,
the sharing of truth,
the spread of error,
thought and poetry,
dogmas and superstitions.

Animals first learn of death when they die. A human being is aware of getting nearer to his death every hour, and this sometimes makes life a troublesome affair, even for someone who has not yet recognised constant destruction as a feature of all life. This is the main reason why human beings have **a** philosophies and **b** religions. But it is uncertain which of these has given rise to what we rightly esteem above all else in human action—freely willed rectitude and a generous disposition. What we find on this path as sure and legitimate offspring of just these two, and as products of reason, are on the contrary **a** the most fantastic opinions of the philosophers of various schools, and **b** the strangest and sometimes cruel practices of the priests of various religions.

It is the universal opinion of all times and of all nations that these manifold and far-reaching achievements spring from a common source, from the unique intellectual power that belongs distinctively to man and puts him ahead of the animals, which has been called reason, *ratio* [and he gives some Greek names for it]. And all human beings can very well •recognise expressions of this capacity, •tell what is rational, what irrational, •tell where reason enters the scene as opposed to other human capacities and properties, and, finally, •tell what is never to be expected of even the most clever animals, given their lack of it. Philosophers of all ages pretty much agree about this general knowledge of reason, and emphasise some of its particularly important manifestations, such as

•mastery of the emotions and passions,

•the ability to conduct inferences,

•the ability to formulate general principles, including ones that are certain in advance of all experience,

and so on. But their accounts of what reason essentially *is* are all vacillating, imprecise, long-winded, without unity and focus.... This leads many of them to start from the opposition between reason and revelation, which has nothing to do with philosophy and only increases the confusion. It is very remarkable that no philosopher yet has rigorously traced all the uses of reason to one simple function that

•can be recognised in all of them,

•is the basis for explaining them all, and

•therefore constitutes the real inner nature of reason.

To be sure, the superb Locke in his *Essay Concerning Human Understanding* (II.xi.10-11) rightly presents **abstract general concepts** as the characteristic distinction between the animal and the human, and Leibniz wholly agrees with this in his *Nouveaux essais sur l'entendement humain*. But when Locke gets to his real account of reason in IV.xvii.2-3, he entirely loses sight of **that simple main characteristic** and slides into a vacillating, indefinite, incomplete specification of bits of it and derivatives of it. Leibniz follows suit at the corresponding point in his work, with greater confusion and unclarity. As for how badly Kant confused and falsified the concept of the nature of reason: I deal with this in detail in the Appendix \cdot of the present work \cdot . A survey of the mass of philosophical works appearing since Kant shows

that—just as entire peoples have to pay for the mistakes of their princes—the errors of great minds spread their harmful influence over entire generations and even centuries, growing and propagating, eventually into monstrosities. Just as

•the understanding has only *one* function, immediate grasp of the relation between cause and effect; and the perception of the real world, and all shrewdness, sagacity, and inventiveness, however multifarious their manifestations may be, are obviously nothing other than applications of that simple function; so also

•reason has *one* function, the formation of concepts; on the basis of which it is very easy—altogether self-evident—to explain all the phenomena that have been cited as distinguishing human from animal life.

The common distinction between 'rational' and 'irrational' is based entirely on the difference between employing and failing to employ that function.

9. Abstract concepts

Concepts form a unique class of presentations—utterly different from the perceptual presentations so far considered that exist only in the human mind. So any knowledge we can get of their nature can never be perceptual or truly evident, but only abstract and discursive.... They can only be *thought*, not *perceived*, and only the effects that people produce by their means are objects of experience proper. Such are language, preconceived and planned action, and science, together with whatever results from all these. As an object of outer experience, speech is obviously nothing other than a highly perfected telegraphy,¹ communicating chosen

¹ [Telegraphy is the long-distance transmission of textual messages by some means other than sending a physical object bearing the message; e.g. flag semaphore.]

signs with the greatest speed and subtlety of nuance. But what do those signs mean? How does their interpretation happen? Do we perhaps, while the other person is speaking, at once translate his speech into imaginative pictures that instantaneously flash upon us, arrange and link themselves together (and acquire shape and colour) according to the words that are poured forth and according to their grammatical inflections? What a tumult would then be in our heads while we were listening to speech or reading a book! That is not at all how it happens. Here is how it does happen:

> The sense of the speech is immediately registered, precisely and determinately grasped, usually with no mental images coming into it.

Here reason speaks to reason and keeps to its own domain; and what it communicates and receives are abstract concepts, non-perceptual presentations, which are formed once and for all and in relatively small number, yet concern, contain, and represent all the countless objects of the real world. This is the only way to explain why an animal can never speak or understand even if it shares with us the instruments for speech as well as perceptual presentations. Just because words signify the wholly unique class of presentations whose subjective correlate is reason, they are without sense and significance for animals. So language—just like •everything else that we ascribe to reason, and •everything that distinguishes human beings from animals-is to be explained in terms of this one simple source, namely concepts-abstract, non-perceptual, general presentations, not existing as individuals in time and space.

It is only in individual cases that we pass from concepts to perception, form mental images as perceptual *representatives of concepts*, though they are never adequate to them. They are specifically discussed in my treatise on the GP, and I shan't repeat that discussion here....

Although concepts are wholly unlike perceptual presentations, they stand in a necessary relation to them; without this relation they would be nothing, so the relation constitutes their entire essence and existence. Reflection is necessarily a copying or replication of the perceptual world, but it is a special kind of copy in an entirely different material. Thus concepts may aptly be called presentations of presentations. The GP has likewise a shape of its own here. Just as

•the shape in which that principle holds sway within a class of presentations always constitutes and exhausts the entire nature of that class, considered as a class of presentations; so that time is through and through succession and nothing further, space through and through location and nothing further, matter through and through causality and nothing further; so also

•the entire nature of concepts, or of the class of abstract presentations, consists only in

the next phrase: der Relation, welche in ihnen der Satz vom Grunde ausdrückt

rendered by one translator as: the relation which the principle of sufficient reason expresses in them

and by another as: the relation within them that the principle of sufficient reason expresses

and meaning: ??

and as this is the relation to the ground of knowledge, the whole nature of the abstract presentation is simply and solely its relation to another presentation, which is its ground of knowledge. The latter can of course also be a concept or abstract presentation, and *its* ground of knowledge may be yet another concept, and so on. But this can't go on for ever: the series of grounds of knowledge has to terminate in a concept that is grounded in perceptual knowledge. For the entire world of reflection rests on the perceptual world as its ground of knowledge. Whereas with any other kind of presentation the GP always demands a reference to another presentation of the same class, with abstract presentations it demands in the end a reference to a presentation from another class....

It is generally held to be an essential property of a concept that it comprehends a number of things under itself, i.e. that a number of presentations stand in the relation of ground of knowledge to it; but this is wrong. It must always be possible for a concept to have this property, but when a concept does have it it's a derivative and secondary property, not an essential one. It comes from the fact that the concept is a presentation of a presentation, usually of a perceptual presentation, which can have temporal, spatial, and other determinations that are not at all thought in the concept; so that a number of presentations that differ in inessential respects can be thought through the same concept, i.e. subsumed under it.... There can be concepts through which only a single real object is thought, but they are still abstract and general presentations, in no way individual or perceptual ones. Such, for example, is someone's concept of a particular city, which he knows about only from its geography. While only this one city is thought through his concept, there could be several different cities that all fit it. Thus, it is not the case that

•a concept has generality because it is abstracted from a number of objects;

on the contrary,

•a number of things can be thought through the same concept because •the concept has generality, i.e. because• it is essential to the concept, as an abstract presentation of reason, that it does not determine anything individual.

From all this it results that every concept, just because it

is an abstract and non-perceptual and therefore somewhat indeterminate presentation, has what is called an extension or sphere, even when only one real object corresponds to it. We always find that the sphere of any concept has something in common with the spheres of others, i.e. that the same thing is partially thought in it as is thought in the others. ·I emphasise 'partially'. If two concepts really are two, at least one of them contains something that is lacking in the other: every subject stands in this relation to its predicate. Recognising this relation is called *judging*. [AS now talks approvingly about the use of Euler circles to portray different relations among concepts' spheres, lists those relations and draws circles illustrating them, and says that they are a sufficient source for 'the entire doctrine of judgment' and for the rules governing syllogisms. They are also relevant, he adds, to 'the properties of judgments on which Kant based his supposed categories of the understanding', though he notes two exceptions (the hypothetical form, which 'involves a combination not of concepts but of judgments', and modality); and he promises to deal with these Kantian topics in the Appendix. He remarks that although this way of presenting the rules of concept-relations makes it easy to expound and explain various branches of logic, ...]

·What logic is (not) good for·

... there is no need to burden our memory with them, since logic can never be of practical use but only of theoretical interest for philosophy. For although it can be said that

> •logic relates to rational thinking as •the basso continuo relates to music, and also—a little less strictly as •ethics relates to virtue or as •aesthetics relates to art,

it should be borne in mind

that •no artist has yet come into being through a study

of aesthetics, nor any noble character through a study of ethics, that •well-constructed and beautiful works were composed long before Rameau, and that •one does not need to be aware of the basso continuo in order to notice dissonances.

No more does one need to know logic to avoid being deceived by fallacious inferences. It must be conceded that

•the basso continuo is quite useful if not for the appreciation of music at least for the practice of musical composition; and that •aesthetics and even ethics are also of some practical use, •though• to a far lesser degree and mainly in a negative way.

But not even that much can be claimed for logic, because it is merely abstract knowledge of what everyone already knows in concrete cases. One doesn't need it to avoid accepting fallacious lines of reasoning, any more than one needs to appeal to its rules to produce correct ones; and in actual thinking even the most learned logician sets them entirely aside. The explanation for this is as follows. Every science consists of a system of general (and thus abstract) truths, laws, and rules relating to objects of some kind. Individual cases that fall under them are determined in accordance with this always-valid general knowledge. For such an application of generalities is infinitely easier than starting from scratch to investigate the individual cases, because general abstract knowledge, once attained, is always more within our reach than the empirical investigation of individuals. But with logic the situation is exactly the reverse of this. Logic is general knowledge of reason's way of proceeding, learned through •reason's self-observation and •abstraction from all content, and expressed in the form of rules. But this way of proceeding is necessary and essential to reason: so reason when left to itself will never deviate from it. It is thus easier and surer in any particular case to •let

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reason proceed according to its essence than to •confront it with knowledge-in the form of an externally provided law-abstracted from that procedure in the first place. It is easier because with the use of reason (this being the reverse of the situation in all other sciences) the procedure needed in a given case is always more within our reach than the general rule abstracted from it, because what does the thinking in us is reason itself. It is **surer** because it is easier •for an error to occur in the management of such abstract knowledge than it is •for a procedure of reason to occur that runs contrary to reason's essence, its nature. That's the source of the strange fact that whereas in other sciences the truth about an individual case is tested against the rule, in logic the rule has always to be tested against the individual cases. And when even the most practised logician notices that a single-case inference he has made disobeys some rule, he will look for something wrong in the rule rather than in the inference he has actually made. Laboriously applying general rules to test individual moves of whose soundness we are immediately and confidently conscious would be like consulting the science of mechanics before moving, or physiology before digesting....

