oneself can be called the *enlightened mode of thought*; the maxim of putting oneself in the viewpoint of others in thought, the *extended mode of thought*; and the maxim of always thinking in agreement with one self, the *consequent*[q] or *coherent*[r] *mode of thought*.

58 VIII.

C) Logical perfection of cognition as to quality – Clarity – Concept of a mark in general – Various kinds of marks – Determination of the logical essence of a thing – Its distinction from the real essence – Distinctness, a higher degree of clarity – Aesthetic and logical distinctness – Distinction between analytic and synthetic distinctness

From the side of the understanding, human cognition is *discursive*, i.e., it takes place through representations which take as the ground of cognition that which is common to many things, hence through *marks*[s] as such. Thus we cognize things *through marks* and that is called *cognizing*,[t] [the German word for which] comes from [the German word for] *being acquainted*.[u]

A *mark is that in a thing which constitutes a part of the cognition of it*, or – what is the same – a *partial representation, insofar as it is considered as ground of cognition of the whole representation*. All our *concepts* are marks, accordingly, and all *thought* is nothing other than a representing through marks.

Every mark may be considered from two sides:

First, as a representation in itself;

Second, as belonging, as a partial concept, to the whole representation of a thing, and thereby as ground of cognition of this thing itself.

All marks, considered as grounds of cognition, have *two* uses, either an *internal* or an *external* use. The *internal* use consists in *derivation*, in order to cognize the thing itself through marks as its grounds of cognition. The external use consists in *comparison*, insofar as we can compare one thing with others through marks in accordance with the rules of *identity* or *diversity*.

There are many specific differences among marks, on which the following classification of them is grounded.

[q] "*consequente*."
[r] "*bündige*."
[s] "*Merkmale*."
[t] "*Erkennen*."
[u] "*Kennen*."

1. *Analytic* or *synthetic* marks. *The former* are partial concepts of my *actual* concept (marks that I already think therein), while the latter are partial concepts of the *merely possible* complete concept (which is supposed to *come to be* through a synthesis of several parts). The former are all *concepts of reason*, the latter can be *concepts of experience*. 59
2. *Coordinate* or *subordinate*. This division of marks concerns their connection *after*[c] or *under*[m] one another.

Marks are *coordinate* insofar as each of them is represented as an *immediate* mark of the thing and are *subordinate* insofar as one mark is represented in the thing only by means of the other. The combination of coordinate marks to form the whole of a concept is called an *aggregate*, the combination of subordinate concepts a *series*. The former, the aggregation of coordinate marks, constitutes the totality of the concept, which, in regard to synthetic empirical concepts, can never be completed, but rather resembles a straight line *without limits*.

The series of subordinate marks terminates *a parte ante*, or on the side of the grounds, in concepts which cannot be broken up, which cannot be further analyzed on account of their simplicity; *a parte post*, or in regard to the consequences, it is *infinite, because we have a highest genus* but no lowest *species*.

With the synthesis of every new concept in the aggregation of coordinate marks, the *extensive* or *extended* distinctness grows, as *intensive* or *deep* distinctness grows with the further analysis of the concept in the series of subordinate marks. This latter kind of distinctness, since it necessarily contributes to *thoroughness* and *coherence* of the cognition, is thus principally a matter of philosophy and is pursued to the highest degree in metaphysical investigations in particular.

3. *Affirmative* or *negative* marks. Through the former we cognize what the thing is, through the latter what it is not.

Negative marks serve to keep us from errors. Hence they are unnecessary *where it is impossible to err*, and are necessary and of importance only in those cases where they keep us from an important error into which we can easily fall. Thus in regard to the concept, e.g., of a being like *God*, negative marks are quite necessary and important.

Through affirmative marks we seek *to understand something*, through negative marks – into which all marks can be transformed – we only seek not to *misunderstand* or not to *err*, even if we should not thereby become acquainted with anything. 60

4. *Important* and *fruitful*, or *empty* and *unimportant*, marks.

[c] "*nach.*"
[m] "*unter.*"

A mark is important and fruitful if it is a ground of cognition for great and numerous consequences, *partly* in regard to its internal use, its use in derivation, insofar as it is sufficient for cognizing thereby a great deal in the thing itself, *partly* in respect to its *external* use, its use in comparison, insofar as it thereby contributes to cognizing both the *similarity* of a thing to many others and its difference from many others.

We have to distinguish *logical* importance and fruitfulness from *practical*, from *usefulness* and *utility*, by the way.

5. *Sufficient*[x] *and necessary* or *insufficient and accidental* marks.

A mark is *sufficient* insofar as it suffices always to distinguish the thing from all others; otherwise it is insufficient, as the mark of barking is, for example, for dogs. The sufficiency[y] of marks, as well as their importance, is to be determined only in a relative sense, in relation to ends that are intended through a cognition.

Necessary marks, finally, are those that must always be there to be found in the thing represented. Marks of this sort are also called *essential* and are opposed to *extra-essential* and *accidental* marks, which can be separated from the concept of the thing.

Among necessary marks there is another distinction, however.

Some of them belong to the thing *as grounds* of other marks of one and the same thing, while *others* belong only *as consequences* of other marks.

The former are *primitive* and *constitutive* marks (*constitutiva, essentialia in*
61 *sensu strictissimo*[z]), the others are called *attributes* (*consectaria, rationata*[a]) and belong admittedly to the essence of the thing, but only insofar as they must first be derived from its essential points, as the three angles follow from the three sides in the concept of the triangle, for example.

Extra-essential marks are again of *two kinds*; they concern either *internal* determinations of a thing (*modi*) or its external relations (*relationes*). Thus the mark of *learnedness* signifies an inner determination of a man, but *being a master or a servant* only an external relation.

