§ 10. The origin of dualism in the prevailing exemplary role of natural science.

The rationality of the world more geometrico.

ONE BASIC ELEMENT of the novel conception of nature has yet to be brought to the fore. In his view of the world from the perspective of geometry, the perspective of what appears to the senses and is mathematizable, Galileo abstracts from the subjects as persons leading a personal life; he abstracts from all that is in any way spiritual, from all cultural properties which are attached to things in human praxis. The result of this abstraction is the things purely as bodies; but these are taken as concrete real objects, the totality of which makes up a world which becomes the subject matter of research. One can truly say that the idea of nature as a really self-enclosed world of bodies first emerges with Galileo. A consequence of this, along with mathematization, which was too quickly taken for granted, is [the idea of] a self-enclosed natural causality in which every occurrence is determined unequivocally and in advance. Clearly the way is thus prepared for dualism, which appears immediately afterward in Descartes.

In general we must realize that the conception of the new idea of "nature" as an encapsuled, really and theoretically self-enclosed world of bodies soon brings about a complete transformation of the idea of the world in general. The world splits, so to speak, into two worlds: nature and the psychic world, although the latter, because of the way in which it is related to nature, does not achieve the status of an independent world. The ancients had individual investigations and theories about bodies, but not a closed world of bodies as subject matter of a universal science of nature. They also had investigations of the human and the animal soul, but they could not have a psychology in the modern sense, a psychology which, because it had universal nature and a science of nature before it [as a model], could strive for a corresponding universality, i.e., within a similarly self-enclosed field of its own.

The splitting of the world and the transformation of its meaning were the understandable consequences of the exemplary role of natural-scientific method—or, to put it another

way, natural-scientific rationality—a role which was indeed guite unavoidable at the beginning of the modern period. Implied in the mathematization of nature, as the idea and the task were understood, was the supposition of the coexistence of the infinite totality of its bodies in space-time as mathematically rational; though natural science, as inductive, could have only inductive access to interconnections which, in themselves, are mathematical. In any case, natural science possessed the highest rationality because it was guided by pure mathematics and achieved, through inductions, mathematical results. Should this not become the model of all genuine knowledge? Should knowledge, if it is to attain the status of a genuine science which goes beyond nature, not follow the example of natural science or, even better, that of pure mathematics, insofar as we have, perhaps, in other spheres of knowledge, the "innate" faculty of apodictic self-evidence through axioms and deductions? It is no wonder that we already find the idea of a universal mathematics in Descartes. Of course the weight of the theoretical and practical successes [of science], beginning immediately with Galileo, had its effect. Thus the world and, correlatively, philosophy, take on a completely new appearance. The world must, in itself, be a rational world, in the new sense of rationality taken from mathematics, or mathematized nature; correspondingly, philosophy, the universal science of the world, must be built up as a unified rational theory more geometrico.

§ 11. Dualism as the reason for the incomprehensibility of the problems of reason; as presupposition for the specialization of the sciences; as the foundation of naturalistic psychology.

OF COURSE, if scientifically rational nature is a world of bodies existing in itself—which was taken for granted in the given historical situation—then the world-in-itself must, in a sense unknown before, be a peculiarly split world, split into nature-in-itself and a mode of being which is different from this: that which exists psychically. At first this was to introduce con-

62

siderable difficulties, even in respect to the idea of God coming from religion, an idea which had by no means been given up. Was God not unavoidable as the principle of rationality? Does not rational being, even [merely] as nature, in order to be thinkable at all, presuppose rational theory and a subjectivity which accomplishes it? Does not nature, then, indeed the world-in-it-self, presuppose God as reason existing absolutely? Does this not mean that, within being-in-itself, psychic being takes precedence as subjectivity existing purely for itself? It is, after all, subjectivity, whether divine or human.

In general, the separating-off of the psychic caused greater and greater difficulties whenever problems of reason made themselves felt. Of course it was only later that these difficulties became so pressing that they became the central theme of philosophy, in the great investigations on human understanding, in "critiques of reason." But the power of rationalistic motives was as yet unbroken; everywhere men proceeded, full of confidence, to carry through the rationalistic philosophy on all fronts. And they were not without success in acquiring undoubtedly valuable knowledge; even if this knowledge did "not yet" correspond to the ideal, it could be interpreted as a preliminary stage. Every establishment of a special science was now eo ipso guided by the idea of a rational theory, or of a rational domain, corresponding to it. The specialization of philosophy into particular sciences accordingly has a deeper meaning, one exclusively related to the modern attitude. The specializations of ancient scientists could not result in particular sciences in our sense. Galileo's natural science did not arise through a specialization. It was only the subsequent new sciences which by contrast specialized the idea of a rational philosophy motivated by the new natural science; it was from this idea that they received the momentum to make progress and conquer new domains, rationally closed special regions within the rational totality of the universe.

Naturally, as soon as Descartes had proclaimed the idea of a rational philosophy and the division of nature and spirit, a new psychology was an immediate requirement, and it already made its appearance in Descartes's contemporary, Hobbes. It was, as we have already indicated, a psychology of a sort completely unknown to earlier times, designed concretely as a psychophysical anthropology in the rationalistic spirit.

One should not be misled by the usual contrast between empiricism and rationalism. The naturalism of a Hobbes wants to be physicalism, and like all physicalism it follows the model of physical rationality.*

This is also true of the other sciences of the modern period, the biological, etc. The dualistic split, the consequence of the physicalistic conception of nature, brings about in them a development in the form of split disciplines. The biophysical sciences, those which at first concentrate, in a one-sided fashion, purely on what pertains to the physical body, still find it necessary to begin by grasping the concrete entities descriptively, analyzing and classifying them intuitively; but the physicalistic view of nature makes it obvious that a further-developed physics would in the end "explain" all these concrete entities in a physicalistically rational way. Thus the flourishing of the biophysical-descriptive sciences, especially in view of their occasional use of knowledge taken from physics, is considered a success of the scientific method, always interpreted in the sense of physics.