Although it has no *practical* use, logic must be retained because it has *philosophical* interest as specialised knowledge of the organisation and activity of reason. As a closed, self-subsistent, internally complete, perfected, and perfectly sure discipline, it is entitled to be •treated on its own, independently of all other sciences, and to be •taught in universities. But it gets its true value, in the context of philosophy as a whole, in the consideration of knowledge and in particular of rational or abstract knowledge. [He a goes into some detail regarding *how* this topic should be handled as a matter of theory, **b** refers slightingly to logic's 'only practical use', namely supplying *names* for the fallacies one convicts one's disputation-opponent of making, and \mathbf{c} says that downplaying logic's practical usefulness shouldn't lead to any reduction in the amount of study devoted to it. His reason for \mathbf{c} is given in an intense display of contemptuous sarcasm:] These days, anyone who doesn't want to remain uncultivated in things that matter most, and be counted among the multitude of the ignorant mired in obtuseness, must study speculative [see Glossary] philosophy. That is because this 19th century is a philosophical one—which is not to say that it *has* philosophy or that philosophy and just for that reason in need of it. This is a sign of high degree of civilisation, a fixed point on the cultural scale of the times....

Little practical utility as logic can have, it was invented for a practical purpose. I understand its origination to be as follows. [He traces it to a need by disputatious ancient Greeks to bring some discipline into their proceedings; they took to stating the agreed starting-point for each individual dispute and then moved to propositions that were to be respected in all disputes. They handled this clumsily, and made only slow progress-evidenced by 'the clumsy and sprawling way logical truths were brought to light in many Platonic dialogues'-until Aristotle gathered it all together and put it in order.] As pleasure in disputation developed ever more among the Eleatics, Megarians, and Sophists, gradually growing almost to a mania, the confusion into which almost every dispute slid must have quickly made them sensitive to the need for a *methodical* procedure, as a guide to which a science of dialectic had to be sought. The first thing that must have been noticed is that, in disputation, both parties to the conflict had always to be in agreement on some proposition to which the points at issue were to be traced back. The beginning of methodical procedure conBut in the beginning, these propositions concerned only the matter in question in the inquiry. One soon became aware that, in the mode and manner of tracing things back to commonly acknowledged truth, and of deriving one's claims from it, one also adhered to certain forms and laws on which, although without antecedent agreement, one nonetheless also never disagreed; from this one saw that the latter had to be the procedure peculiar to reason itself, lying in its very essence, the formal element in an inquiry. While this was not exposed to doubt or disagreement, some pedantically systematic individual then slid into thinking that it would look truly fine, as the culmination of methodical dialectic, if the formal element in every disputation-this ever-lawful procedure of reason itself-were also pronounced in abstract propositions that were set at the head of an inquiry as the fixed canon for disputation as such.... Consciously desiring in this manner to acknowledge as law and formally pronounce what they had previously followed as if by tacit agreement or practised as if by instinct, they gradually found more or less perfect expressions for such logical principles as those of contradiction, sufficient ground, excluded middle, de omni et nullo.... They advanced only slowly and laboriously, and before Aristotle everything remained most incomplete; we can see this •in part from the clumsy and wide-ranging way in which logical truths were brought to light in many of the Platonic dialogues, but •even better from what Sextus Empiricus reports of the Megarians' disputes regarding the easiest and simplest logical laws and their laborious way of making them clear [reference given]. But Aristotle collected, organised, corrected what he found at hand, and brought it to an incomparably higher state of completion. When one considers how in this manner the course of Greek culture

sisted in formally pronouncing these mutually acknowledged

propositions and setting them at the head of an inquiry.

had prepared the way and ushered in the work of Aristotle, one will be little inclined to believe the claim of Persian authors....that Callisthenes discovered a complete logic among the Indians and passed it on to his uncle Aristotle!

It is easy to understand that in the dreary, gloomy Middle Ages the disputatious scholastic mind—lacking real knowledge and feeding only on formulas and words—found Aristotelian logic to be most welcome..., quickly elevating it to the position of a centrepiece for all knowledge. Its prestige has lessened since then, admittedly, but down to our own time *that* logic has preserved the reputation of a self-subsistent, practical, and most necessary science. Even in our days the Kantian philosophy, the foundation-stone of which is logic, has again aroused new interest in it, which in this respect—i.e. as a means toward knowledge of the nature of reason—it certainly deserves.

While **truly strict inferences** arise from attending exactly to relations among the spheres of concepts, and only when sphere x is wholly contained in sphere y, and that in turn entirely wholly in sphere z, is x recognised as entirely contained in z, the **art of persuasion** involves casting a merely superficial glance at the relations among spheres of concepts and then one-sidedly defining them in accordance with one's intentions, usually in this way:

When the sphere of a concept x lies only partly in the sphere of y and partly in the entirely different sphere of z, the person passes x off as lying either entirely in y or entirely in z, depending on his purposes.

For example, when speaking of *passion*, he can choose to subsume this concept under that of •the greatest force, of the most powerful agency in the world, or under the concept of •the irrational, and the latter under that of impotence,

of weakness. The same procedure can be continued, and re-applied with every concept the discourse arrives at. The sphere of almost every a concept overlaps several others, each containing a part of the domain of the first within its own, but including **b** more as well; and the persuader allows only one of **b** the latter spheres of concepts to be highlighted, wanting to subsume a the first under it and neglecting or concealing the others. This stratagem is the basis for all the arts of persuasion, all the more subtle sophisms. [AS remarks that the officially listed sophisms are 'too heavy-handed for actual employment', and goes on to illustrate the procedure he has described. We can excuse ourselves from following this, because AS himself minimizes it: 'I hope that no-one is misled by this diagram into giving this minor casual discussion more importance than its nature allows'. His generalisation of it, however, is remarkable:] Fundamentally, most scientific, especially philosophical, deductions are not very different from this. How else could it be possible that so many things have been at various times not only erroneously accepted (for error as such has a different origin), but demonstrated and proved, and yet later found to be completely wrong: e.g. the philosophy of Leibniz and Wolff, Ptolemaic astronomy, the chemistry of Stahl, Newton's theory of colours, etc. etc.?

10. What knowledge is

Through all of this the question keeps arising: how then is *certainty* to be attained, how are *judgments* to be grounded, what is the nature of that *knowledge* and science?¹ These are valued as one of the three great advantages provided by reason, the other two being language and deliberate action.

¹ [certainty = Gewissheit, knowledge = Wissen, science = Wissenschaft]

Reason is feminine in nature: it can give only after it has received. On its own it has nothing but the empty forms of its operation. The only perfectly pure rational knowledge is that of the four principles to which I have attributed metalogical truth¹, namely the principles of identity, of contradiction, of excluded middle, and of sufficient ground for knowledge. For the rest of logic is not perfectly pure rational knowledge, because it presupposes the relations and combinations of the spheres of concepts; and concepts exist only because of perceptual presentations, reference to which constitutes concepts' entire nature. But this relationship doesn't involve concepts' particular content but only their existence in general; so logic as a whole can count as a pure rational science. In all the other sciences, reason gets its content from perceptual presentations:

- •in mathematics from spatial and temporal relations that we are perceptually conscious of prior to all experience;
- •in *pure* natural science—i.e. in what we know about the course of nature prior to all experience—from *a priori* knowledge of the law of causality and of its connection with those pure perceptions of space and time; and
- •in all other sciences, content that isn't derived from the above-mentioned sources comes from experience.

What *Knowledge* [see Glossary] in general means is having under one's command, available for production at will, judgments that have beyond themselves a sufficient ground of knowledge, i.e. are true. Thus, abstract knowledge is the only Knowledge. So Knowledge is conditioned by reason, and we cannot strictly speaking say of animals that they *know* [*wissen*] anything, even though they have perceptual knowledge, memory and just on that account imagination (which the fact of their dreaming additionally proves). We attribute consciousness to them, the concept of which—

although the word [Bewusstsein] is taken from Knowledge [*Wissen*]

— coincides with that of presentation generally, of whatever kind, so that we attribute life to plants but not consciousness. Thus Knowledge is abstract consciousness, fixing in concepts of reason things we have come to know in a different way.

11. Feeling as a negative concept

In this respect, then, the real opposite of *Knowledge* is *feeling*, which I therefore have to say something about here. The concept signified by the word 'feeling' has a totally negative content, namely, that something present in consciousness is *not* a concept, *not* an abstract bit of thinking by reason. This means that the inordinately broad sphere of the concept of feeling contains the most heterogeneous things, and to understand how they can be in the domain of one concept, you have to grasp that all they have in common is the **negative** respect of *not* being abstract concepts. For the most diverse—indeed, the most incompatible—elements lie peacefully side by side within that concept, for example:

- •religious feeling,
- •feeling of sexual desire,
- •moral feeling,
- •bodily feeling such as of touch, of pain, sense of colours, of sounds and their harmonies and dissonances,
- •feeling of hatred, abhorrence, of self-satisfaction, of honour, of shame, of right, of wrong,

¹ [This refers to an earlier mention of 'fundamental laws of thought, or judgments of metalogical truth', not included in this version.]

•feeling for truth, aesthetic feeling, feeling of strength, weakness, health, friendship, love

etc. etc. [AS adds as a 'most striking' example of the breadth of the concept of feeling the fact that it includes the *a priori* knowledge of space that is gained through understanding (not reason), and quotes confirmatory uses of 'feel' from some textbooks of geometry.]

So long as people don't have a proper view of the concept of feeling—don't recognise the single negative feature that is its entire essence—the concept is bound to generate constant misunderstandings and disputes, because of the breadth of its sphere and the corresponding thinness of its content.

Since we have in German the almost synonymous word *Empfindung* [= 'sensation'], it would be useful to appropriate that for bodily feelings as a sub-species.

What gave rise to this spread of the concept of feeling, so much greater than that of any other concept? No doubt the answer is as follows. All concepts....exist only for reason, have their origin in it. With concepts, therefore, we are already at a one-sided point of view; but from such a point of view what is near seems clear and is set down as positive, what is further off becomes confused and is soon regarded as merely negative. Thus

•each nation calls all others 'foreign',

•to the Greek all others are 'barbarians',

•to the Englishman all that is not England or English is 'continent' or 'continental',

•to the believer all others are 'heretics' or 'heathens',

•to the noble all others are 'commoners',

•to the student all others are 'philistines',

and so forth. Now, reason itself, strange as this may seem, is guilty of the same one-sidedness, indeed one might say of the same crude ignorance arising from vanity, for it classes under the single concept *feeling* every state of consciousness

that doesn't immediately belong to *its* manner of presentation, i.e. that is not an abstract concept. Since this didn't arise from thorough self-knowledge, reason has had to pay a price for it in the form of misunderstandings and aberrations within its own domain: a special *faculty of feeling* has been postulated, and theories of it are now being constructed!