The complex of all the essential parts of a thing, or the sufficiency of its marks as to coordination or subordination, is the *essence* (*complexus notarum primitivarum, interne conceptui dato sufficientium; s. complexus notarum, conceptum aliquem primitive constituentium*[b]).

In this explanation, however, we must not think at all of the *real* or

[x] "*Zureichende.*"

[y] "Hinlänglichkeit."

[z] things that are constitutive, things that are essential in the strictest sense.

[a] things that follow, things grounded.

[b] the complex of primitive marks internally sufficient for a given concept, or the complex of marks that primitively constitute a certain concept.

natural essence of things, into which we are never able to have insight. For since logic abstracts from all content of cognition, and consequently also from the thing itself, in this science the talk can only be of the *logical* essence of things. And into this we can easily have insight. For it includes nothing further than the cognition of all the predicates in regard to which an object is determined *through its concept*; whereas for the real essence of the thing (*esse rei*) we require cognition of those predicates on which, as grounds of cognition, everything that belongs to the existence of the thing depends. If we wish to determine, e.g., the logical essence of body, then we do not necessarily have to seek for the data for this in nature; we may direct our reflection to the marks which, as essential points (*constitutiva, rationes*) originally constitute the basic concept of the thing. For the logical essence is nothing but *the first basic concept of all the necessary marks of a thing* (*esse conceptus*).

The first stage of the perfection of our cognition as to quality is thus its clarity. A second stage, or a higher degree of clarity, is *distinctness*. This consists in *clarity of marks*. 62

First of all we must here distinguish logical distinctness in general from aesthetic distinctness. Logical distinctness rests on objective clarity of marks, aesthetic distinctness on subjective clarity. The former is a clarity *through concepts*, the latter a clarity through *intuition*. The latter kind of distinctness consists, then, in a mere *liveliness* and *understandability*, i.e., in a mere clarity through examples *in concreto* (for much that is not distinct can still be understandable, and conversely, much that is hard to understand can still be distinct, because it goes back to remote marks, whose connection with intuition is possible only through a long series).

Objective distinctness frequently causes subjective obscurity, and conversely. Hence logical distinctness is often possible only to the detriment of aesthetic distinctness, and conversely aesthetic distinctness through examples and similarities which do not fit exactly but are only taken according to an analogy often becomes harmful to logical distinctness. Besides, examples are simply not marks and do not belong to the concept as parts but, as intuitions, to the use of the concept. Distinctness through examples, mere understandability, is hence of a completely different kind than distinctness through concepts as marks. *Lucidity* consists in the combination of both, of aesthetic or popular distinctness and of scholastic or logical distinctness. For one thinks of a *lucid mind* as the talent for a luminous presentation of abstract and thorough cognitions that is congruent with the *common understanding's* power of comprehension.

Next, as for what concerns logical distinctness in particular, it is to be called *complete* distinctness insofar as all the marks which, taken together,

make up the whole concept have come to clarity. A *completely*[c] distinct concept can be so, again, either in regard to the totality of its *coordinate* marks or in respect to the totality of its *subordinate* marks. *Extensively* complete or sufficient distinctness of a concept consists in the total clarity of its coordinate marks, which is also called *exhaustiveness*. Total clarity of subordinate marks constitutes *intensively* complete distinctness, *profundity*.

63 The former kind of logical distinctness can also be called the *external completeness* (*completudo externa*) of the clarity of marks, the other the *internal completeness* (*completudo interna*). The latter can be attained only with pure concepts of reason and with arbitrary concepts, but not with empirical concepts.

The extensive quantity of *distinctness*, insofar as it is not superfluous,[d] is called *precision*.[e] *Exhaustiveness*[f] (*completudo*) and precision (*praecisio*) together constitute *adequacy*[g] (*cognitio, quae rem adaequat*[h]); and *the completed perfection of a cognition* (*consummata cognitionis perfectio*) consists (as to quality) in *intensively adequate* cognition, *profundity*, combined with *extensively adequate* cognition, *exhaustiveness* and *precision*.

Since, as we have noted, it is the business of logic *to make clear concepts distinct*, the question now is *in what way* it makes them distinct.

Logicians of the *Wolffian* school place the act of making cognitions distinct[i] entirely in mere analysis of them. But not all distinctness rests on analysis of a given concept. It arises thereby only in regard to those marks that we already thought in the concept, but not in respect to *those* marks that are first added to the concept as parts of the whole possible concept.

The kind of distinctness that arises not through analysis but through synthesis of marks is *synthetic* distinctness. And thus there is an essential difference between the two propositions: *to make a distinct concept* and *to make a concept distinct*.

For when I make a distinct concept, I begin with the parts and proceed from these toward the whole. Here there are no marks as yet at hand; I acquire them only through synthesis. From this synthetic procedure emerges synthetic distinctness, then, which actually extends my concept as to content through what is added as a mark *beyond*[j] the concept in (pure

[c] "*vollständig* oder *complet*."
[d] "abundant."
[e] "*Präcision* (Abgemessenheit)."
[f] "*Ausführlichkeit*."
[g] "*Angemessenheit*."
[h] cognition that is adequate to the thing.
[i] "alle Deutlichmachung der Erkentnisse."
[j] "*über*."

or empirical) intuition. The mathematician and the natural philosopher make use of this synthetic procedure in making distinctness in concepts.[k] 64
For all distinctness of properly mathematical cognition, as of all cognition based on experience, rests on such an expansion of it through the synthesis of marks.

When I make a concept distinct, however, my cognition does not grow at all as to content through this mere analysis. The content remains the same, only the form is altered, in that I learn to distinguish better, or to cognize with clearer consciousness, what lay in the given concept already. As nothing is added to a map through the mere illumination[l] of it, so a given concept is not in the least increased through its mere illumination[m] by means of the analysis of its marks.