In regard to the soul, on the other hand, which is left over after the animal and the human bodies have been separated off as belonging inside the closed region of nature: here the exemplary role of physics' conception of nature, and of the scientific method, has the understandable effect-this since the time of Hobbes—that a type of being is ascribed to the soul which is similar in principle to that of nature; and to psychology is ascribed a progression from description to ultimate theoretical "explanation" similar to that of biophysics. This notwithstanding the Cartesian doctrine that bodily and psychic "substance" are separated by radically different attributes. This naturalization of the psychic comes down through John Locke to the whole modern period up to the present day. Locke's image of the white paper 1 is characteristic—the tabula rasa on which psychic data come and go, somehow ordered like the events of bodies in nature. This novel, physicalistically oriented naturalism is, in Locke, not yet consistently worked out, not thought through to the end as positivistic sensationalism. But it spreads rapidly, and in a way which is fateful for the historical development of all

^{*} When I use the term "physicalism," here and elsewhere, I use it exclusively in the general sense which is understood throughout the course of our own investigations, i.e., to stand for philosophical errors resulting from misinterpretations of the true meaning of modern physics. Thus the word does not refer here specifically to the "physicalistic movement" ("Vienna Circle," "logical empiricism").

^{1.} Husserl uses the English term.

philosophy. In any case, the new naturalistic psychology was from the beginning more than an empty promise; it enters the stage impressively, in great writings, claiming to give the lasting formulation of a universal science.

Borne by the same spirit, all the new sciences seem to succeed, even the highest, metaphysics. Where physicalistic rationalism could not be carried through in earnest, as precisely in the case of metaphysics, aid was sought in unclear qualifications, through the use of variations of Scholastic concepts. For the most part, in fact, the guiding sense of the new rationality was not precisely thought out, even though it was the driving force behind the movements. Its explication in more precise terms was itself a part of philosophy's intellectual labor up to the time of Liebniz and Christian Wolff. In Spinoza's *Ethica* we have a classical example of how the new naturalistic rationalism thought itself capable of creating ordine geometrico a systematic philosophy—metaphysics, a science of the ultimate and highest questions, questions of reason, but also questions of fact.

One must, of course, correctly understand Spinoza's historical meaning. It is a complete misunderstanding to interpret Spinoza according to what is visible on the surface of his "geometrical" method of demonstration. Beginning as a Cartesian, he is at first, of course, completely convinced that not only nature but the totality of being as such must be a coherent rational system. That was taken for granted in advance. The mathematical system of nature must be enclosed in the total system-but, as part of a system, the former cannot be self-sufficient. One cannot leave physics to the physicists as if it were truly a complete system and then entrust to psychological specialists the task of developing a rational system proper to the psychological arm of the dualism. God, the absolute substance, would also have to belong within the unity of the rational total system as a subject for theory. Spinoza is confronted with the task of discovering the postulated rational total system of what is-discovering first of all the conditions of its being thought in coherent fashion-and then of systematically realizing it through actual construction. It is only thus, through the deed, that the actual conceivability of a rational totality of being is established. Prior to this, in spite of the self-evidence this attitude found in the exemplary character of natural science, it was only a postulate; for the dualism of radically different "substances," with the one absolute and most real substance above them, the possibility of its being thought through was not at all clear. Of course, Spinoza

was interested only in what was systematically general—his *Ethica* is the first universal ontology. Through it, he believed, the actual systematic meaning of existing natural science could be obtained, together with that of the psychology which was to be similarly constructed as a parallel to it. Without this meaning both remain incomprehensible.

• § 12. Over-all characterization of modern physicalistic rationalism.

PHILOSOPHY IN ITS ancient origins wanted to be "science," universal knowledge of the universe of what is; it wanted to be not vague and relative everyday knowledge—δόξα but rational knowledge—ἐπιστήμη. But the true idea of rationality, and in connection with that the true idea of universal science, was not yet attained in ancient philosophy-such was the conviction of the founders of the modern age. The new ideal was possible only according to the model of the newly formed mathematics and natural science. It proved its possibility in the inspiring pace of its realization. What is the universal science of this new idea but—thought of as ideally completed—omniscience? This, then, is for philosophy truly a realizable, though infinitely distant, goal-not for the individual or a given community of researchers but certainly for the infinite progression of the generations and their systematic researches. The world is in itself a rational systematic unity-this is thought to be a matter of apodictic insight-in which each and every singular detail must be rationally determined. Its systematic form (the universal structure of its essence) can be attained, is indeed known and ready for us in advance, at least insofar as it is purely mathematical. Only its particularity remains to be determined; and unfortunately this is possible only through induction. This is the path infinite, to be sure—to omniscience. Thus one lives in the happy certainty of a path leading forth from the near to the distant, from the more or less known into the unknown, as an infallible method of broadening knowledge, through which truly all of the totality of what is will be known as it is "in-itself"-in an infinite progression. To this always belongs another progression: that of approximating what is given sensibly and intuitively in the surrounding life-world to the mathematically ideal, i.e., the perfecting of the always merely approximate "subsumptions" of empirical data under the ideal concepts pertaining to them. This involves the development of a methodology, the refinement of measurements, the growing efficiency of instruments, etc.

Along with his growing, more and more perfect cognitive power over the universe, man also gains an ever more perfect mastery over his practical surrounding world, one which expands in an unending progression. This also involves a mastery over mankind as belonging to the real surrounding world, i.e., mastery over himself and his fellow man, an ever greater power over his fate, and thus an ever fuller "happiness" -- "happiness" as rationally conceivable for man. For he can also know what is true in itself about values and goods. All this lies within the horizon of this rationalism as its obvious consequence for man. Man is thus truly an image of God. In a sense analogous to that in which mathematics speaks of infinitely distant points, straight lines, etc., one can say metaphorically that God is the "infinitely distant man." For the philosopher, in correlation with his mathematization of the world and of philosophy, has in a certain sense mathematically idealized himself and, at the same time, God.