12. Reason's advantages and disadvantages

....Since reason only brings back for Knowledge what it has gathered from elsewhere, it doesn't really enlarge our knowledge but merely gives it a different form: it enables us to know in abstract and general terms what we first took in intuitively, *in concreto*. But this is incomparably more important than it seems at first glance. For all secure preservation, all communicability, and all secure and far-reaching practical applications of knowledge depend on its having become Knowledge [see Glossary], abstract knowledge. Intuitive knowledge always concerns individual cases, applies only to what is nearest to hand, because sensibility and understanding can really only grasp one object at a time. So any continuing, complex, planned activity has to start from and be guided by principles, thus by abstract Knowledge. ·Consider this contrast·:

•On one hand, the understanding's knowledge of the relation of cause and effect is in itself much more complete, deeper, and more exhaustive than what can be thought about cause-effect *in abstracto*. The unaided understanding knows perceptually, immediately and completely what is going on in the workings of a lever, pulley, cog-wheel, and in the stability of an arch, etc.

•On the other hand, because of intuitive knowledge's confinement to the immediately present, mere understanding does not suffice for the construction of machines and buildings. For this, reason has to enter the picture, setting abstract concepts in the place of perceptions, adopting them as its guide for operation, and meeting with success when this is done properly.

[AS repeats the point in term of further examples, saying that the full knowledge perception gives us of the nature of the parabola, hyperbola, spiral, and curves can't be applied to anything practical without the help of reason, e.g. what the differential calculus does with our knowledge of curves.]

Another peculiarity of our knowledge faculty can be mentioned here; it couldn't be brought in earlier, when the difference between perceptual and abstract knowledge hadn't yet been made perfectly clear. It is that spatial relations can't be directly carried over into abstract knowledge; but only temporal magnitudes, i.e. numbers, are suited for this.¹ Only numbers can be expressed in exactly corresponding abstract concepts; spatial magnitudes can't. The difference between the concept 1000 and the concept 10 is exactly the same as that between the two temporal magnitudes in perception: with 1000 we are thinking of a particular multiple of tens, into which we can resolve it as we please for temporal perception, i.e. count it. But between the abstract concept of a mile and that of a foot-without any perceptual presentation of the two and without the aid of numbers—there is no exact difference that corresponds to the magnitudes themselves. In each case some kind of spatial magnitude is thought, and if we want to distinguish them adequately we must either •get help from spatial perception (thereby leaving the domain of abstract knowledge) or •think the difference in numbers. If there is to be abstract knowledge of spatial relations, they must first to be translated into temporal relations, i.e. into numbers. That is why only arithmetic, not geometry, is the

general doctrine of magnitudes, and why geometry has to be translated into arithmetic if it is to be communicable, exactly determinate, and applicable to practical matters. A spatial relation can indeed be thought *in abstracto*, for example 'The sine increases as the angle does'; but numbers are needed for stating the magnitude of the relation \cdot between one increase and the other \cdot . [AS elaborates this point, saying that what 'makes mathematics [he means: other than arithmetic] so difficult' is the need to handle three-dimensional space with numbers and thus with one-dimensional time. He adds:] It is worth noting that

•whereas space is so very well suited to perception and, by way of its three dimensions, allows an easy survey even of its complex relations, but eludes abstract knowledge,

•time enters easily indeed into abstract concepts, but has very little to offer perception. Our perception of numbers in their element of mere time, without bringing space into it, barely reaches to 10; to get beyond that we have only abstract concepts, not further perceptual knowledge. By contrast, we connect exactly determined abstract concepts with every numeral and with all the algebraic symbols.

It may be noted in passing that \mathbf{a} many minds find full satisfaction only in what they know perceptually. They are looking for a perceptual display of the grounds and consequences of existence in space; they aren't satisfied by a Euclidean proof or an arithmetical solution of a spatial problem. Whereas \mathbf{b} other minds demand the abstract concepts that are alone useful for application and communication: they have patience and a memory for abstract propositions, formulas, long chains of inferences, and calculations whose symbols represent complicated abstractions. The \mathbf{b} latter are looking for precision, the \mathbf{a} former for perceptibility. This

[[]The view that numbers are temporal is introduced abruptly here. But it was adumbrated at the start of chapter 4, and will be expounded shortly.]

difference lies in ·personal· character.

What gives Knowledge, abstract knowledge, its greatest value is its ability to be a communicated and b permanently preserved. Someone may have immediate perceptual knowledge, involving mere understanding, of the causal relations among changes and movements of natural bodies, and be entirely satisfied with this; but he can't communicate what he knows until he has fixed it in concepts. Perceptual knowledge is even sufficient for practical matters so long as the person puts his knowledge into practice

a entirely on his own, and

b while his perceptual knowledge is still alive,

but not when he requires \mathbf{a} outside help or even \mathbf{b} action of his own at different times— b is ruled out because it involves a pre-conceived plan. Thus for example a competent billiards player can have-merely in his understanding, merely through immediate perception—complete knowledge of the laws governing the impact of elastic bodies, and get along perfectly well with that. Whereas only a specialist in the science of mechanics has real Knowledge of those laws, i.e. a knowledge of them in abstracto. A purely intuitive knowledge by the understanding suffices for the construction of a machine if its inventor does the work **a** on his own, as is often seen in the case of talented craftsmen ignorant of all science. By contrast, as soon as a several persons and some complex activity on their part, **b** occurring at various points in time, are needed for the completion of a mechanical work—a machine, or a building—whoever is directing the activity needs to have designed the plan in abstracto, and it is only with the aid of reason that such collaborative activity is possible. It is noteworthy, however, that with that first kind of activity, where a single person is to do the

job without interruption, he can often be downright hindered by Knowledge, the application of reason. In billiards, in fencing, in tuning an instrument, in singing: here perceptual knowledge must *directly* guide the activity; passing the guidance through reflection makes it unsure by dividing the person's attention and confusing him. That is why savages and crude persons, who are very little accustomed to thinking, engage in many physical activities—such as bullfights, marksmanship with arrows etc.-with an assurance and swiftness that the thoughtful European never achieves because his reflective consideration makes him waver and hesitate: he tries, for example, to discover the right spot or the right moment on the basis of their equidistance from the extremes of two wrong ones; whereas the man of nature hits on it immediately, without reflecting on alternate routes. And it is no help to me to be able to state in abstracto, in degrees and minutes, the angle at which I need to set the razorblade if I don't know it intuitively, i.e. don't have it in my grasp. The application of reason is similarly disturbing to an understanding of physiognomy, which also has to occur immediately by way of the understanding. It is said that the expression, the meaning of the features, can only be *felt*, i.e. can't be put into abstract concepts. Every man has his direct intuitive method of physiognomy and pathognomy,¹ yet one man understands more clearly than another these signatura rerum [Latin for 'signs of how thing are']. But it is not possible for an abstract science of physiognomy to be taught and learned; for the distinctions of difference here are so fine that concepts cannot reach them; therefore abstract Knowledge is related to them as a mosaic is to a painting by an old master; however fine-grained the mosaic is, the boundaries of its stones are still there, preventing a continuous passage

[[]The practice of inferring things about someone's character and emotions from the look of his face.]

from one colour to another. So also concepts, with their rigidity and sharp boundaries, however finely they might be split up through chains of definitions, can never reach the subtle modifications of the perceptual that are involved in my chosen example of physiognomy.

This characteristic of concepts—by which they resemble the stones of a mosaic, and by virtue of which they can only asymptotically approach perception—is also the reason why good art is never accomplished by their means. If a singer or instrumental performer tries to use reflection to guide his performance, it remains dead. The same applies to composers, to painters, even to poets. Concepts always remain unfruitful for art: they can direct only the technical side of it; their domain is science. Why all genuine art comes from perceptual knowledge, never from concepts, is something I'll investigate in more detail in Book III.

Even with respect to conduct, to pleasantness in interpersonal dealings, concepts are useful only in the negative respect of preventing gross outbursts of egoism and brutality. Thus good manners are their commendable outcome. But that which is attractive, gracious, captivating in one's conduct, one's tender and amicable aspect, should not come from concepts; if it does, 'they feel the intention and are put out of tune' [quoted from Goethe].

....Given the press of life, with its call for quick decisions, bold action, prompt and firm engagement, there is indeed need for reason; but when it gets the upper hand, and creates indecisiveness by hindering and confusing the pure understanding's intuitive, immediate discovery and simultaneous adoption of the right course of action, it easily ruins everything.

Finally, virtue and saintliness come not from reflection but from the inner depth of the will and its relation to knowledge. This topic belongs to an entirely different place in the present work, but I'll allow myself here to make one point. A whole nation's reason can retain the same ethical dogmas, while the individuals in it act differently from one another; and action comes from feelings, i.e. not from concepts but from the \cdot person's \cdot ethical character. Dogmas are the concern of idle reason, and action goes its way independently of them, usually guided not by abstract maxims but by unspoken ones whose expression is the whole person himself.... This is not meant to deny that the application of reason is needed for maintaining a virtuous way of life, but only to deny that it is the *source* of such a life. Its function is a subordinate one:

•sticking by decisions that have been made,

•holding up maxims for defence against momentary weakness and for consistency in action.

The same thing applies in art, where reason contributes nothing to the main thing, but supports its execution, because genius is not always on call, and the work still needs to be completed in all its details and rounded out as a whole.

13. A theory of humour

All this....shows clearly that although abstract Knowledge is a reflection of perceptual presentation and is grounded in it, it doesn't fit it so snugly that it could everywhere take its place; indeed, it never exactly corresponds to it. Thus as we have seen, many human accomplishments are possible only with the aid of reason and reflective procedures, but some succeed better when reason is kept out of them.

This lack of fit between **a** perceptual knowledge and **b** abstract knowledge, by virtue of which **b** one only approximates to **a** the other as mosaic does to painting, is the cause of a most remarkable phenomenon which pertains exclusively to human nature (as reason does); there have

been repeated attempts to explain it, none of them adequate. I am talking about **laughter**. Because of the facts about the source of it, I have to discuss this here, although it yet again slows our course.¹

Laughter always arises solely from a suddenly perceived lack of fit [*Kongruenz*] between a concept and the real objects that have been thought through it in some respect or other; and laughter itself is merely the expression of this lack of fit.

This often occurs when two or more real objects are thought through *one* concept and its identity—its *one*ness—·is carried over to them, but where they are otherwise so entirely different that it becomes strikingly apparent that the concept fits them in only a partial respect. But it just as often occurs when someone suddenly becomes aware of how a single real object fails to fit in one respect a concept that it is rightly subsumed under in another. The more correct the subsumption of such actual realities under a concept in one respect, and the greater and more glaring their lack of fit with it in another, the more laughable the contrast is. All laughter is thus occasioned by paradoxical and therefore unexpected subsumption, whether this is expressed in words or in actions. This is in brief the correct explanation of what causes laughter.