To synthesis pertains the making distinct of *objects*,[n] to analysis the making distinct of *concepts*.[o] In the latter case *the whole precedes the parts*, in the former *the parts precede the whole*. The philosopher only makes given concepts distinct. Sometimes one proceeds synthetically even when the concept that one wants to make distinct in this way is already *given*. This is often the case with propositions based on experience, in case one is not yet satisfied with the marks already thought in a given concept.

The analytic procedure for creating distinctness, with which alone logic can occupy itself, is the first and principal requirement in making our cognition distinct. For the more distinct our cognition of a thing is, the stronger and more effective it can be too. But analysis must not go so far that in the end the object itself disappears.

If we were conscious of all that we know, we would have to be astonished at the great multitude of our cognitions.

In regard to the objective content of our cognition in general, we may think the following *degrees*, in accordance with which cognition can, in this respect, be graded:

The *first* degree of cognition is: *to represent* something;[p]

The *second*: to represent something with consciousness, or *to perceive*[q] (*percipere*);

The *third*: *to be acquainted*[r] with something (*noscere*), or to represent 65

[k] "Deutlichmachung der Begriffe."
[l] "Illumination."
[m] "Aufhellung."
[n] "Deutlichmachung der *Objecte*."
[o] "Deutlichmachung der *Begriffe*."
[p] "sich etwas *vorstellen*."
[q] "*wahrnehmen*."
[r] "*kennen*."

something in comparison with other things, both as to *sameness*[s] and as to *difference*;[t]

The *fourth*: to be acquainted with something *with consciousness*, i.e., to *cognize*[u] it (*cognoscere*). Animals are *acquainted* with objects too, but they do not *cognize* them.

The *fifth*: *to understand*[v] something (*intelligere*), i.e., to cognize something *through the understanding by means of concepts*, or to *conceive*.[w] One can conceive[x] much, although one cannot comprehend[y] it, e.g., a *perpetuum mobile*, whose impossibility is shown in mechanics.

The *sixth*: to cognize something through reason, or *to have insight*[z] into it (*perspicere*). With few things do we get this far, and our cognitions become fewer and fewer in number the more that we seek to perfect them as to content.

The *seventh, finally*: *to comprehend*[a] something (*comprehendere*), i.e., to cognize something through reason or *a priori* to the degree that is sufficient for our purpose. For all our comprehension is only *relative*, i.e., sufficient for a certain purpose; we do not comprehend anything *without qualification*. Nothing can be comprehended more than what the mathematician demonstrates, e.g., that all lines in the circle are proportional. And yet he does not comprehend how it happens that such a simple figure has these properties. The field of understanding or of the understanding is thus in general much greater than the field of comprehension or of reason.

IX.

D) Logical perfection of cognition as to modality certainty – Concept of holding-to-be-true in general – Modi of holding-to-be-true: opining, believing and knowing – Conviction and persuasion – Reservation and deferral of a judgment – Provisional judgments – Prejudices, their sources and principal kinds

Truth is an *objective property* of cognition; the judgment through which
66 something is *represented* as true, the relation to an understanding and thus to a particular subject, is, *subjectively*, *holding-to-be-true*.[b]

[s] "*Einerleiheit.*"
[t] "*Verschiedenheit.*"
[u] "*erkennen.*"
[v] "*verstehen.*"
[w] "*concipiren.*"
[x] "Concipiren."
[y] "begreifen."
[z] "*einsehen.*"
[a] "*begreifen.*"
[b] "*Fürwahrhalten.*"

Holding-to-be-true is in general of two kinds, *certain* or *uncertain*. Certain holding-to-be-true, or *certainty*, is combined with consciousness of necessity, while uncertain holding-to-be-true, or *uncertainty*, is combined with consciousness of the contingency or the possibility of the opposite. The latter is again either *subjectively as well as objectively* insufficient, or *objectively insufficient* but *subjectively sufficient. The former* is called *opinion*,[c] *the latter* must be called *belief*.[d]

Accordingly, there are *three kinds or modi* of holding-to-be-true: *opining*,[e] *believing*,[f] and *knowing*.[g] Opining is *problematic* judging, believing is *assertoric* judging, and knowing is *apodeictic* judging. For what I merely opine I hold in judging, with consciousness, only to be problematic; what I believe I hold to be *assertoric*, but not as objectively necessary, only as subjectively so (holding only for me); what I *know*, finally, I hold to be *apodeictically certain*, i.e., to be universally and objectively necessary (holding for all), even granted that the object to which this certain holding-to-be-true relates should be a merely empirical truth. For this distinction in holding-to-be-true according to the three *modi* just named concerns only the *power of judgment* in regard to the subjective criteria for subsumption of a judgment under objective rules.

Thus, for example, our holding-to-be-true of immortality would be merely problematic in case we only act *as if we were immortal*, but it would be *assertoric in case we believe that we are immortal*, and it would be *apodeictic, finally, in case we all knew* that there is another life after this one.

There is an essential difference, then, between opining, believing, and knowing, which we wish to expound more exactly and in more detail here.

1. *Opining.* Opining, or holding-to-be-true based on a ground of cognition that is neither subjectively nor objectively sufficient, can be regarded as *provisional* judging (*sub conditione suspensiva ad interim*) that one cannot easily dispense with. One must first opine before one accepts and maintains, but in doing so must guard oneself against holding an opinion to be something more than mere opinion. For the most part, we begin with opining in all our cognizing. Sometimes we have an obscure premonition 67
of truth, a thing seems to us to contain marks of truth; we *suspect* its truth even before we cognize it with determinate certainty.