There is no doubt that the new ideal of the universality and rationality of knowledge entails an enormous advance in the area in which it began, mathematics and physics-provided, of course, in accord with our earlier analysis, that it is brought to a correct understanding of itself and is kept free of all transformations of meaning. Is there in the history of the world anything more worthy of philosophical wonder than the discovery of infinite totalities of truth, realizable in infinite progress either purely (in pure mathematics) or in approximations (in inductive natural science)? Is it not almost a miracle, what was actually accomplished and continued to grow? The purely theoretical-technical accomplishment is a miracle, even if, through a transformation of meaning, it is taken for science itself. It is something else to ask how far the exemplary character of these sciences should be stretched and whether the philosophical reflections, which were said to be responsible for the new conceptions of the world and of world sciences, were at all adequate.

How little that was the case, even in respect to nature, was demonstrated (though only in most recent times) by the weakening of the firm belief that all natural science was ultimately physics—that the biological and all the concrete sciences of nature would, in the advance of their researches, resolve themselves more and more into physics. This belief was so weakened, in fact, that these sciences found it necessary to undertake reforms of method. Of course this did not take place on the basis of a fundamental revision of the ideas which originally established modern natural science and which became depleted in the process of becoming method.

§ 13. The first difficulties of physicalistic naturalism in psychology: the incomprehensibility of functioning subjectivity.

YET MUCH EARLIER than this, the dubious character of the mathematization of the world, or rather of the rationalization unclearly imitating it-philosophy ordine geometricomade itself felt in the new naturalistic psychology. Its domain included, after all, the rational knowing activity and the knowledge of the philosophers, mathematicians, scientists of nature, etc., the activity in which the new theories developed as its intellectual constructions and which, as such, bore within itself the ultimate truth-meaning of the world. This caused such difficulties that in the case of Berkeley and Hume a paradoxical skepticism developed, one that was felt to be nonsense but was not properly understood [as such]. This directed itself at first precisely against the models of rationality, mathematics and physics, and even tried to invalidate their basic concepts, indeed even the sense of their domains (mathematical space, material nature) by calling them psychological fictions. In the case of Hume this skepticism was carried through to the end, to the uprooting of the whole ideal of philosophy, the whole manner in which the new sciences were scientific. Not only the modern philosophical ideal was affected-and this is of great significance-but the entire philosophy of the past, the very formulation of the task of philosophy as universal objective science. A paradoxical situation! Highly successful accomplishments, daily growing more numerous, at least in a large number of new sciences, were at hand. Those working in these sciences, and

those carefully following and understanding them, experienced a kind of self-evidence neither they nor anyone could ignore. And yet this whole accomplishment, this very self-evidence, had become completely incomprehensible through a certain new way of looking at it, from the viewpoint of psychology, in whose domain the accomplishing activity took place. Even more than this: not only the new sciences and their world, the world interpreted as rational, were affected, but also everyday world-consciousness and world-life, the prescientific world in the everyday sense, the world within whose obvious validity of being the activities and dealings of men untouched by science take place—the world which is ultimately also that of the scientist, and not merely when he returns to everyday praxis.

[Even] the most radical skepticism of earlier times did not focus its attack on this world but only pointed to its relativity, in order to negate $\frac{1}{6}\pi \iota \sigma \tau \dot{\eta} \mu \eta$ and the world-in-itself substructed through it by philosophy. This was [the extent of] its agnosticism.

Thus world-enigmas now enter the stage, of a sort previously never imagined, and they bring about a completely new manner of philosophizing, the "epistemological" philosophy, that of the "theory of reason." Soon they also give rise to systematic philosophies with completely novel goals and methods. This greatest of all revolutions must be characterized as the transformation of scientific objectivism—not only modern objectivism but also that of all the earlier philosophies of the millennia—into a transcendental subjectivism.

§ 14 Precursory characterization of objectivism and transcendentalism. The struggle between these two ideas as the sense of modern spiritual history.

What Characterizes objectivism is that it moves upon the ground of the world which is pregiven, taken for granted through experience, seeks the "objective truth" of this world, seeks what, in this world, is unconditionally valid for every rational being, what it is in itself. It is the task of epistēmē,

ratio, or philosophy to carry this out universally. Through these one arrives at what ultimately is; beyond this, no further questions would have a rational sense.

Transcendentalism, on the other hand, says: the ontic meaning [Seinssinn] of the pregiven life-world is a subjective structure [Gebilde], it is the achievement of experiencing, prescientific life. In this life the meaning and the ontic validity [Seinsgeltung] of the world are built up-of that particular world, that is, which is actually valid for the individual experiencer. As for the "objectively true" world, the world of science, it is a structure at a higher level, built on prescientific experiencing and thinking, or rather on its accomplishments of validity [Geltungsleistungen]. Only a radical inquiry back into subjectivity-and specifically the subjectivity which ultimately brings about all world-validity, with its content and in all its prescientific and scientific modes, and into the "what" and the "how" of the rational accomplishments-can make objective truth comprehensible and arrive at the ultimate ontic meaning of the world. Thus it is not the being of the world as unquestioned, taken for granted, which is primary in itself; and one has not merely to ask what belongs to it objectively; rather, what is primary in itself is subjectivity, understood as that which naïvely pregives 2 the being of the world and then rationalizes or (what is the same thing) objectifies it.