I shan't pause here to relate any anecdotes, as examples to \mathbf{a} illustrate my explanation. For it is so simple and graspable that it doesn't need them; and everything laughable that the reader recalls is equally suitable as \mathbf{b} evidence for it. But my explanation is both \mathbf{b} confirmed and \mathbf{a} illustrated by an account of two types of things that cause laugher, the difference between the two coming straight out of that explanation. They are these. •Wit: The person knows about two or more very different real objects, perceptual presentations, that fall under one concept, and he uses the oneness of this concept to identify them with one another, doing this deliberately.

•Folly: The person has the concept in his knowledge, and goes from it to *Realität* and to operation on that, to action: he treats in the same manner objects that are all thought in that concept but are otherwise fundamentally different, and he is surprised, astonished, when it becomes obvious how different they are.

Accordingly, anything laughable is either **a** a witty idea or **b** a foolish action, depending on whether the person goes **a** from discrepancies between objects to conceptual identities or **b** the reverse of that; in **a** one case always deliberately, in **b** the other never deliberately but from forces outside \cdot his consciousness \cdot

Pedantry is a kind of folly. It arises from the person's having so little trust in his own understanding that he won't rely on it for immediate knowledge of what is right in particular cases, and accordingly puts it altogether under the control of reason and avails himself of that everywhere, i.e. always tries—in life, in art, even for ethically good behaviour—to adhere strictly to general concepts, rules, maxims. And so we get pedantry's characteristic attachment to form, to style, to expressions and words, which for the pedant take the place of the heart of things. Here then the lack of fit between concepts and *Realität* is soon shown, how concepts never come down to the level of the individual, and how their generality and rigid definiteness can never exactly fit the subtle nuances and manifold modifications of reality. With his general maxims, the pedant thus almost always comes up

^{[&#}x27;yet again'? AS regarded chapter 11 also as an interruption; see the first paragraph of chapter 14..]

short in life, shows himself to be dull-witted, insipid, useless: in art, for which concepts are unfruitful, what he produces is lifeless, stiff, and mannered. [This paragraph attacks pedantry with no further mention of its being folly, or being laughable; simiarly for what comes next. AS gets back on track in the final paragraph of this chapter.]

Even in an ethical respect, the intention to act rightly or nobly cannot always be carried out in accordance with abstract maxims, because in many cases the infinitely finegrained nature of the circumstances requires the right choice to issue immediately from the person's character. Applying merely abstract maxims ·won't help, because it·

•yields wrong results, because of only halfway fitting the circumstances, and

•cannot be carried out, because the maxims don't precisely fit the person's stubbornly retained individual character.

Inconsistencies then result.

We cannot entirely clear Kant of the charge of encouraging moral pedantry, because he makes it a condition of the moral worth of an action that it must come from purely reason-based abstract maxims, with no \cdot input from \cdot inclination or a passing emotion.

When, especially in political affairs, there is talk of 'doctrinaires', 'theoreticians', 'scholars' etc., what is meant are *pedants*, i.e. people who know things very well *in abstracto* but not *in concreto*. Abstraction consists in thinking away the more fine-grained features \cdot of a situation \cdot ; but in practical matters a great deal rests precisely on them.

To complete this theory, I need to mention a degenerate species wit, namely wordplay, pun,¹ with which we can bracket ambiguity, *l'équivoque*, the main use of which is for

obscenity (smut). Just as

•wit forces two very different real objects under a single concept, so

•a pun brings different concepts under a single word that just *happens* to express them both.

The pun involves the same \cdot one-against-two \cdot contrast, but in a fainter and more superficial way, because it has originated not from the essence of things but from a mere accident of nomenclature....

14. The form of science. Perception vs. proof

From all of these manifold considerations, through which I hope to have made entirely clear the difference between

•reason's way of knowing, Knowledge, concepts and

•immediate knowledge in purely sensory mathematical

perception, and the **understanding**'s grasp of things and the relation between these, and from the discussions in passing of *feeling* and *laughter* [chapters 11 and 13] that I was almost inescapably led into by consideration of that remarkable relation between our ways of knowing, I now return to further discussion of science, as the third benefit that reason brings to humanity (the other two being speech and deliberate action). I shall consider science in connection with its form, the foundation of its judgments, and its content.

•THE FORM OF SCIENCE•

We have seen that no Knowledge [see Glossary]—with the sole exception of the foundation of pure logic—has its origin in reason itself; rather, it is obtained from elsewhere as perceptual knowledge and is then deposited in reason, where it becomes an entirely different kind of knowledge, the

¹ [AS expresses this without any German word, using only the French *calembour* and the English *pun*.]

abstract kind. All *Knowledge*, i.e. all knowledge that has been raised to the level of consciousness *in abstracto*, relates to genuine science as a fragment to the whole. Every person has acquired through experience—through the individual matters that are made available to him—some Knowledge concerning many kinds of things. But only someone who tries to get complete knowledge *in abstracto* concerning some species of objects is aiming at *science*.¹ He needs a concept to mark out that species. So at the head of every ·branch ofscience there stands a concept..., such as the concept of

•spatial relations,

•the workings of inorganic bodies,

•the character of plants or animals,

•the successive changes on the surface of the earth,

•changes in the human race as a whole,

•the structure of a language,

and so on. If science tried to get knowledge of its subjectmatter by examining one at a time all the things that fall under its top concept, wanting to get knowledge of them all in that way, then (i) no human memory would suffice for this and (ii) there would be no way to be certain of completeness. So science makes use of the property of conceptual spheres discussed above, namely that some of them enclose others; it proceeds mainly to the broader spheres that lie within the concept of its topic in general. When the relations of these spheres to each other have been determined, all that is thought in them is also generally determined, and can now be more and more precisely determined by the marking out of smaller and smaller concept-spheres. In this way a science can take in its subject-matter completely. This path that it takes toward knowledge, namely, from the general to the particular, distinguishes it from ordinary Knowledge;

so an essential and characteristic mark of science is its systematic form. An inescapable condition of learning any science is knowing how its most general conceptual spheres are inter-related, i.e. knowing its highest principles. How far to go from these to more particular principles is a matter of choice, and does not affect •how grounded one's learning is but only •its scope.

The number of higher principles to which all the others are subordinated differs greatly in the different sciences, so that in some there is more a subordination, in others more **b** coordination. In this respect, the **a** former make more demands on the judgment, the **b** latter more on the memory. The scholastics knew that because inference requires two premises, no science can proceed from a single higher principle that isn't derived from others •that are still higher•; each must have several, or at least two. The strictly classificatory sciences-zoology, botany, and even physics and chemistry inasmuch as they reduce all inorganic operation to a few basic forces—have the greatest amount of a subordination. History, on the other hand, really has none; since what is general in it consists only in a survey of the major periods, from which no particular events can be *derived*; here the particular is a subordinated to the general only temporally; conceptually they are **b** coordinated. So strictly speaking, history is indeed Knowledge but not science. In mathematics in its Euclidean treatment, the axioms are the only indemonstrable higher principles, and all demonstrations are strictly subordinated to them step by step. However, this treatment is not essential to it [i.e. to mathematics, here meaning geometry], and in fact every theorem introduces its own new spatial construction that is independent of the preceding theorems and can be known in its own terms, within that

[[]Reminder: 'science' translates Wissenschaft, and Wissen is translated by 'Knowledge' with a capital K (see glossary).]

pure perception of space in which even the most complicated construction is really as immediately evident as the axiom. I'll say more about this later. In the meantime: every mathematical proposition is a general truth that applies to countless individual cases, and it is essential to mathematics that there is a step-by-step path from simple propositions to the complex ones that are traced back to them. Thus mathematics is in every respect a science.

A science's formal perfection consists in its having as much a subordination and as little b coordination of propositions as possible. Accordingly, scientific talent in general is skill in a subordinating conceptual spheres in such a way that, as Plato repeatedly urged, a science does not consist merely in •one general item with a huge spread of others lying side by side under it, but in •a gradual descent of knowledge from the most general to the particular through intermediate concepts and divisions. In Kant's terms, this means doing equal justice to the laws of homogeneity and specification. However, just because this is what constitutes real ·formal· perfection in a science, it follows that science's goal is not greater certainty—which can just as well be had with even the most fragmentary knowledge of particulars-but making Knowledge easier through its form, and making possible the perfection of Knowledge, also through its form. So it is a prevalent but perverse opinion that the scientific character of knowledge consists in greater certainty; and equally false is the claim-drawn from that one-that only mathematics and logic are sciences in the strict sense of the word, because only in them, on account of their completely a priori nature, is there incontrovertible certainty. This advantage is indeed not to be denied them; but it gives them no particular claim to a scientific character, which lies not in certainty but in the systematic form of knowledge, grounded in stepwise descent from the general to the particular.

•THE FACULTY OF JUDGMENT•

This specially scientific path of knowledge from the general to the particular has the consequence that much in the sciences is based on derivation from antecedent propositions, and thus on proofs; and this has given rise to the old error of supposing that only what has been proved is perfectly true, and every truth needs a proof. Whereas, on the contrary, every proof needs an unproved truth that ultimately supports it.... So •a truth that is grounded in an immediate way is as much preferable to •one grounded in proof as •water from a spring is preferable to •water from an aqueduct. Perception—whether pure a priori perception like that of mathematics, or empirical a posteriori perception such as is the basis for all the other sciences—is the spring from which all truth flows and the foundation of all science. (The only exception to this is logic, based on reason's non-perceptual but still immediate knowledge of its own laws.) Not proved judgments or their proofs, but judgments drawn immediately from perception and based on it without any proof: these are in science what the sun is in the solar system. For from them issues all light, which illuminates the others so that they in turn give light. Grounding the truth of such primary judgments directly in perception-raising such strongholds of science up out of the vast multitude of real things-is the work of the faculty of judgment, which is the capacity for taking what is known through a perception and translating it, accurately and exactly, into **b** abstract consciousness; so it is the mediator between a understanding and b reason. Only extraordinary and exceptional strength of judgment in an individual can really advance the sciences. Merely sound reason is all one needs to be able to infer some propositions from others, to conduct proofs and reach conclusions; but judgment \cdot goes far beyond that:

It

sets down and consolidates **a** what is perceptually known in **b** concepts suited for reflection, so that on the one hand •what is common to many real objects is thought through one concept, and on the other hand •their differences are thought through just as many different concepts; so that different things are known and thought as different, despite partial agreement, and identical [see Glossary] things are known and thought as identical, despite partial difference; all according to the purpose and concern that is dominant at the moment.·

Lack of judgment is simple-mindedness. The simpleminded person fails sometimes to recognise the partial or relative difference in things that are in one respect identical, sometimes the identity in things that are relatively or partially different.