But now where does mere opining really occur? Not in any sciences that contain cognitions *a priori*, hence neither in mathematics nor in metaphysics nor in morals, but merely in *empirical* cognitions: in physics, psychology, etc. For it is absurd *to opine a priori*. In fact, too, nothing could be more ridiculous than, e.g., only to opine in mathematics. Here, as in

[c] "*Meinung.*"
[d] "*Glaube.*"
[e] "*Meinen.*"
[f] "*Glauben.*"
[g] "*Wissen.*"

metaphysics and in morals, the rule is *either to know or not to know*. Thus *matters of opinion* can only be objects of a cognition by experience, a cognition which is possible *in itself* but impossible *for us* in accordance with the restrictions and conditions of our faculty of experience and the attendant degree of this faculty that we possess. Thus, for example, the *ether* of modern physicists is a mere matter of opinion. For with this as with every opinion in general, whatever it may be, I see that the opposite could perhaps yet be proved. Thus my holding-to-be-true is here both objectively and subjectively insufficient, although it can become complete, considered in itself.

2. *Believing*. Believing, or holding-to-be-true based on a ground that is objectively insufficient but subjectively sufficient, relates to objects in regard to which we not only cannot know anything but also cannot opine anything, indeed, cannot even pretend there is probability, but can only be certain that it is not contradictory to think of such objects as one does think of them. What remains here is a *free* holding-to-be-true, which is necessary only in a practical respect given *a priori*, hence a holding-to-be-true of what I accept on *moral* grounds, and in such a way that I am certain that the *opposite* can never be proved.*

* Believing is not a special source of cognition. It is a kind of incomplete holding-to-be-true with consciousness, and if considered as restricted to a particular kind of object (which pertains only to believing), it is distinguished from opining not by its degree but rather by the relation that it has as cognition to action. Thus the businessman, for example, to strike a
68 deal, needs not just to opine that there will be something to be gained thereby, but to believe it, i.e., to have his opinion be sufficient for an undertaking into the uncertain. Now we have theoretical cognitions (of the sensible) in which we can come to certainty, and in regard to everything that we can call human cognition this latter must be possible. We have just such certain cognitions, and in fact completely *a priori*, in practical laws, but these are grounded on a supersensible principle (of freedom) and in fact *in us ourselves*, as a principle of practical reason. But this practical reason is a causality in regard to a likewise supersensible object, *the highest good*, which is not possible through our faculty in the sensible world. Nature as object of our theoretical reason must nonetheless agree with this, for the *consequence* or *effect* of this idea is supposed to be met with in the world of the senses. Thus we ought to act so as to make this end actual.

Now in the world of the senses we also find traces of an *artistic wisdom*,[b] and we believe that the cause of the world also works with *moral* wisdom toward the highest good. This is a holding-to-be-true that is enough for action, i.e., a *belief*. Now we do not need this for action in accordance with moral laws, for *these* are given through practical reason alone, but we need to accept a highest wisdom as the object of our moral will, an object beyond the mere legitimacy of our actions, toward which we cannot avoid directing our ends. Although *objectively* this would not be a necessary relation of our faculty of choice, *subjectively* the highest good is still necessarily the object of a good (even of a human) will, and hence belief in its attainability is necessarily presupposed.

There is no mean between the acquisition of a cognition through experience (*a posteriori*) and through reason (*a priori*). But there is a mean between the cognition of an object and the mere presupposition of its possibility, namely, an empirical ground or a ground of reason for

[b] "*Kunstweisheit.*"

Matters of belief are thus I) not objects of *empirical* cognition. Hence so- 68
called historical belief cannot really be called belief, either, and cannot be opposed as such to knowledge, since it can itself be knowledge. Holding-to-be-true based on testimony is not distinguished from holding-to-be-true through one's own experience either as to degree or as to kind.

II) [N]or [are they] objects of cognition by reason (cognition *a priori*), whether theoretical, e.g., in mathematics and metaphysics, or practical, in morals.

One can believe mathematical truths of reason on testimony, to be sure, partly because error here is not easily possible, partly, too, because it can easily be discovered, but one cannot know them in this way, of course. But

accepting this possibility in relation to a necessary extension of the field of possible objects beyond those whose cognition is possible for us. This necessity occurs only in regard to that in which the object is cognized as practical and, through reason, as practically necessary, for to accept something on behalf of the mere extension of theoretical cognition is always *contingent*. This practically necessary presupposition of an object is the presupposition of the possibility of the highest good as object of choice, hence also of the condition of this possibility (God, freedom, and immortality). This is a subjective necessity to accept the reality of the object for the sake of the necessary determination of the will. This is the *casus extraordinarius*, without which practical reason cannot maintain itself in regard to its necessary end, and here a *favor necessitatis* proves useful to it in its own judgment. It cannot acquire an object logically, but can only oppose what hinders it in the use of this idea, which belongs 69
to it practically.

This belief is the necessity to accept the objective reality of a concept (of the highest good), i.e., the possibility of its object, as *a priori* necessary object of choice. If we look merely to actions, we do not need this belief. But if we wish to extend ourselves through actions to possession of the end that is thereby possible, then we must accept that this end is completely possible. Hence I can only say that *I* see myself necessitated through my end, in accordance with laws of freedom, to accept as possible a highest good in the world, but I *cannot necessitate anyone else through grounds* (the belief is free).

A belief of reason can never aim at theoretical cognition, then, for there objectively insufficient holding-to-be-true is merely opinion. It is merely a presupposition of reason for a subjective though absolutely necessary practical purpose. The sentiment toward moral laws leads to an object of choice, which [choice] is determinable through pure reason. The acceptance of the feasibility of this object, and hence of the reality of its cause, is a moral belief, or a free holding-to-be-true that is necessary for moral purposes for completion of one's ends.