Yet already one is threatened with absurdity here. For it first appears obvious that this subjectivity is man, i.e., psychological subjectivity. Mature transcendentalism protests against psychological idealism and, questioning objective science as philosophy, claims to have initiated a completely new sort of scientific procedure, the transcendental. Past philosophy had not even the slightest conception of a subjectivism in this transcendental style. Effective motives for the appropriate change of attitude were lacking, although such a change might have been conceivable from the direction of ancient skepticism, precisely through its anthropologistic relativism.

 vorgibt. A peculiarly Husserlian twist: that which is (pre)given is (pre)given by subjectivity through its meaning-bestowing acts.

^{1.} Husserl probably means to include Hume under transcendentalism, as is his usual practice. This sentence would not strictly apply to Kant, according to Husserl (cf. § 28, below), since Kant's transcendentalism did not penetrate to the role of the pregiven life-world in subjective life. In this sense Hume was for Husserl the more radical transcendental philosopher.

The whole history of philosophy since the appearance of "epistemology" and the serious attempts at a transcendental philosophy is a history of tremendous tensions between objectivistic and transcendental philosophy. It is a history of constant attempts to maintain objectivism and to develop it in a new form and, on the other side, of attempts by transcendentalism to overcome the difficulties entailed by the idea of transcendental subjectivity and the method it requires. The clarification of the origin of this internal split in the philosophical development, the analysis of the ultimate motives for this most radical transformation of the idea of philosophy, is of the utmost importance. It affords the first insight into the thoroughgoing meaningfulness [Sinnhaftigkeit] which unifies the whole movement of philosophical history in the modern period: a unity of purpose binding generations of philosophers together, and through this a direction for all the efforts of individual subjects and schools. It is a direction, as I shall try to show here, toward a final form of transcendental philosophy-as phenomenology. This also contains, as a suspended moment [aufgehobenes Moment], the final form of psychology which uproots the naturalistic sense of modern psychology.

§ 15. Reflection on the method of our historical manner of investigation.

The type of investigation that we must carry out, and which has already determined the style of our preparatory suggestions, is not that of a historical investigation in the usual sense. Our task is to make comprehensible the teleology in the historical becoming of philosophy, especially modern philosophy, and at the same time to achieve clarity about ourselves, who are the bearers of this teleology, who take part in carrying it out through our personal intentions. We are attempting to elicit and understand the unity running through all the [philosophical] projects of history that oppose one another and work together in their changing forms. In a constant critique, which always regards the total historical complex as a personal one, we are attempting ultimately to discern the historical task which we can acknowledge as the only one which is personally our own. This

we seek to discern not from the outside, from facts, as if the temporal becoming in which we ourselves have evolved were merely an external causal series. Rather, we seek to discern it from the inside. Only in this way can we, who not only have a spiritual heritage but have become what we are thoroughly and exclusively in a historical-spiritual manner, have a task which is truly our own. We obtain it not through the critique of some present or handed-down system, of some scientific or prescientific "Weltanschauung" (which might as well be Chinese, in the end), but only through a critical understanding of the total unity of history -our history. For it has spiritual unity through the unity and driving force of the task which, in the historical process-in the thinking of those who philosophize for one another and with one another across time-seeks to move through the various stages of obscurity toward satisfying clarity until it finally works its way through to perfect insight. Then the task stands before us not merely as factually required but as a task assigned to us, the present-day philosophers. For we are what we are as functionaries of modern philosophical humanity; we are heirs and cobearers of the direction of the will which pervades this humanity; we have become this through a primal establishment which is at once a reestablishment [Nachstiftung] and a modification of the Greek primal establishment. In the latter lies the teleological beginning, the true birth of the European spirit as such.

This manner of clarifying history by inquiring back into the primal establishment of the goals which bind together the chain of future generations, insofar as these goals live on in sedimented forms yet can be reawakened again and again and, in their new vitality, be criticized; this manner of inquiring back into the ways in which surviving goals repeatedly bring with them ever new attempts to reach new goals, whose unsatisfactory character again and again necessitates their clarification, their improvement, their more or less radical reshaping-this, I say, is nothing other than the philosopher's genuine self-reflection on what he is truly seeking, on what is in him as a will coming from the will and as the will of his spiritual forefathers. It is to make vital again, in its concealed historical meaning, the sedimented conceptual system which, as taken for granted, serves as the ground of his private and nonhistorical work. It is to carry forward, through his own self-reflection, the self-reflection of his forebears and thus not only to reawaken the chain of thinkers, the social interrelation of their thinking, the community of their thought, and transform it into a living present for

us but, on the basis of the total unity thus made present, to carry out a responsible critique, a peculiar sort of critique which has its ground in these historical, personal projects, partial fulfillments, and exchanges of criticism rather than in what is privately taken for granted by the present philosopher. If he is to be one who thinks for himself [Selbstdenker], an autonomous philosopher with the will to liberate himself from all prejudices, he must have the insight that all the things he takes for granted are prejudices, that all prejudices are obscurities arising out of a sedimentation of tradition—not merely judgments whose truth is as yet undecided 1—and that this is true even of the great task and idea which is called "philosophy." All judgments which count as philosophical are related back to this task, this idea.

A historical, backward reflection of the sort under discussion is thus actually the deepest kind of self-reflection aimed at a self-understanding in terms of what we are truly seeking as the historical beings we are. Self-reflection serves in arriving at a decision; and here this naturally means immediately carrying on with the task which is most truly ours and which has now been clarified and understood through this historical self-reflection, the task set for us all in the present.

But to every primal establishment [Urstiftung] essentially belongs a final establishment [Endstiftung] assigned as a task to the historical process. This final establishment is accomplished when the task is brought to consummate clarity and thus to an apodictic method which, in every step of achievement, is a constant avenue to new steps having the character of absolute success, i.e., the character of apodictic steps. At this point philosophy, as an infinite task, would have arrived at its apodictic beginning, its horizon of apodictic forward movement. (It would, of course, be completely wrong to confuse the sense of the apodictic which is indicated here, and which is the most fundamental sense, with the usual sense taken from traditional mathematics.)