Incidentally, Kant's division into \mathbf{c} 'reflecting judgment' and \mathbf{d} 'subsuming judgment' can be understood in tems of this explanation of judgment. It's a division between \mathbf{c} cases where the judgment passes from objects of perception to concepts and \mathbf{d} cases where it goes in the opposite direction, in each case still mediating between understanding's perceptual and reason's reflective knowledge.

·PERCEPTION VS. PROOF·

No truth could be brought forth just by inferences alone; the need to ground truth through inferences is always only relative, indeed subjective [presumably meaning: 'always depends on the situation and the character of the person who has the need']. Since all proofs are inferences, what is first to be sought for a new truth is not proof but *immediate* evidentness, and only while this is lacking is a proof to be constructed as a temporary expedient. No science can be proved all the way through, any more than a building can stand on air; a science's proofs must all lead back to something perceptual and thus not provable. For the entire world of reflection rests on and is rooted in the perceptual world. All ultimate (i.e. original) evidentness is perceptual evidentness.... So it is either empirical evidentness or grounded in perception *a* priori of the conditions of possible experience; so either way it provides only immanent and not transcendent knowledge [i.e. knowledge of what is *in*, not what is *above*, the experienced world]. Every concept has its value and its existence only in its relation-perhaps highly mediated-to a perceptual presentation. What holds for concepts holds also for the judgments composed from them and for entire sciences. So it must be possible somehow to know directly-without proofs or inferences—every truth that is arrived at through inferences and communicated through proofs. [Acknowledging that this is hard to do with 'complicated mathematical propositions', AS says that he stands by his position in relation to them too, and says he'll deal with mathematical proofs in detail, which he does in the next chapter.]

There is frequent lofty talk about sciences that rest completely on valid inferences from sure premises, and are therefore incontrovertibly true. But purely logical chains of inference, however true the premises, will never do more than clarify and elaborate what the premises already contain, making explicit what was already there implicitly. The celebrated sciences that people have in mind \cdot when they talk this way are mainly the mathematical ones, especially astronomy.

(i) But astronomy's certainty stems from its being grounded in a perception of space that is given *a priori* and is thus infallible.... In addition to mathematically-defined spatial relations, astronomy involves

•only one natural force, gravity, which acts between two bodies exactly in proportion to their masses and the square of the distance between them, and

•the law of inertia, assured *a priori* since it follows from

the law of causality, and (lastly) along with thatthe empirically given fact of the movement impressed on each of these masses from the start.

That is the whole raw material of astronomy; and through its simplicity and certainty it leads to conclusions that are solid and—because of the size and importance of its objects—most interesting. For example, if I know the mass of a planet and the distance of its satellite from it, I can use Kepler's second law to calculate with assurance what the satellite's period of revolution is. The calculation involves working out what velocity is neither •so large that the satellite flies away from the planet nor •so small that it collapses into the planet.

Thus only on such a geometrical foundation, i.e. by means of a perception *a priori*, and only by application of a natural law besides, can inferences get anywhere; for they are mere bridges (so to speak) leading from one perceptual result to another. No progress can be made with bare and pure inferences, following the exclusively logical path.

(ii) The origin of the first basic truths in astronomy is really induction, i.e. gathering what is given in many perceptions into one valid and immediately grounded judgment. On the basis of this, hypotheses are subsequently formed, the empirical confirmation of which..., yields a proof of the initial judgment. For example, the apparent movement of the planets is known empirically: after many false hypotheses about the spatial interconnection of these movements (planetary orbits), the correct one was finally found, and then the laws that it follows (Kepler's laws), and finally also its cause (universal gravitation); and the empirically established agreement of all the observed cases with the totality of those hypotheses and their consequences (that is, induction) made them completely certain. Discovery of the correct hypothesis was a matter of judgment, which accurately took in the given facts and expressed them accordingly. The truth of the hypothesis could be confirmed by Induction, i.e. multiple perception; but it could also be grounded immediately, through a single empirical perception, if only we could travel freely through the realms of space and had telescopic eyes. Consequently, here too, inferences are not the essential and single source of knowledge, but always in actuality merely a crutch.

(iii) A third and last example—a quite different one—is the following. Even so-called 'metaphysical truths', like the ones Kant parades in his *Metaphysical Foundations of Natural Science*, don't owe their evidentness to proofs. If something is *a priori* certain, we know it *immediately*; as the form of all knowledge, it is known to us with the greatest necessity. For example, that matter persists—i.e. can neither come into nor go out of existence—we know immediately as a negative truth:

•our pure perception of space and time provides the possibility of **movement**; and

- •our understanding provides, through the law of causality, the possibility of **change in form and quality**; but
- •the forms of possible presentation don't provide for matter's **coming into or going out of existence**.

So the truth that *matter persists* has been evident always, everywhere, and to everyone, and has never been seriously doubted; and that couldn't be the case if it could be known only through a proof as difficult—and as like walking on the points of needles—as Kant's. And anyway (as I explain in the Appendix, chapter 88) I have found it to be mistaken, and I have shown above that the persistence of matter is to be derived not from time's contribution to the possibility of experience of time but from space's. The real ground-ing of all truths called 'metaphysical' in this sense—i.e. of abstract expressions of the necessary and general forms

of knowledge—cannot lie in further-back abstract propositions, but only in immediate awareness of the forms of presentations, announcing itself *a priori* through necessary statements that can't be refuted. If you want to give a proof of them, it would have to consist in demonstrating that the truth to be proved is already contained, either as a part or as a presupposition, in some truth that is not in doubt. So, for example, I have shown that all empirical perception already contains an application of the law of causality; so knowledge of that law is a pre-condition of all experience, and can't be first given and conditioned by experience, as Hume claimed.

Proofs are generally not so much for \cdot instructing \cdot those who want to learn as for \cdot correcting \cdot those who want to dispute. \cdot Some of \cdot the latter stubbornly deny all immediately grounded insight; but truth is consistent with itself from every angle; so these \cdot disputatious \cdot people need to be shown that what they are accepting under one aspect, mediately, is the very thing that they are denying under another aspect, immediately; \cdot using a proof \cdot to show them the logically necessary connection between what they deny and what they accept.

Furthermore, scientific form—the subordination of everything particular under something general, and upward to ever higher levels of generality—has the consequence that the truth of many propositions is grounded only logically, i.e. through their dependence on other propositions, and thus through inferences that function as proofs. But let it not be forgotten that the role of this entire ·scientific· form is only to make it easier •to get knowledge, not •to achieve greater certainty. It is easier to recognise the nature of an animal on the basis of the species to which it belongs, and so on upwards through genus, family, order, class, than to investigate the particular animal on its own. But the truth of any proposition arrived at through inferences depends ultimately on a proposition that rests not on inference but on perception. Perception would be altogether preferable to the inferential procedure if only it were always as easily available. For any derivation on the basis of concepts risks many errors, because of the manifold overlapping of their spheres (as shown above) and the fluctuating content of many of them. Many 'proofs' of false doctrines and sophisms of all kinds are examples of this. [He elaborates this a little, in terms of the theory of syllogisms.]

Consequently, **a** immediate evidentness is far preferable to **b** proved truth, and **b** the latter is acceptable only when **a** the former is too remote; and *not* where **a** the former is at least as easily avaiable as **b** the latter. Thus, we saw that in the case of logic, where in each single case immediate knowledge lies nearer to hand than deduced scientific knowledge, our thinking is always led by immediate knowledge of the laws of thought, with \cdot the science of \cdot logic left unused.

15. Mathematics. Explanation

If now with our conviction

- •that perception is the first source of all evidentness, and absolute truth is an immediate or mediated reference to it alone, and
- •that the shortest path to truth is always the most sure, because all interposition of concepts brings exposure to many deceptions,

we turn to *mathematics*, as it was presented by Euclid as a science and has remained such to the present day, we can't help finding the path it follows to be strange, even perverse. We require every case of logical grounding to be traced back to a perceptual grounding; whereas mathematics has taken a lot of trouble to throw out the unique •perceptual evidentness that is available everywhere and replace it with •logical

evidentness. We have to see this as being like someone who amputates his legs so as to walk with crutches, or like the prince in \cdot Goethe's \cdot *The Triumph of Sensitivity* who flees from the real beauty of nature so as to enjoy theatrical scenery that imitates it!

I must here recall what I said in chapter 6 of my treatise on the GP, and assume that it is fresh and present in the reader's memory, so that I may pick up from there without again expounding the difference between

- **a** the mere ground of *knowledge* of a mathematical truth, which can be provided logically, and
- **b** the ground of *being*, which is the immediate interconnection of the parts of space and time, which we can know only perceptually, and insight into which alone guarantees true satisfaction and grounded knowledge,

and the fact that mere grounds of knowledge remain always on the surface, and can indeed provide Knowledge *that* something is the case, but none as to *why* it is.

·WHAT IS WRONG WITH EUCLID·

Euclid followed the a ground-of-knowledge path, to the obvious detriment of the science. Right at the beginning, for example,

where he was to show once and for all how the angles and sides of triangles determine one another, and stand to each other in the relation of ground and consequent, which they do in **b** accordance with the form belonging to the GP in pure space, which—here as everywhere—creates the necessity that something is as it is,

what he does is to argue **a** that something is as it is because something entirely different from it is as *it* is! Instead of providing a grounded insight into the essence of triangles, he presents some disparate, arbitrarily chosen propositions about triangles and provides a logical **a** ground of knowledge for them, through laborious logical proofs following the principle of contradiction. Instead of exhaustive knowledge of these spatial relations, all we get are some of consequences that he has chosen to tell us about. Our situation is like that of someone who has been shown the various *effects* of a mechanical artifice but told nothing about its *inner structure and workings*.

Forced by the principle of contradiction, we have to grant that everything demonstrated by Euclid is the case, but we don't learn *why* it is the case. We get something like the uncomfortable feeling of having witnessed a sleight of hand, and in fact most of Euclid's proofs are remarkably like that. In nearly all of them the truth enters by the back door, following per accidens [see Glossary] from some secondary circumstance. It is often a reductio ad absurdum, which shuts all the doors one after the other, leaving only one open, through which we therefore have to enter. Often, as with the Pythagorean theorem, lines are drawn without our knowing why. It is afterwards revealed that they were traps to capture the assent of the student, who now has to grant in amazement something whose inner connection remains utterly incomprehensible to him—so much so that he can study the whole of Euclid without •gaining any real insight into the laws of spatial relations, merely •learning by heart some of their consequences. This strictly empirical and unscientific knowledge is like that of a doctor who knows about sicknesses and remedies for them but doesn't know how the two are connected. This is all the upshot of someone's capriciously rejecting the kind of grounding and evidentness that belong to a species of knowledge, forcibly replacing them with a kind that is essentially foreign to it.

In other respects, Euclid's procedure has earned all the admiration it has received over so many centuries, to the

extent that his way of treating mathematics was declared to be the pattern for all scientific exposition, so that all the other sciences tried to model themselves on it (though they have subsequently retreated from this, without much knowing why). Yet I can only see the Euclidean method in mathematics as a brilliant piece of perversity. But when a great error—in life or in science—is intentionally and methodically carried out with universal applause, it is always possible to track its source to the then-prevalent philosophy.