Fides is really good faith[i] in the *pactum*, or subjective trust[j] in one another, that one will keep his promise to the other, with full faith and credit.[k] The first when the *pactum* is made, the second when it is to be concluded.

In accordance with the analogy, practical reason is, as it were, the *promisor*,[l] man the *promissee*,[m] the good expected from the deed the *promised*.[n]

[i] "Treue."
[j] "subjectives Zutrauen."
[k] "Treue und Glauben."
[l] "der *Promittent*."
[m] "der *Promissarius*."
[n] "das *Promissum*."

philosophical truths of reason may not even be believed, they must simply be known; for philosophy does not allow mere persuasion. And as for what concerns in particular the objects of practical cognition by reason in
70 morals, rights and duties, there can just as little be mere belief in regard to them. One must *be fully certain* whether something is right or wrong, in accordance with duty or contrary to duty, allowed or not allowed. In moral things one cannot *risk anything* on the uncertain, one cannot decide anything *on the danger of trespass against the law*. Thus it is not enough for the judge, for example, that he *merely believe* that someone accused of a crime actually committed this crime. He must know it (juridically), or he acts unconscientiously.

III) The only objects that are matters of belief are those in which holding-to-be-true is necessarily free, i.e., is not determined through objective grounds of truth that are independent of the nature and the interest of the subject.

Thus also on account of its merely subjective grounds, believing yields no conviction that can be communicated and that commands universal agreement, like the conviction that comes from knowledge. Only *I myself* can be certain of the validity and unalterability of my practical belief, and my belief in the truth of a proposition or the actuality of a thing is what takes the place of a cognition only in relation to me without itself being a cognition.

He who does not accept what it is *impossible* to know but *morally necessary* to presuppose is morally *unbelieving*. At the basis of this kind of unbelief lies always a lack of moral interest. The greater a man's moral sentiment,[o] the firmer and more lively will be his belief in all that he feels himself necessitated to accept and to presuppose out of moral interest, for practically necessary purposes.

3. *Knowing*. Holding-to-be-true based on a ground of cognition that is objectively as well as subjectively sufficient, or certainty, is either *empirical* or *rational*, accordingly as it is grounded either on *experience* – one's own as well as that communicated by others – or on *reason*. This distinction relates, then, to the two sources from which the whole of our cognition is drawn: *experience* and *reason*.

Rational certainty, again, is either mathematical or philosophical certainty. The former is *intuitive*,[p] the latter *discursive*.

Mathematical certainty is also called *evidence*,[q] because an intuitive cog-
71 nition is clearer than a discursive one. Although the two, mathematical and philosophical cognition of reason, are in themselves equally certain, the certainty is different in kind in them.

[o] "moralische Gesinnung."
[p] "*intuitiv*."
[q] "*Evidenz*."

Empirical certainty is original (*originarie empirica*) insofar as I become certain of something *from my own* experience, and *derived* (*derivative empirica*) insofar as I become certain through *someone else's* experience. The latter is also usually called *historical* certainty.

Rational certainty is distinguished from empirical certainty by the consciousness of *necessity* that is combined with it; hence it is *apodeictic* certainty, while empirical certainty is only *assertoric*. We are rationally certain of that into which we would have had insight *a priori* even without any experience. Hence our cognitions can concern objects of experience and the certainty concerning them can still be both empirical and rational at the same time, namely, insofar as we cognize an empirically certain proposition from principles *a priori*.

We cannot have rational certainty of everything, but where we can have it, we must put it before empirical certainty.

All certainty is either *unmediated* or *mediated*, i.e., it either requires a proof, or it is not capable of and does not require any proof. Even if so much in our cognition is certain only mediately, i.e., through a proof, there must still be something *indemonstrable* or *immediately certain*, and the whole of our cognition must proceed from *immediately certain* propositions.

The proofs on which any mediated or mediate certainty of a cognition rests are either *direct* proofs or *indirect*, i.e., *apagogical* ones. When I prove a truth from its grounds I provide a direct proof for it, and when I infer the truth of a proposition from the falsehood of its opposite I provide an indirect one. If this latter is to have validity, however, the propositions must be opposed *contradictorily* or *diametraliter*. For two propositions opposed only as contraries (*contrarie opposita*) can both be false. A proof that is the ground of mathematical certainty is called a *demonstration*, and that which is the ground of philosophical certainty is called an *acroamatic* proof. The essential parts of any proof in general are its *matter* and its *form*, or the *ground of proof* and the *consequentia*.

From [the German word for] *knowing*[1] comes [the German word for] *science*,[2] by which is to be understood the complex of a cognition as a *system*. It is opposed to *common* cognition, i.e., to the complex of a cognition as *mere aggregate*. A system rests on an idea of the whole, which precedes the parts, while with common cognition on the other hand, or a mere aggregate of cognitions, the parts precede the whole. There are *historical* sciences and sciences *of reason*. 72

In a science we often *know* only the *cognitions* but not the *things repre-*

[1] "*Wissen.*"
[2] "*Wissenschaft.*"

sented through them; hence there can be a science of that of which our cognition is not knowledge.

From the foregoing observations concerning the nature and the kinds of holding-to-be-true we can now draw the universal result that all our conviction is thus either *logical* or *practical*. When we know, namely, that we are free of all subjective grounds and yet the holding-to-be-true is sufficient, then we are *convinced*, and in fact *logically* convinced, or convinced on *objective* grounds (the object is certain).

Complete holding-to-be-true on subjective grounds, which in a *practical relation* hold just as much as objective grounds, is also conviction, though not logical but rather *practical* conviction (*I am certain*). And this practical conviction, or this *moral belief of reason*,[f] is often firmer than all knowledge. With knowledge one still listens to opposed grounds, but not with belief, because here it does not depend on objective grounds but on the moral interest of the subject.*

73 Opposed to conviction stands *persuasion*, a holding-to-be-true on insufficient grounds, of which one does not know whether they are merely subjective or also objective.