But we must be warned of a misunderstanding: Every historical philosopher performs his self-reflections, carries on his dealings with the philosophers of his present and past. He expresses himself about all this, fixes through these confrontations his own position, and thus creates a self-understanding of his own deeds in accord with the way his published theories have grown up within him in the consciousness of what he was striving for.

I.e., pre-judices (Vor-Urteile) in the literal sense.

But no matter how precisely we may be informed, through historical research, about such "self-interpretations" (even about those of a whole series of philosophers), we learn nothing in this way about what, through all these philosophers, "the point of it" ultimately was, in the hidden unity of intentional inwardness which alone constitutes the unity of history. Only in the final establishment is this revealed; only through it can the unified directedness of all philosophies and philosophers open up. From here elucidation can be attained which enables us to understand past thinkers in a way that they could never have understood themselves.

This makes it clear that the peculiar truth of such a "teleological consideration of history" can never be decisively refuted by citing the documented "personal testimony" of earlier philosophers. This truth is established only in the self-evidence of a critical over-all view which brings to light, behind the "historical facts" of documented philosophical theories and their apparent oppositions and parallels, a meaningful, final harmony.

§ 16. Descartes as the primal founder not only of the modern idea of objectivistic rationalism but also of the transcendental motif which explodes it.

WE SHALL NOW BEGIN actually to carry out the clarification of the unifying sense of the modern philosophical movements. Here the particular role assigned to the development of the new psychology will soon become evident. To this end we must go back to the primally founding genius of all modern philosophy, Descartes. After Galileo had carried out, slightly earlier, the primal establishment of the new natural science, it was Descartes who conceived and at the same time set in systematic motion the new idea of universal philosophy: in the sense of mathematical or, better expressed, physicalistic, rationalism—philosophy as "universal mathematics." And immediately it had a powerful effect.

This does not mean, then (in accord with our exposition above), that he had fully and systematically thought out this

idea in advance, much less that his contemporaries and successors, constantly guided by it in the sciences, had it in mind in explicit form. For this it would have been necessary to have the higher systematic development of pure mathematics under the new idea of universality which appears in its first, relative maturity in Leibniz (as mathesis universalis) and which is now, in more mature form, still a subject of lively research as the mathematics of definite manifolds. Like all historical ideas that result in great developments, those in the new mathematics, the new natural science, and the new philosophy live in very diverse noetic modes in the consciousness of the persons who function as the bearers of their development: sometimes they strive forward like instincts, without these persons having any ability to give an account of where they are going; sometimes they are the results of a more or less clear realization, as plainly and simply grasped goals, possibly crystallizing into ever more precise goals through repeated consideration. On the other hand, there are modes in which these ideas become leveled down, are made unclear when ideas are taken over which have been made precise in another area and now take on different kinds of vagueness (we have already learned to understand this kind of thing): ideas emptied [of meaning] which have been obscured and have become mere word-concepts; ideas burdened, through attempts at exposition, with false interpretations, etc. In spite of all this, they are driving forces in the development. And the ideas which interest us here also have their effect on those who are not trained in mathematical thinking. It is well to take note of this when one speaks of the power of the new idea of philosophy, having its effect throughout the whole modern period in all sciences and culture, as it was first grasped and mastered in a relatively stable way by Descartes.

But it was not merely in the inauguration of this idea that Descartes was the founding father of the modern period. It is highly remarkable at the same time that it was he, in his Meditations—and precisely in order to provide a radical foundation for the new rationalism and then eo ipso for dualism—who accomplished the primal establishment of ideas which were destined, through their own historical effects (as if following a hidden teleology of history), to explode this very rationalism by uncovering its hidden absurdity. Precisely those ideas which were supposed to ground this rationalism as aeterna veritas bear within themselves a deeply hidden sense, which, once brought to the surface, completely uproots it.

§ 17. Descartes's return to the ego cogito. Exposition of the sense of the Cartesian epochē.

LET US CONSIDER the progress of the first two Cartesian meditations from a perspective which allows its general structures to come to the fore—the progress to the ego cogito, the ego of the cogitationes of the various cogitata. This beloved examination question for philosophical children, then, shall be our subject. In truth, there is in these first meditations a depth which is so difficult to exhaust that even Descartes was unable to do it, to the extent that he let slip away the great discovery he had in his hands. Even today, and perhaps especially today, everyone who would think for himself ought, it seems to me, to study these first meditations in the utmost depth, not being frightened off by the appearance of primitiveness, by the well-known use of the new ideas for the paradoxical and basically wrong proofs of the existence of God, or by many other obscurities and ambiguities —and also not being too quickly comforted by one's own refutations. It is with good reasons that I now devote considerable space to my attempt at a careful exposition, not repeating what Descartes said, but extracting what was really involved in his thinking and then separating what he became conscious of from what was concealed from him, or rather what was smuggled into his ideas, because of certain things-of course very natural things-taken for granted. These were not merely remains of Scholastic traditions, not merely accidental prejudices of his time, but were things taken for granted throughout the millennia which can be overcome only by clarifying and thinking through to the end what was original in Descartes's thought.