[AS proceeeds to make good on that, with a lengthy account of the ancient Greeks' preoccupations with error and its sources, and with doubts about the reliability of sense-perception, leading them to 'jump' to the conclusion that only logical thinking can be trusted. Hence Euclid. He continues:] His method held sway through the centuries, and was bound to, so long as pure perception *a priori* was not distinguished from empirical perception.... It wasn't until 2000 years later that Kant's doctrine, which is destined to make such great changes in all the knowledge, thought, and efforts of the European nations, led to a similar change in mathematics as well. For after we have learned from this great mind that our perceptions of space and time are

completely different from empirical perceptions,
entirely independent of all sense-impressions,
conditioning them, not conditioned by them,

•*a priori* and thus not at all liable to sense-deception, then, and only then, we can see that Euclid's logical treatment of mathematics is a useless precaution, a crutch for sound legs; that it is like a wanderer at night who mistakes a brightly lit and solid path for water, is careful not to walk on it, and steadily walks the rough ground beside it, always content to keep to the edge of the supposed water. [AS develops this a little, and concludes:] Keeping to the ground peculiar [see Glossary] to mathematics, we get the great advantage that Knowledge *that* something is the case is henceforth one with Knowledge of *why* it is the case; whereas the Euclidean method completely separates the two and gives us knowledge only of the former, not the latter. [He applaudingly quotes Aristotle's insistence that *that* should always be accompanied by *why*; gives an example 'That the mercury stands at 28 inches in a Torricellian tube is a poor example of Knowledge if it is not accompanied by the fact that it is held there by the counterweight of the air'; and characterises some of Euclid's results as revealing 'occult qualities' [see Glossary] of circles and triangles.]

To improve the method of mathematics, the main need is to drop the prejudice that •proved truth has an advantage over •what is known perceptually, or that •logical truth based on the principle of contradiction has an advantage over •metaphysical truth, which is immediately evident and to which the pure perception of space belongs.

·The status of the GP·

What is most certain, yet always inexplicable, is the content of the GP. For that in its various shapes [see Glossary] signifies the universal form of all our presentations and items of knowledge. All explanation consists in tracing things back to it, showing in the single case the linking of presentations that is expressed in general terms by it. So it is the principle of all explanation, and therefore can't itself be explained; nor does it need to be, for every explanation presupposes it and has meaning only through it. But none of its shapes has primacy over the others; the GP is equally certain and unprovable as a statement about the ground of

a being,becoming,acting, orb knowing.

The relation of ground to consequence, in any one of its shapes, is a necessary one; indeed it is the origin as well as the sole meaning of the concept of necessity. The only necessity is that of the consequence given the ground, and every ground leads necessarily to its consequence. Thus just as surely as the consequence expressed in the conclusion of an inference flows from the **b** ground of knowledge given in the premises, equally surely the a ground of being in space conditions its consequence in space; if I know through perception the relation between the latter two,¹ then that certainty is just as great as any logical certainty. But each geometrical theorem expresses such a relation just as well as any one of the twelve *axioms* of Euclido; it is a metaphysical truth and, as such, is as immediately certain as the principle of contradiction itself. [He develops this point along lines we have aready seen, scolding Euclid for giving a privilege to his axioms, which] are no more immediately evident than any other geometrical proposition, but only simpler because of their narrower content.

When a criminal is interrogated, **b** his statements are put on record so as to judge their truth from their consistency. But this is a mere stop-gap, which the authorities don't use when they can **a** immediately examine the truth of each of his statements on its own, especially as he might consistently lie from the beginning. But the **b** former method is the one Euclid used to examine space. He was right in supposing that no single spatial determination could be other than it is without contradicting all the others; but his procedure is a very burdensome and unsatisfying detour, preferring **b** mediated knowledge to equally certain **a** immediate knowledge. [He winds up with some remarks about the harm this does to students of geometry.]

·ARITHMETIC·

It is in any case noteworthy that this method of proof has been applied only to geometry and not to arithmetic. In arithmetic the truth is made evident only through *perception*, which here consists merely in counting. For the perception of numbers occurs in *time alone*, so it can't be represented by a sensory schema like a geometrical figure. So the suspicion that the perception might be only empirical and thus subject to illusion was removed from arithmetic; and this suspicion was solely responsible for introducing the logical style of proof into geometry. Because time has only one dimension, counting is the only arithmetical operation; all the others can be reduced to it; and this counting is nothing other than a perception *a priori*, which no-one hesitates to appeal to in this case, and through which alone all the rest—every calculation and every equation—is confirmed.

This....makes every single proposition an axiom. Instead of the proofs with which geometry is replete, the entire content of arithmetic and algebra is thus a mere method for the abbreviation of counting. Our immediate perception of numbers in time gets no further than about ten; beyond that, a verbally defined abstract concept of number has to take the place of perception, which is then no longer actually at work but only designated in a precisely determinate way. However, with the crucial aid of the system of numerical order, which always allows us to represent larger numbers by way of the same small ones, perceptual evidentness is indeed made possible for every calculation, even in cases where the reliance on abstraction is so great that not only numbers but also indeterminate magnitudes and entire operations are conceived *in abstracto* and designated accordingly....

With the same right and same assurance as in arithmetic,

[[]Presumably meaning the relation between the ground of being in space and its consequence in space.]

we could also let geometrical truths be grounded solely through pure perception *a priori*. It is in fact always this perceptually known necessity—according to the GP taken as concerning the ground of *being*—that bestows the greatest evidentness on geometry; it is the basis in everyone's consciousness of the certainty of its propositions. That doesn't come from the logical proof—striding on stilts!—which

•is always foreign to the matter at hand,

•is usually soon forgotten without detriment to conviction,

•could be dropped entirely without lessening the geometrical evidentness, which is independent of it, and
•only 'proves' something that one was already fully convinced of through a different kind of knowledge.

•Regarding that last point:• the logical proof is like a cowardly soldier who •inflicts a further wound on an enemy slain by someone else and then •boasts of having killed him.

I hope that all this removes any lingering doubt that the evidentness of mathematics, which has become a pattern and symbol of all evidentness, is essentially based not on proofs but on immediate perception, which is thus-here as everywhere-the ultimate ground and the source of all truth. However, the perception that grounds mathematics has a great advantage over any other perception, and thus over empirical perception. [What follows is extremely obscure, apparently because of clumsiness in the writing. The gist of it is that (i) in *a priori* perception 'one knows the consequence on the basis of the ground', and ground-to-consequence carries necessity with it; whereas (ii) much experience works in the oppposite direction and thus doesn't have necessity, so that 'sense-deception is possible and often actual'. AS continues:] When several or all five of the senses receive impressions pointing to the same cause, the possibility of deception becomes extremely small; but it is still present, for in certain cases—e.g. with counterfeit coins—one's whole sensibility is deceived. The case is the same for all empirical knowledge, and thus for the whole of natural science except for its pure part (what Kant calls its 'metaphysical' part). Here too causes are recognised through their effects. All natural science rests on hypotheses that are often false and then gradually give place to more correct ones. It is only with intentionally arranged experiments that knowledge goes on the secure path from causes to effects; but these experiments are undertaken only in consequence of hypotheses. That is why no branch of natural science-e.g. physics or astronomy or physiology-could be discovered all at once, as mathematics or logic could have been; rather, they have needed and still need the collected and compared experiences of many centuries. Multiple empirical confirmation brings •the induction on which hypotheses rest so near to completeness that •it replaces certainty for practical purposes, and the hypothesis is no more harmed by its origin ·in induction · than the application of geometry is harmed by the incommensurability of straight and curved lines or than arithmetic is harmed by the unnattainability of completely accurate logarithms. For just as the squaring of a circle and logarithms are brought infinitely close to accuracy by way of infinitely many fractions, so also induction-i.e. knowledge of grounds on the basis of consequences—is brought close to mathematical evidentness, i.e. to knowledge of consequences on the basis of grounds; not infinitely close but enough for the possibility of error to be small enough to be negligible. Yet it is still present. For example, an inference from countless cases to all, or really to the unknown ground on which they all depend, is still an inductive inference. What inference of this kind seems surer than that all human beings have their heart on the left side? But there are rare cases of human beings whose heart sits on the right side.

a Sensory perception and empirical science thus have the same kind of evidentness. The advantage over **a** them that is possessed by **b** mathematics, pure natural science, and logic as cases of knowledge *a priori*, rests only on the fact that the formal element in knowledge on which all apriority is grounded is given in **b** the latter in its entirety and all at once, so that *there* one can always proceed from grounds to consequences, whereas in **a** the former the movement is usually from consequences to grounds. In any case, the law of causality—i.e. the GP considered as a statement about the ground of becoming—which directs **a** empirical knowledge is just as sure as any of the other shapes of the GP that are followed *a priori* by **b** the above named sciences.

Logical proofs on the basis of concepts share with knowledge by way of perception a priori the advantage of proceeding from grounds to consequences, so that they are in themselves (i.e. with respect to their form) infallible. This has done much to give proofs in general their great reputation. But the infallibility of the latter is relative: they merely involve bringing things under higher scientific propositions. These contain the entire stock of truth in science, and they can't simply be proved in turn, but must be grounded in perception. In the few *a priori* sciences that I have cited, it is a •pure perception; but everywhere else it is •empirical perception, which is raised to level of generality only by induction. Thus even if in empirical sciences individual cases are proved through what is general, what is general has still obtained its truth from individuals. It is only a warehouse for gathered provisions, not a productive farm.

So much for the grounding of **truth**.

·Error·

Regarding the origin and the possibility of **error**, many explanations have been attempted since Plato's metaphorical

answers in terms of the dove-cote from which one grabs the wrong dove, and so on. Kant's vague, indefinite explanation of the origin of error—using an image of the diagonal between two motions—can be found in the *Critique of Pure Reason* B351.

Since truth is the relation of a judgment to its ground of knowledge, it is a problem how someone making a judgment can think he has such a ground when he actually doesn't, i.e. how error, a deception of reason, is possible. I find this possibility to be analogous to that of **illusion**, or deception of the understanding, which I explained above [late in chapter 6.] My opinion (and this is what gives this explanation its proper place here) is that every error is an inference from a consequence to a ground; which is valid when one knows that the consequence can't have any other ground, but otherwise isn't. •There are two ways for error to arise. (i) In one, \cdot the person who errs assigns to a consequence a ground that it *cannot* have, thereby showing a deficiency in his understanding, i.e. in his capacity for immediate knowledge of the connection between cause and effect. This is not as common as •the second way error arises, (ii) in which \cdot the person who is in error assigns for the consequence a ground that is indeed a possible ground for it, but is only one among many possible candidates. To be justified in picking on this one, he would have to have performed a complete induction, which he has not done. If the results of the induction were stated in the language not of 'always' but rather of 'sometimes' or 'usually', the conclusion our person has reached would be problematic but not erroneous. So someone who errs in the manner of (ii) either •is rash or •doesn't know enough about possibility to realise the necessity for a complete induction. Error is thus entirely analogous to illusion. Both are inferences from the consequence to the ground: illusion is always produced in accordance with the law of causality and by

the *understanding* alone, thus immediately in perception itself; error is produced by *reason*, thus in thought proper. It can involve any of the forms the GP can have, but most often it's the law of causality. [AS gives three examples, in one of which he joins Goethe in mocking Newton's theory of the colour of light. He adds a point about 'mistakes in calculation', which are 'not really errors'.].