Persuasion often precedes conviction. We are conscious of many cognitions only in such a way that we cannot judge whether the grounds of our holding-to-be-true are objective or subjective. To be able to pass from mere persuasion to conviction, then, we must first of all *reflect*, i.e., see to which power of cognition a cognition belongs, and then *investigate*, i.e., test whether the grounds are sufficient or insufficient in regard to the object. Many remain with persuasion. Some come to reflection, few to investigation. He who knows what pertains to certainty will not easily mix up persuasion and conviction, and hence will not let himself be easily

* This practical conviction is thus *moral belief of reason*,[g] which alone can be called a belief in the proper sense and be opposed as such to knowledge and to all theoretical or logical conviction in general, because it can never elevate itself to knowledge. So-called historical belief, on the other hand, as already observed, may not be distinguished from knowledge, since as a kind of theoretical or logical holding-to-be-true it can itself be knowledge. We can accept an empirical truth on the testimony of others with the same certainty as if we had attained it through *facta* of our own experience. In the former kind of empirical knowledge there is something deceptive, but also with the latter kind.

Historical or mediate empirical knowledge rests on the reliability of testimony. The requirements of an irrefutable witness include *authenticity*[h] (competence[i]) and *integrity*.[k]

[f] "*moralische Vernunftglaube*."
[g] "der *moralische Vernunftglaube*."
[h] "*Authenticität*."
[i] "Tüchtigkeit."
[k] "*Integrität*."

persuaded, either. There is a ground of determination to approval, which is composed of objective and subjective grounds, and most men do not analyze[y] this mixed effect.

Although all persuasion is false as to form (*formaliter*), namely, insofar as an uncertain cognition appears here to be certain, it can nonetheless be true as to matter (*materialiter*). And thus it is distinct from opinion, too, which is an uncertain cognition, *insofar as it is held to be uncertain.*

The sufficiency of holding-to-be-true (in belief) can be put to the test by *betting* and by *taking oaths*. For the first *comparative* sufficiency of *objective* grounds is necessary, for the second *absolute* sufficiency, instead of which, if this is not available, a merely subjectively sufficient holding-to-be-true nevertheless holds.

It is customary to use the expressions, *to agree with someone's judgment, to reserve, to defer, or give up one's judgment.* These and similar expressions seem to indicate that there is something arbitrary[z] in our judging, in that we hold something to be true because we want to hold it to be true. The question arises, accordingly, *whether willing has an influence on our judgments.*

The will does not have any influence immediately on holding-to-be-true; this would be quite absurd. When it is said that *we gladly believe what* 74
we wish, this means only our benign wishes, e.g., those of a father for his children. If the will had an immediate influence on our conviction concerning what we wish, we would constantly form for ourselves chimeras of a happy condition, and always hold them to be true, too. But the will cannot struggle *against* convincing proofs of truths that are contrary to its wishes and inclinations.

Insofar as the will either impels the understanding toward inquiry into a truth or holds it back therefrom, however, one must grant it an influence on the *use of the understanding*, and hence mediately on conviction itself, since this depends so much upon the use of the understanding.

As for what concerns in particular the *deferral* or *reservation* of our judgment, however, this consists in the resolution not to let a merely *provisional* judgment become *determining*. A provisional judgment is one in which I represent that while there are more grounds for the truth of a thing than against it, these grounds still do not suffice for a *determining* or *definitive* judgment, through which I simply decide for the truth. Provisional judging is thus merely problematic judging with consciousness.

Reservation of judgment can happen for two purposes: *either* in order to seek for the grounds of the determining judgment, *or* in order *never* to

[y] "setzen . . . nicht aus einander."
[z] "etwas Willkürliches."

judge. In the former case the deferral of judgment is called *critical* (*suspensio judicii indagatoria*), in the latter *skeptical* (*suspensio judicii sceptica*). For the skeptic refrains from all judgment, while the true philosopher merely suspends his judgment in case he does not yet have sufficient grounds for holding something to be true.

To suspend one's judgment *in accordance with maxims* requires a practiced faculty of judgment, which is found only in advancing age. In general, reservation of our approval is a very hard thing, partly because our understanding is so desirous of expanding itself and enriching itself with cognitions[a] by judging, partly because our inclination is always directed more toward certain things than toward others. He who has often had to retract his approval, however, and who has thereby become smart and
75 cautious, will not give it so quickly, out of fear of having subsequently to retract his judgment again. This *revocation* is always mortifying and causes one to mistrust all other cognitions.[b]

We observe here further that leaving one's judgment *in dubio* is something different from leaving it *in suspenso*. In the latter case I always have an interest in the thing, in the former it is not always in conformity with my end and interest to decide whether the thing is true or not.

Provisional judgments are quite necessary, indeed, indispensable, for the use of the understanding in all meditation and investigation. For they serve to guide the understanding in its inquiries and to provide it with various means thereto.

When we meditate concerning an object, we must always judge provisionally and, as it were, get the scent of the cognition that is partly to come to us through the meditation. And when we go after inventions or discoveries, we must always make a provisional plan, otherwise our thoughts go on at random. We can think of provisional judgments, therefore, as *maxims* for the investigation of a thing. We could also call them *anticipations*, because we anticipate our judgment of a thing even before we have the determining judgment. Judgments of this sort have their good use, then, and rules can even be given for how we ought to judge provisionally concerning an object.

Prejudices must be distinguished from provisional judgments.