Philosophical knowledge is, according to Descartes, absolutely grounded knowledge; it must stand upon a foundation of immediate and apodictic knowledge whose self-evidence excludes all conceivable doubt. Every step of mediate knowledge must be able to attain the same sort of self-evidence. A survey of his hitherto existing convictions, acquired or taken over, shows him that doubts or possibilities of doubt arise on all sides. In this situation it is unavoidable that he, and anyone who

seriously seeks to be a philosopher, begin with a sort of radical, skeptical epochē which places in question all his hitherto existing convictions, which forbids in advance any judgmental use of them, forbids taking any position as to their validity or invalidity. Once in his life every philosopher must proceed in this way; if he has not done it, and even already has "his philosophy," he must still do it. Prior to the epoche "his philosophy" is to be treated like any other prejudice. The "Cartesian epoche" has in truth a hitherto unheard-of radicalism, for it encompasses expressly not only the validity of all previous sciences—even mathematics, which claims apodictic self-evidence, is not excludedbut even the validity of the pre- and extrascientific life-world, i.e., the world of sense-experience constantly pregiven as taken for granted unquestioningly and all the life of thought which is nourished by it—the unscientific and finally even the scientific. The lowest stratum of all objective knowledge, the cognitive ground of all hitherto existing sciences, all sciences of "the" world, is, we can say, for the first time called into question in the manner of a "critique of knowledge." It is experience in the usual sense which is thus called into question, "sense" experience and its correlate, the world itself, as that which has sense and being for us in and through this experience, just as it is constantly valid for us, with unquestioned certainty, as simply there [vorhanden], having such and such a content of particular real objects [Realitäten], and which is occasionally devaluated as doubtful or as invalid illusion only in individual details. But from this point on, even all the accomplishments of meaning and validity which are founded on experience are called into question. Indeed, this is the historical beginning, as we have already said, of a "critique of knowledge," and specifically a radical critique of objective knowledge.

It must be recalled again that the ancient skepticism begun by Protagoras and Gorgias calls into question and denies epistēmē, i.e., scientific knowledge of what is in-itself, but that it does not go beyond such agnosticism, beyond the denial of the rational substructions of a "philosophy" which, with its supposed truths-in-themselves, assumes a rational in-itself and believes itself capable of attaining it. [According to skepticism] "the" world is not rationally knowable; human knowledge cannot extend beyond the subjective-relative appearances. Starting from this point (for example, from Gorgias' ambiguous proposition "There is nothing"), it might have been possible to push radicalism farther; but in reality it never came to this. The skepticism

which was negativistically oriented toward the practical and ethical (political) lacked, even in all later times, the original Cartesian motif: that of pressing forward through the hell of an unsurpassable, quasi-skeptical epochē toward the gates of the heaven of an absolutely rational philosophy, and of constructing the latter systematically.

But how is this epoche supposed to accomplish this? If it puts out of play, with one blow, all knowledge of the world, in all its forms, including those of the straightforward experience of the world, and thus loses its grasp on the being of the world, how is it that precisely through the epoche a primal ground of immediate and apodictic self-evidences should be exhibited? The answer is: If I refrain from taking any position on the being or nonbeing of the world, if I deny myself every ontic validity related to the world, not every ontic validity is prohibited for me within this epochē. I, the ego 1 carrying out the epochē, am not included in its realm of objects but rather-if I actually carry out the epoche radically and universally—am excluded in principle. I am necessary as the one carrying it out. It is precisely herein that I find just the apodictic ground I was seeking, the one which absolutely excludes every possible doubt. No matter how far I may push my doubt, and even if I try to think that everything is dubious or even in truth does not exist, it is absolutely self-evident that I, after all, would still exist as the doubter and negator of everything. Universal doubt cancels itself. Thus, during the universal epoche, the absolutely apodictic self-evidence "I am" is at my disposal. But within this self-evidence a great deal is comprised. A more concrete version of the self-evident statement sum cogitans is: ego cogito-cogitata qua cogitata. This takes in all cogitationes, individual ones as well as their flowing synthesis into the universal unity of one cogitatio in which, as cogitatum, the world and what I have variously attributed to it in thought had and still has ontic validity for me -except that now, as one who is philosophizing. I may no longer straightforwardly effect these validities and use them as knowledge in the natural way. Standing above them all in my posture of epoche I may no longer take part in performing them. Thus my whole life of acts-experiencing, thinking, valuing, etc.-remains, and indeed flows on; but what was before my eyes in that life as "the" world, having being and validity for me,

 I have usually translated both das Ego and das Ich as "the ego," since Husserl makes no distinction between these terms. Occasionally I have used "the 'I.'" has become a mere "phenomenon," and this in respect to all determinations proper to it. In the epochē, all these determinations, and the world itself, have been transformed into my ideae; they are inseparable components of my cogitationes, precisely as their cogitata. Thus here we would have, included under the title "ego," an absolutely apodictic sphere of being rather than merely the one axiomatic proposition ego cogito or sum cogitans.

But something else, something especially remarkable, must be added. Through the epoche I have penetrated into the sphere of being which is prior in principle to everything which conceivably has being for me, and to all its spheres of being-as their absolutely apodictic presupposition. Or, what for Descartes counts as the same thing: I, the ego performing the epoche, am the only thing that is absolutely indubitable, that excludes in principle every possibility of doubt. Whatever else enters the stage as apodictic, as, for example, mathematical axioms, certainly does leave open possibilities of doubt and thus also the conceivability of their being false. The latter is excluded, and the claim to apodicticity justified, only with the success of an indirect and absolutely apodictic grounding which traces these things back to that sole absolute, primal self-evidence from which all scientific knowledge must-if a philosophy is to be possible—be derived.

§ 18. Descartes's misinterpretation of himself. The psychologistic falsification of the pure ego attained through the epochē.

HERE WE MUST BRING UP certain things about which we have deliberately been silent in the exposition up to now. Thereby a hidden double meaning of Descartes's ideas will become evident: there arise two possible ways of taking these ideas, developing them, and setting scientific tasks; whereas for Descartes only one of these was obvious from the start. Thus the sense of his presentations is factually (i.e., as his own sense) unambiguous; but unfortunately this unambiguousness stems from the fact that he does not actually carry through the original radicalism of his ideas, that he does not actually subject to the epochë

(or "bracket") all his prior opinions, the world in all respects, that he, obsessed by his goal, does not draw out precisely what is most significant in what he gained through the "ego" of the epochë, so as to unfold, purely in connection with this ego, a philosophical $\theta \alpha \nu \mu \dot{\alpha} \dot{\gamma} \epsilon \nu \nu$. In comparison with what such an unfolding could yield, indeed very soon, everything new in what Descartes actually brought to light was in a certain sense superficial, in spite of its originality and widespread effects. In addition, it loses its value by Descartes's own interpretation of it. Namely: in wonder over this ego, first discovered in the epochë, he himself asks what kind of an ego it is, whether the ego is the human being, the sensibly intuited human being of everyday life. Then he excludes the living body—this, like the sensible world in general, falls under the epochë—and thus the ego becomes determined, for Descartes, as mens sive animus sive intellectus.