·SCIENTIFIC EXPLANATION·

As for the *content* of the sciences in general, this is really always the relation of the world's phenomena to one another •according to the GP and •under the guidance of the *Why*? that gets its applicability and meaning solely from the GP. Showing that relation is called *explaining*. So an explanation can only show that two presentations have to one another the relation required by the shape of the GP that governs the class they belong to. Having gone that far, there is no more *Why*? to be asked. For the displayed relation is one that absolutely cannot be presented in any other way, i.e. it is the form of all knowledge. Therefore, one does not ask

•why 2 + 2 = 4, or

•why equality of the angles in a triangle determines equality of the sides, or

•why any given cause is followed by its effect, or

•why the truth of a conclusion is made evident by that of the premises.

Every explanation that doesn't trace back to a relation of which no further *Why?* can be asked ends up with the assumption of an occult quality [see Glossary], but every basic natural force is also of this kind. Every explanation in the natural sciences has to end up with something of that sort, thus in complete obscurity. It must leave the inner nature of a stone as unexplained as that of a human being; it can no more account for the gravity, cohesion, chemical properties etc. of the former than it can for the knowledge and behaviour of the latter. Gravity, for example, is an occult quality because it can be removed in thought—i.e. we can conceive of a world without it—·so it does not arise as a necessity from the form of knowledge. Unlike the law of inertia: tracing things back to *that* is a perfectly satisfactory mode of explanation, because it follows from the law of causality.

Two things are absolutely inexplicable, i.e. cannot be traced back to the relation expressed in the GP: (i) the GP itself in all four of its shapes can't be explained because it is the principle of all explanation, the sole source of any explanation's meaning; (ii) the *thing in itself*, knowledge of which is in no way subject to the GP; the GP does not extend to it, but it is the source of all phenomena. I won't be able to make the latter intelligible until Book II [chapter 24], where I'll return to this topic of what the sciences can achieve.

·HOW PHILOSOPHY PROCEEDS·

At the point where natural science (indeed any science) leaves things standing, unable to get any further through its own explanations or even through the GP (the principle of them), philosophy steps in and deals with things in its own manner, which is entirely different from that of the sciences.

In section 51 of my treatise on the GP, I have shown how the GP in one or another of its shapes is the main directing principle in \cdot each of \cdot the various sciences; indeed the best way of classifying the sciences may be in terms of which shape of the GP each is directed by. But (to repeat myself) every explanation given according to that directing principle is only relative: it explains things with reference to one another but always leaves Something unexplained, which is just what they presuppose.

•In mathematics this is space and time;

•in mechanics, physics, and chemistry it is matter, qualities, original forces, natural laws;

•in botany and zoology it is the diversity of species and life itself;

•in history it is the human race with all its peculiarities of thinking and willing.

In each case it is the relevant shape of the GP.

It is a peculiarity of *Philosophy* that it presupposes absolutely nothing as already known, treating everything as equally foreign and a problem: not only •the relations among phenomena but also •the phenomena themselves, and even •the GP to which the other sciences are content to trace everything back. This way of tracing things back does nothing for philosophy, because for it any link in the chain is as foreign as any other, and indeed that kind of interconnection is itself as much a problem for philosophy as are the things connected by it.... For (I repeat) what the sciences presuppose and lay down as the basis of their explanations and set as their boundary is precisely the real problem for philosophy, which in that way begins where the sciences leave off. It can't be based on proofs, for proofs derive ·previously· unknown propositions from ones that are known; whereas for philosophy everything is equally unknown and foreign. It can offer no proposition from which it would follow that the world with all of its phenomena exists. So no philosophy can provide what Spinoza wanted, a demonstration from 'firm principles' ·that the world exists ·. Philosophy is also the most general Knowledge, whose main principles can't be consequences of others still more general.

The principle of contradiction merely establishes an agreement among concepts; it doesn't provide the concepts

themselves. The GP explains connections among phenomena, not the phenomena themselves; so philosophy can't set out to find either an efficient cause or a final cause of the entire world.¹ My philosophy doesn't ask where the world comes from or where it is going; it merely asks what the world is, subordinating the *Why*? to the *What*?.... To be sure, it could be said that each person knows without further aid *what* the world is, since he himself has the knowledge which is the world's presentation; and this would be true as far as it goes. But this knowledge is perceptual, *in concreto*. The task of philosophy is to reproduce it *in abstracto*, to raise

> successive and changing perceptions, and in general everything that falls under the broad (and negative) concept of *feeling*, i.e. everything that *is not* clear abstract Knowledge [see chapter 11 above]

to a level where it *is* such a thing, the level of permanent Knowledge. So philosophy must be a statement *in abstracto* of the nature of the entire world, as a whole and in all its parts. If it is not to lose itself in here an endless multitude of individual judgments, it has to make use of abstraction, thinking in universal terms not only of all individuals but also of their differences.

Thus philosophy will partly separate and partly unite, in order (for the sake of Knowledge) to deliver the whole of the world's manifold gathered into a few abstract concepts according to its nature. However, through those concepts in which philosophy fixes the nature of the world knowledge has to be gained of the entirely individual as much as of what is universal.... So the capacity for philosophy consists in just what Plato said it to be: knowledge of the one in the many and of the many in the one. Philosophy will accordingly

[[]AS gives these in Latin: **a** *causa efficiens* and **b** *causa finalis*—scholastic technical terms meaning **a** 'cause' (as we would understand this) and **b** 'goal' or 'purpose'.]

be a sum-total of very general judgments whose immediate ground of knowledge is the world itself in its totality, with nothing excluded—thus everything that is to be found in human consciousness. It will be

a complete replication—as it were, a mirroring—of the world in abstract concepts,

which is only possible by •uniting the essentially identical [see Glossary] under one concept and •assigning to different concepts things that are different from one another. [AS quotes (in Latin) Bacon saying essentially the same thing, adding that he 'takes this in a more extended sense than Bacon could have conceived at his time'.]

[This paragraph returns to chapter 14's theme of 'perception versus proof.] The accord that all aspects and parts of the world have with respect to one another, just because they belong to one whole, must also be found in this abstract copy of the world. Accordingly, any one of that sum-total of judgments could to a certain extent be derived from any other. But for that to happen, they must first *exist* and thus be antecedently provided as grounded in immediate knowledge of the world *in concreto*....

16. Practical reason

After all this discussion of

reason as a special faculty of **knowledge** that only human beings have, and of the special facts about human nature (including human achievements) that are due to it,

it now remains for me to say something about

reason so far as it guides the **behaviour** of human beings, and in this respect can be called *practical*.

This topic mainly belongs not here but in the Appendix to this work, where I controvert the existence of the so-called practical reason of Kant, which he (very conveniently!) depicts as the immediate source of all virtue and as the seat of an absolute (i.e. dropping down from heaven!) *ought*. I later provided in my *Fundamental Problems of Ethics* a detailed and thorough refutation of this Kantian principle of morality.

So here I have only a little to say about the actual influence of reason, in the true sense of that word, on behaviour. Already at the start of my discussion of reason [chapter 8], I noted in a general way how greatly human doings and changes differ from those of animals, and that this difference is solely due to the presence of abstract concepts in the human consciousness. Their influence on our entire existence is so thoroughgoing and significant that it has us relating to animals in somewhat the way a sighted animals relate to b animals lacking eyes (certain larvae, worms, and zoophytes): the **b** latter know about only their immediate environment, doing this by touch; whereas a sighted animals know about a broad circle of things, near and far. In just the same way, animals' lack of reason limits them to perceptual presentations that constitute their immediate present environments strung out over time, i.e. to real objects; whereas our knowledge in abstracto enables us to take in, along with the narrow actual present, the entire past and future as well, together with the broad realm of possibility: we view life freely on all sides, and go beyond the present and the actual.

Thus what the eye is •in space and for •sensory knowledge reason is, to a certain extent, •in time and for •inner knowledge. But just as objects' visibility gets its value and significance solely from being a predictor of their tangibility, so also the entire value of abstract knowledge lies in its relation to what is perceptible. So natural man always finds much more value in what is **known immediately and perceptually** than in abstract concepts, in what is **merely thought**: he puts empirical knowledge ahead of logical knowledge. But the opposite order is maintained by those who—unlike the 'natural man' I have just been speaking of—·live more in words than deeds, who have looked more into paper and books than into the actual world, and who at their worst become pedants and pencil-pushers. Only in these terms is it comprehensible how Leibniz, along with Wolf and all their successors, following the lead of Duns Scotus, could go so far wrong as to describe perceptual knowledge as merely confused abstract knowledge! (To Spinoza's honour I must mention that his more accurate understanding reversed this, explaining all general concepts as having arisen from the confusion of what is known perceptually [*E*thics, note to proposition 40 in part II].

That perverse way of thinking has given rise to •the following three errors•. (i) The evidentness that is special to mathematics has been rejected in favour of granting validity to logical evidentness alone. (ii) All non-abstract knowledge has been given the broad label *feeling* [see chapter 11 above], and valued little. (iii) Kantian ethics explained

the *good will* that immediately asserts itself when the circumstances are known, and leads to right and good action

as mere feeling and emotion, and consequently as worthless and without merit, and would recognise moral worth only in actions that have come from abstract maxims.

A man's survey of his life as a whole—a gift of his reason that puts him ahead of the animals—can be likened to a geometrical, colourless, abstract, small-scale sketch of his life's journey. It relates **a** him to **b** the animals in the way **a** the captain of a ship—whose chart, compass, and quadrant enable him to know exactly what the ship's course and present postion are—relates to **b** to the uninformed crew who see only waves and the sky. Thus it is worth noting—and is indeed wonderful—how besides **c** his life *in concreto* a person always leads d a second life in abstracto. In c the former, prey to all the turbulence of reality and influence of the present, he has to strive, suffer, die like an animal. But his **d** life *in abstracto*, as it confronts him in the thoughts reason gives him, is the still mirroring of c the former life and of the world he lives in; it is 'the small-scale sketch' that I have just mentioned. Here in a the domain of restful reflective consideration, what fully possesses and intensely moves him c there appears cold, colourless, and for the moment foreign to him; **d** here he is a mere spectator and observer. In respect of this withdrawal into reflection he is like an actor who has played his part in one scene, takes his place among the audience until it is time for him to go on the stage again, and quietly looks on at whatever happens on the stage, even if it is the preparation for his own death (in the play), but afterwards he again goes on the stage and acts and suffers as he must.