Prejudices are provisional judgments *insofar as they are accepted as principles*. Every prejudice is to be regarded as a principle of erroneous judgments, and from prejudices arise not prejudices, but rather erroneous judgments. Hence one must distinguish the false cognition that arises from prejudice from its source, the prejudice itself. Thus the interpreta-

[a] "Kenntnissen."
[b] "Kenntnisse."

tion of dreams, for example, is not in itself a prejudice, but rather an error, which arises from the assumed universal rule that what happens a few times happens always, or is always to be held to be true. And this principle, under which the interpretation of dreams belongs, is a prejudice.

Sometimes prejudices are true provisional judgments; what is wrong is only that they hold for us as principles or as *determining* judgments. The 76
cause of this deception is to be sought in the fact that subjective grounds are falsely held to be objective, *due to a lack of reflection*, which must precede all judging. For even if we can accept some cognitions, e.g., immediately certain propositions, without *investigating* them, i.e., without examining the conditions of their truth, we still cannot and may not judge concerning anything without *reflecting*, i.e., without comparing a cognition with the power of cognition from which it is supposed to arise (sensibility or the understanding). If we accept judgments without this reflection, which is necessary even where no investigation occurs, then from this prejudices arise, or principles for judging based on subjective causes that are falsely held to be objective grounds.

The principal sources of prejudices are: *imitation*, *custom*, and *inclination*.

Imitation has a universal influence on our judgments, for there is a strong ground for holding to be true what others have put forth as true. Hence the prejudice that what the whole world does is right. As for what concerns prejudices that have arisen from custom, they can only be rooted out in the course of time, as the understanding, having little by little been held up and slowed down in judging by opposing grounds, is thereby gradually brought to an opposite mode of thought. If a prejudice of custom has arisen at the same time from imitation, however, then the man who possesses it is very hard to cure. The *inclination toward passive use of reason*, or *toward the mechanism of reason rather than toward its spontaneity under laws*, can also be called a prejudice of imitation.

Reason is an active principle, to be sure, which ought not to derive anything from the mere authority of others, nor even, when its *pure* use is concerned, from experience. But the indolence of many men is such that they prefer to follow in the footsteps of others rather than strain their own powers of understanding. Men of this sort can only be copies of others, and if everyone were of this kind, the world would remain eternally in one and the same place. Hence it is most necessary and important not to confine youths to mere imitation, as customarily happens.

There are so many things that contribute to accustoming us to the maxim of imitation, and thereby to making reason a fruitful ground of 77
prejudices. Such aids to imitation include:

1. *Formulas.*[c] These are rules whose expression serves as a model for imitation. They are uncommonly useful, by the way, for making complicated proposi-

[c] "*Formeln.*"

tions easier, and the most enlightened mind therefore seeks to discover such things.

2. *Sayings*,[d] whose expression has the great precision of pregnant meaning, so that it seems one could not capture the sense with fewer words. Pronouncements of this sort (*dicta*$_{L}$), which must always be borrowed from others whom one trusts to have a certain infallibility, serve, on account of this authority, as rules and as laws. The pronouncements of the bible are called sayings κατ' ἐξοχήν.[e]
3. *Sentences*,[f] i.e., propositions which recommend themselves and which, through the force of the thoughts lying within them, often retain their prestige through centuries as products of a mature power of judgment.
4. *Canones*. These are universal rules[g] that serve as foundations for the sciences and indicate something sublime and thought through. One can express them in a sententious way, too, so that they are the more pleasing.
5. *Proverbs*[h] (*proverbia*). These are popular rules of the common understanding, or expressions for signifying its popular judgments. Since provincial propositions of this sort serve only the common crowd as sentences and canons, they are not to be found among people of finer upbringing.

From the three universal sources of prejudices stated above, and from imitation in particular, many particular prejudices arise, among which we wish to touch here upon the following as the most common.

1. *Prejudices of prestige.* Among these are to be reckoned:

a) The *prejudice of the prestige of the person*. If, in things that rest on experience and on testimony, we build our cognition on the prestige of other persons, we are not thereby guilty of any prejudice; for in matters of
78 this kind, since we cannot experience everything ourselves and comprehend it with our own understanding, the prestige of the person must be the foundation of our judgments. When we make the prestige of others the ground of our holding-to-be-true in respect of cognitions of reason, however, we accept these cognitions merely on the basis of prejudice. For truths of reason hold anonymously; the question here is not, *Who* said it? but rather, *What* did he say? It does not matter at all whether a cognition is of noble descent; but the inclination toward the prestige of great men is nonetheless very common, partly because of the restrictedness of our own insight, partly due to a desire to imitate what is described to us as *great*. Added to this is the fact that the prestige of the person serves to flatter our vanity in an indirect way. Just as the subjects of a powerful despot are proud of the fact that they are all just treated *equally* by him, since to this

[d] "*Sprüche.*"
[e] par excellence.
[f] "*Sentenzen.*"
[g] "Lehrsprüche."
[h] "*Sprüchwörter.*"

extent the least can fancy himself the equal of the foremost, as they are both nothing over against the unrestricted power of their ruler, so too do the admirers of a great man judge themselves to be equal, insofar as the superiorities that they may have compared to one another are to be regarded as insignificant when considered against the merit of the great man. For more than one reason, therefore, highly prized great men contribute not a little to the inclination toward the prejudice of the prestige of the person.

b) The *prejudice of the prestige of the multitude.* It is principally the *crowd* who are inclined to this prejudice. For since they are unable to pass judgment on the merits, the capabilities, and the cognitions[i] of the person, they hold rather to the judgment of the multitude, under the presupposition that what everyone says must surely be true. This prejudice among the vulgar relates only to historical matters, however; in matters of religion, where they are themselves interested, they rely on the judgment of the learned.