But here we have several questions. Is not the epoche related to the totality of what is pregiven to me (who am philosophizing) and thus related to the whole world, including all human beings, and these not only in respect to their bodies? Is it not thus related to me as a whole man as I am valid for myself in my natural possession of the world [Welthabe]? Is Descartes here not dominated in advance by the Galilean certainty of a universal and absolutely pure world of physical bodies, with the distinction between the merely sensibly experienceable and the mathematical, which is a matter of pure thinking? Does he not already take it for granted that sensibility points to a realm of what is in-itself, but that it can deceive us; and that there must be a rational way of resolving this [deception] and of knowing what is in-itself with mathematical rationality? But is all this not at once bracketed with the epoche, indeed even as a possibility? It is obvious that Descartes, in spite of the radicalism of the presuppositionlessness he demands, has, in advance, a goal in relation to which the breakthrough to this "ego" is supposed to be the means. He does not see that, by being convinced of the possibility of the goal and of this means, he has already left this radicalism behind. It is not achieved by merely deciding on the epochē, on the radical withholding of [judgment on] all that is pregiven, on all prior validities of what is in the world; the epoche must seriously be and remain in effect. The ego is not a residuum of the world but is that which is absolutely apodictically posited; and this is made possible only through the epoche. only through the "bracketing" of the total world-validity; and it is the only positing thus made possible. The soul, however, is the

residuum of a previous abstraction of the pure physical body, and according to this abstraction, at least apparently, is a complement of this body. But this abstraction (and we must not overlook this) occurs not in the epoche but in the natural scientist's or psychologist's way of looking at things, on the natural ground of the world as pregiven and taken for granted. We shall have occasion to speak again about these abstractions and about the appearance of their obviousness. Here it suffices to be clear about the fact that in the foundation-laying reflections of the Meditations—those in which the epoche and its ego are introduced-a break of consistency occurs when this ego is identified with the pure soul. The whole gain, the great discovery of this ego, loses its value through an absurd misconstruction: a pure soul has no meaning at all in the epoche, unless it is as "soul" in "brackets," i.e., as mere "phenomenon" no less than the living body. One should not overlook, [by the way,] the new concept of "phenomenon" which arises for the first time with the Cartesian epochē.

We can see how difficult it is to maintain and use such an unheard-of change of attitude as that of the radical and universal epochē. Right away "natural common sense," some aspect of the naïve validity of the world, breaks through at some point and adulterates the new kind of thinking made possible and necessary in the epochē. (Whence also the naïve objections of almost all my philosophical contemporaries to my "Cartesianism" or to the "phenomenological reduction" for which I have prepared the way through this presentation of the Cartesian epochē.) This nearly ineradicable naïveté is also responsible for the fact that for centuries almost no one took exception to the "obviousness" of the possibility of inferences from the ego and its cognitive life to an "outside," and no one actually raised the question of whether, in respect to this egological sphere of being, an "outside" can have any meaning at all-which of course turns this ego into a paradox, the greatest of all enigmas. Yet perhaps a great deal, indeed everything for a philosophy, turns upon this enigma; and perhaps the way in which Descartes himself was shaken by the discovery of this ego is significant as an indication to us lesser spirits that something truly great, indeed of the greatest magnitude, is announced in it, something which should one day emerge, through all the errors and confusions, as the "Archimedean point" of any genuine philosophy.

The new motif of returning to the ego, once it had entered history, revealed its inner strength through the fact that in spite of falsifications and obfuscations it introduced a new philosophical age and implanted within it a new telos.

§ 19. Descartes's obtrusive interest in objectivism as the reason for his self-misinterpretation.

FOR DESCARTES, the Meditations work themselves out in the portentous form of a substitution of one's own psychic ego for the [absolute] ego, of psychological immanence for egological immanence, of the evidence of psychic, "inner," or "self-perception" for egological self-perception; and this is also their continuing historical effect up to the present day. Descartes himself really believes he is able to establish the dualism of finite substances by way of inferences to what transcends his own soul, mediated through the first inference to the transcendence of God. Likewise he thinks he is solving the problem which is meaningful for his absurd attitude and which returns later, in a modified form, in Kant: the problem of how the rational structures engendered in my reason (my own clarae et distinctae perceptiones)—those of mathematics and mathematical natural science—can claim an objectively "true," a metaphysically transcendent validity. What the modern period calls the theory of the understanding or of reason—in the pregnant sense "critique of reason," transcendental problematics—has the roots of its meaning in the Cartesian Meditations. The ancient world was not acquainted with this sort of thing, since the Cartesian epochē and its ego were unknown. Thus, in truth, there begins with Descartes a completely new manner of philosophizing which seeks its ultimate foundations in the subjective. That Descartes. however, persists in pure objectivism in spite of its subjective grounding was possible only through the fact that the mens, which at first stood by itself in the epoche and functioned as the absolute ground of knowledge, grounding the objective sciences (or, universally speaking, philosophy), appeared at the same time to be grounded along with everything else as a legitimate subject matter within the sciences, i.e., in psychology. Descartes

Reading denselben for derselben.