This double life generates that human composure—so unlike animals' absence of thought—with which a person, after thinking it through, decides that he *will* or sees that he *must* do something that is of great importance to him, coldbloodedly allowing or carrying out something utterly frightful: suicide, execution, a duel, all sorts of life-threatening deeds, and in general anything his entire animal nature rebels against. In this we see how far reason has mastered animal nature and cries out to the strong 'You must have iron courage' [AS quotes this in Greek; it is from the *Iliad*.]

Here one can really say that reason expresses itself *practically*. Thus practical reason shows itself wherever

•conduct is directed by reason,

•one's conduct is moved by abstract concepts,

•the determining factor is neither individual perceptual presentations nor momentary impressions like those that direct animals. This is entirely different from and independent of the ethical worth of an action; acting in accordance with reason is entirely different from acting virtuously; reason is found as much in alliance with great malice as with great goodness, and is equally helpful to each—equally ready and serviceable for the methodical, consistent carrying out of noble and of bad intentions, of shrewd and of stupid maxims. This is just a consequence of reason's nature, which is feminine: it receives and stores, but does not create. [AS says that this is all discussed and illustrated in the Appendix, and can't be handled *here* because it is tied in with his attack on Kant's view of practical reason, [chapters 102-3].]

The most complete development of (in the true and genuine sense of the phrase) practical reason, the highest peak a man can reach merely through the use of his reason, where his difference from animals appears most clearly, is the ideal embodied in Stoic wisdom. For Stoic ethics is originally and essentially not a doctrine of virtue at all, but merely instructions for a reason-guided life, the goal and purpose of which is happiness through peace of mind. Virtuous conduct occurs in the course of this *per accidens* [see Glossary], as a means, not an end. So Stoic ethics is, in its whole essence and point of view, fundamentally unlike those ethical systems that directly insist on virtue, such as the doctrines of the Vedas, of Plato, of Christianity, and of Kant. The goal in Stoic ethics is a happiness...., which can be achieved only through **b** virtue, that being the meaning of the saying that virtue is the highest good. But when a the end gets gradually forgotten in favour of **b** the means, virtue comes to be recommended in a way that discloses an interest that is entirely different from-indeed clearly inconsistent with—one's own happiness. This is one example of how, in this and other systems, truths that are known immediately (or, as they say, truths that are *felt*), lead us back to the

right way by means of bad logic. There is a clear example of this in Spinoza's *Ethics*, where the egoistic *to seek one's own advantage* is made by blatant sophisms to yield a pure doctrine of virtue!

·THE SPIRIT OF STOICISM·

According to what I take to be the spirit of Stoic ethics, it stems from the question of whether reason—

man's great prerogative which, **mediated** by intentional action and its consequences, so greatly eases life and its burdens

-might not also be able in an **immediate** way, i.e. through mere knowledge, to free him from all or most of the sorrows and various torments that fill his life. They [the Stoics] held it to be unsuitable to the pre-eminence of reason that beings who are gifted with it-and who through it comprehend and survey an infinitude of things and situations—should, by the present and by the incidents contained in the few years of such a brief, fleeting, and uncertain a life, be prev to such intense pains, such great fear and suffering as arise from the tumultuous press of desire and repulsion. They thought that the proper application of reason should be able to lift a person out of all that, making him invulnerable. [He quotes, in support of this, Antisthenes and Epictetus, interpreting one of the latter's sayings as meaning:] Want and suffering don't come directly and necessarily from not having, but from desiring to have and not having; so that this desire to have is the necessary condition under which not-having becomes a privation and causes pain. In addition, they knew from experience that what gives birth to and nourishes desire is only hope, only demand; so that we are not disturbed and plagued

•by the many ills that are common to all, and are unavoidable, or

•by unachievable goods, but only

•by the trivial more and less of the things we *can* avoid or achieve,

so that the ills that are always with us and the good things we must necessarily forgo are regarded with indifference. And \cdot the Stoics knew \cdot that—this being a peculiarly human characteristic—every *desire* is extinguished, and thus can no longer cause pain, when there is no *hope* to nourish it. The upshot of all this was that

all happiness rests only on the relation between \mathbf{a} our demands and \mathbf{b} what we receive. It doesn't matter how great or small the two magnitudes of the relation are, and the relation¹ can be produced as well by lessening \mathbf{a} the first magnitude as by increasing \mathbf{b} the second; so that all suffering really comes from a disproportion between \mathbf{a} what we demand and expect and \mathbf{b} what we get.

This disproportion obviously consists in a lack of knowledge, and could be completely cured through greater insight •into what we should expect•. Therefore Chrysippus says that one ought to live with a due knowledge of the transitory nature of the things of the world. For as often as a man loses self-command, or is struck down by a misfortune, or grows angry or faint-hearted, he shows that •he finds things to be different from what he had expected, and consequently •that he had been caught in error, not knowing the world and life, not knowing that the will of the individual is thwarted at every step not only by the chance of inanimate nature but also by the antagonism of aims and the wickedness of other individuals; so either •he has not made use of his reason so as to arrive at a general knowledge of this characteristic of life, or •he lacks judgment, because he doesn't recognise in the particular what he knows in general, and is therefore surprised by it and loses his self-command. Every lively pleasure is an error, a delusion, because no desire once achieved can lastingly satisfy-indeed, every possession and every happiness is only lent to us for an indefinite time by chance, and can be demanded back within the hour. But every pain rests on the disappearance of such a delusion; thus both arise from defective knowledge. Joy and pain thus remain equally remote from the wise man, and nothing that happens disturbs the unshakeability of his spirit. In accordance with this spirit and goal of Stoicism, Epictetus begins with the thesis-to which he constantly returns, as to the core of his wisdom-that we should thoughtfully distinguish what depends on us from what does not, and then not count on the latter; this being a reliable way to stay free from all pain, suffering, and fear. But what depends on us is only our will; and this is the starting-point for a gradual transition to the doctrine of virtue, for it was noted that

a just as happiness and unhappiness are determined by the external world, existing independently of us,

b so also inner contentment or discontent with ourselves comes from the will.

The question then arose as to whether the terms *bonum* and *malum* ['good' and 'bad'] should be applied to **a** the former or to **b** the latter of these pairs. That was really a matter of arbitrary choice, making no real difference. Yet the Stoics endlessly disputed with the Peripatetics and Epicureans about this question....

Zeno, the founder \cdot of Stoicism \cdot , seems originally to have taken a somewhat different path. His point of departure was this: to attain the highest good—-i.e. blessedness through spiritual peace—one must live in harmony with oneself. [AS

[[]He means the happiness-producing relation.]

gives this also in Greek and Latin.] However, this was possible only by way of reasoned self-determination according to concepts, not according to changing impressions and moods. But all that is in our power are **a** the maxims for our actions, not **b** their success or the external circumstances, so consistency requires us to have only **a** ·conformity to· the former as our goal, not **b** to the latter; and this again leads to the doctrine of virtue.

But Zeno's immediate followers seemed to find his principle of morality—living in harmony¹—too formal and empty of content. So they gave it material content by way of an addendum, 'living in harmony *with nature*', which was first added by Cleanthes. This forced the issue rather far afield, because of the large sphere of the concept \cdot of nature \cdot and the vagueness of the word. For Cleanthes meant the whole of nature in general, but Chrysippus meant human nature in particular. It followed that only what was adapted to human nature—as the satisfaction of animal desires was adapted to animal natures—was virtue. So ethics was again forced to admit a doctrine of virtue....

Stoic ethics, taken on the whole, is in fact a most estimable and admirable attempt to give reason—the great prerogative of human beings—an important and salutary purpose, namely to lift people out of the sufferings and pains to which every life is subject, by means of the instruction [which AS gives in Horace's Latin]: 'For which reason may you be able to live your life gently, may you not be driven and harrassed by always needy desires, or by fears and hopes concerning things that profit little'; and through just that to make them in the highest degree participants in the dignity that is due to them as rational beings as distinguished from animals....

This view that I hold of Stoic ethics requires it to be discussed in connection with my account ·in chapter 103· of what reason is and what it can do. But although its goal may be partly achievable by the application of reason and through a purely reason-centred ethics, and although purely rational characters are shown by experience to be surely the happiest, it is emphatically *not* the case that •anything perfect could be brought about in this way or that •a rightly employed reason could actually free us from all life's burdens and sufferings and lead us to a state of blessedness.² Rather, there is a perfect **contradiction** in wanting to live without suffering, a contradiction also carried by the common expression 'blessed life'; I now explain why.

\cdot SUICIDE \cdot

This contradiction in the ethics of pure reason is revealed by the fact that the Stoic is compelled to insert into his instructions for a blessed life (for that's what his ethics always is) a recommendation of suicide..., for the case where bodily sufferings—which can't be philosophised away by propositions and inferences!—are overwhelming and incurable. Here his single goal of blessedness is after all frustrated, and nothing remains for escape from suffering but death, which is to be taken calmly like any other medicine. This reveals a strong contrast between Stoic ethics and all the others I

¹ It was introduced as 'living in harmony *with oneself*'; it's not clear what justifies AS in dropping 'with oneself', though his account of the history of this matter clearly requires him to do so.]

² [In that sentence, AS has a parenthetical remark about the 'purely rational characters' he speaks of. Left *in situ*, it makes the sentence horribly unwieldy; here it is, separated out: 'commonly called "practical philosophers", and rightly so, because the genuine philosopher, i.e. the theoretical philosopher, carries life over into concepts, whereas these ·practical· ones carry concepts over into life.']

have mentioned, which •make an immediate goal of virtue in itself, even if accompanied by the harshest sufferings, and •don't allow a man to end his life as an escape from suffering. (Not one of them has been able to give the true reason for the rejection of suicide, but they laboriously seek out all sorts of pseudo-reasons. The true reason will emerge in Book IV.) That contrast .in attitudes to suicide. reveals and confirms the essential difference in fundamental principles between Stoicism (which is really only a particular form of eudemonism) and those other doctrines, even if they often coincide in their results and seem to be related ·like members of a single family. But the above-mentioned contradiction, infecting Stoic ethics even in its fundamental thought, can also be seen in the fact that its ideal, the Stoic sage, even as the Stoics themselves describe him, could never come alive or achieve any inner poetic truth. He remains rather a stiff, wooden, stick-figure

•of whom nothing can be made,

•who does not know where to go with his wisdom, and •whose perfect repose, contentment, blessedness flatly contradict the essence of humanity and cannot help us to have any perceptual presentation of it.

Set beside that, how differently appear the world-renouncers and voluntary penitents that Indian wisdom recommends and actually produces, or indeed of Christianity's Saviour, that superb figure full of profound life, of the greatest poetic truth and the highest significance, who with consummate virtue, saintliness sublimity stands before us in a state of supreme suffering.