It is in general noteworthy that the ignorant man has a prejudice for learnedness, while the learned man, on the other hand, has a prejudice for the common understanding.

If, after a learned man has nearly run the course of the sciences, he does not procure appropriate satisfaction from all his efforts, he finally acquires a mistrust of learnedness, especially in regard to those specula- 79
tions where the concepts cannot be made sensible, and whose foundations are unsettled, as, e.g., in metaphysics. Since he still believes, however, that it must be possible to find the key to certainty concerning certain objects somewhere, he seeks it now in the common understanding, after he had sought it so long in vain on the path of scientific inquiry.

But this hope is quite deceptive, for if the cultivated faculty of reason can accomplish nothing in respect to the cognition of certain things, the uncultivated faculty will certainly do so just as little. In metaphysics the appeal to pronouncements of the common understanding is completely inadmissible, because here no case can be exhibited *in concreto*. With morals, however, the situation is admittedly different. Not only can all rules in morals be given *in concreto*, but practical reason even manifests itself in general more clearly and more correctly through the organ of the common use of the understanding than through that of its speculative use. Hence the common understanding often judges more correctly concerning matters of morality and duty than does the speculative.

c) The *prejudice of the prestige of the age.* Here the prejudice of *antiquity* is one of the most significant. We do have reason to judge kindly of antiquity, to be sure, but that is only a ground for moderate respect, whose limits we all too often overstep by treating the ancients as treasurers of cognitions

[i] "Kenntnisse."

and of sciences, elevating the *relative* worth of their writings to an *absolute* one and trusting blindly to their guidance. To esteem the ancients so excessively is to lead the understanding back into its childhood and to neglect the use of one's own talent. We would also err greatly if we believed that everyone in antiquity had written as classically as those whose writings have come down to us. For since time sifts everything and preserves only what has an inner worth, we may assume, not without reason, that we only possess the best writings of the ancients.

There are several *causes* by which the prejudice of antiquity is created and sustained.

80 If something exceeds expectation as a universal rule, one initially *wonders* at this, and this wonder then often turns to admiration. This is the case with the ancients when one finds something in them that, in respect of the circumstances of time in which they lived, one did not seek. Another cause lies in the circumstance that acquaintance with the ancients and with antiquity proves learnedness and wide reading, which always brings respect, however common and insignificant in themselves the things may be that one has drawn from the study of the ancients. A third cause is the gratitude we owe to the ancients for the fact that they blazed the path toward many cognitions.[j] It seems fair to show them special esteem, whose measure we often overstep, however. A fourth cause, finally, is to be sought in a certain *envy* toward our contemporaries. He who cannot contend with the moderns extols the ancients at their expense, so that the moderns cannot raise themselves above him.

The opposite of this is the prejudice of *modernity*. Sometimes the prestige of antiquity and the prejudice in its favor declined, particularly at the beginning of this century, when the famous Fontenelle[17] took the side of the moderns. In the case of cognitions that are capable of extension, it is quite natural that we place more trust in the moderns than in the ancients. But this judgment has ground only as a mere provisional judgment. If we make it a determining one, it becomes a prejudice.

2. *Prejudices based on self-love* or *logical egoism*, in accordance with which one holds the agreement of one's own judgment with the judgments of others to be a dispensable criterion of truth. They are opposed to the prejudices of prestige, since they express themselves in a certain preference for that which is the product of one's own understanding, e.g., one's own system.

Is it good and advisable to let prejudices stand or even to encourage them? It
81 is astonishing that in our age such questions can still be advanced, especially that concerning the encouragement of prejudices. Encouraging some-

[j] "Kenntnissen."

one's prejudices amounts to deceiving someone with good intent. It would be permissible to leave prejudices untouched, for who can occupy himself with exposing and getting rid of every prejudice? But it is another question whether it would not be advisable to work toward rooting them out with all one's powers. Old and rooted prejudices are admittedly hard to battle, because they justify themselves and are, as it were, their own judges. People also seek to excuse letting prejudices stand on the ground that disadvantages would arise from rooting them out. But let us always accept these disadvantages; they will subsequently bring all the more good.

X.

Probability – Explanation of the probable – Distinction between probability and plausibility – Mathematical and philosophical probability – Doubt – Subjective and objective doubt – Skeptical, dogmatic, and critical mode of thought or method of philosophizing – Hypotheses

To the doctrine concerning the certainty of our cognition pertains also the doctrine of the cognition of the probable, which is to be regarded as an approximation to certainty.

By probability is to be understood a holding-to-be-true based on insufficient grounds which have, however, a greater relation to the sufficient grounds than do the grounds of the opposite. By this explanation we distinguish probability[k] (*probabilitas*) from mere *plausibility*[l] (*verisimilitudo*), a holding-to-be-true based on insufficient grounds insofar as these are greater than the grounds of the opposite.

The ground of holding-to-be-true, that is, can be either *objectively* or *subjectively* greater than that of the opposite. Which of the two it is one can only discover by comparing the grounds of the holding-to-be-true with the sufficient grounds; for then the grounds of the holding-to-be-true are greater than the grounds of the opposite *can be*. With probability, then, the 82
ground of the holding-to-be-true is *objectively valid*, while with mere plausibility it is only *subjectively valid*. Plausibility is merely quantity of persuasion, probability is an approximation to certainty. With probability there must always exist a standard in accordance with which I can estimate it. This standard is *certainty*. For since I am supposed to compare the insufficient grounds with the sufficient ones, I must know how much pertains to certainty. Such a standard is lacking, however, with mere plausibility, since here I do not compare the insufficient grounds with the sufficient ones, but only with the grounds of the opposite.

[k] "Wahrscheinlichkeit."
[l] "*Scheinbarkeit*."