does not make clear to himself that the ego, his ego deprived of its worldly character [entweltlicht] through the epoche, in whose functioning cogitationes the world has all the ontic meaning it can ever have for him, cannot possibly turn up as subject matter in the world, since everything that is of the world derives its meaning precisely from these functions—including, then, one's own psychic being, the ego in the usual sense. Even more inaccessible to him, and naturally so, was the consideration that the ego as it is disclosed in the epoche, existing for itself, is as yet not at all "an" ego which can have other or many fellow egos outside itself. It remained hidden from Descartes that all such distinctions as "I" and "you," "inside" and "outside," first "constitute" themselves in the absolute ego. Thus it is understandable why Descartes, in his haste to ground objectivism and the exact sciences as affording metaphysical, absolute knowledge, does not set himself the task of systematically investigating the pure ego -consistently remaining within the epoche-with regard to what acts, what capacities, belong to it and what it brings about, as intentional accomplishment, through these acts and capacities. Since he does not stop here, the immense set of problems cannot reveal itself to him, i.e., those of beginning with the world as a "phenomenon" in the ego and systematically inquiring back, to find out which of the actually demonstrable immanent accomplishments of the ego have given the world its ontic meaning. An analysis of the ego as mens was obviously for him a matter for a future objective psychology.

§ 20. "Intentionality" in Descartes.

Accordingly, the foundation-laying first meditations were actually a piece of psychology; but one element in them remains to be brought out expressly as highly significant, though completely undeveloped: intentionality, which makes up the essence of egological life. Another word for it is cogitatio, having something consciously [etwas bewussthaben], e.g., in experiencing, thinking, feeling, willing, etc.; for every cogitatio has its cogitatum. Each is in the broadest sense an act of believing [ein Vermeinen] and thus there belongs to each some mode of certainty—straightforward certainty, surmise, holding-to-be-probable, doubting, etc. In connection with these there are the

distinctions between confirmation and disconfirmation or true and false. We can already see that the problem entitled "intentionality" contains within itself, inseparably, the problems of the understanding or of reason. To be sure, there is no question of a true presentation and treatment of the subject of intentionality [in Descartes]. On the other hand, the whole supposed founding of the new universal philosophy on the ego must be characterized as a "theory of knowledge," i.e., a theory of how the ego, in the intentionality of its reason (through acts of reason) brings about objective knowledge. For Descartes, of course, this means knowledge which metaphysically transcends the ego.

§ 21. Descartes as the starting point of two lines of development, rationalism and empiricism.

If we now follow the lines of development which proceeded from Descartes, one, the "rationalistic," leads through Malebranche, Spinoza, Leibniz, and the Wolff school to Kant, the turning point. Here the spirit of the new kind of rationalism, as implanted by Descartes, thrusts forward enthusiastically and unfolds in great systems. Here the conviction reigns, then, that through the method of mos geometricus an absolutely grounded, universal knowledge of the world, thought of as a transcendent "in-itself," can be realized. Precisely against this conviction, against the new science as having such scope as to extend to something "transcendent," indeed finally against this "transcendent" itself, English empiricism reacts-even though it is likewise strongly influenced by Descartes. But it is a reaction similar to that of ancient skepticism against the systems of rational philosophy of its time. The new skeptical empiricism already sets in with Hobbes. Of greater interest for us, however, because of its immense effect on psychology and the theory of knowledge, is Locke's critique of the understanding, together with its subsequent continuations in Berkeley and Hume. This line of development is especially significant in that it is an essential segment of the historical path on which the psychologically adulterated transcendentalism of Descartes (if we may already so call his original turn to the ego) seeks, through unfolding its consequences, to work its way through to the realization of its untena-

bility and, from there, to a transcendentalism which is more genuine and more conscious of its true meaning. The primary and historically most important thing here was the self-revelation of empirical psychologism (of the sensationalistic, naturalistic cast) as an intolerable absurdity.

§ 22. Locke's naturalistic-epistemological psychology.

It is in the empiricist development, as we know, that the new psychology, which was required as a correlate to pure natural science when the latter was separated off, is brought to its first concrete execution. Thus it is concerned with investigations of introspective psychology in the field of the soul, which has now been separated from the body, as well as with physiological and psychophysical explanations. On the other hand, this psychology is of service to a theory of knowledge which, compared with the Cartesian one, is completely new and very differently worked out. In Locke's great work this is the actual intent from the start. It offers itself as a new attempt to accomplish precisely what Descartes's Meditations intended to accomplish: an epistemological grounding of the objectivity of the objective sciences. The skeptical posture of this intent is evident from the beginning in questions like those of the scope, the extent, and the degrees of certainty of human knowledge. Locke senses nothing of the depths of the Cartesian epoche and of the reduction to the ego. He simply takes over the ego as soul, which becomes acquainted, in the self-evidence of self-experience, with its inner states, acts, and capacities. Only what inner self-experience shows, only our own "ideas," are immediately, self-evidently given. Everything in the external world is inferred.

What comes first, then, is the internal-psychological analysis purely on the basis of the inner experience—whereby use is made, quite naïvely, of the experiences of other human beings and of the conception of self-experience as what belongs to me, one human being among human beings; that is, the objective validity of inferences to others is used; just as, in general, the whole investigation proceeds as an objective psychological one,

indeed even has recourse to the physiological—when it is precisely all this objectivity, after all, which is in question.

The actual problem of Descartes, that of transcending egological (interpreted as internal-psychological) validities, including all manners of inference pertaining to the external world, the question of how these, which are, after all, themselves cogitationes in the encapsuled soul, are able to justify [assertions about] extrapsychic being—these problems disappear in Locke or turn into the problem of the psychological genesis of the real experiences of validity or of the faculties belonging to them. That sense-data, extracted from the arbitrariness of their production, are affections from the outside and announce bodies in the external world, is not a problem for him but something taken for granted.

Especially portentous for future psychology and theory of knowledge is the fact that Locke makes no use of the Cartesian first introduction of the cogitatio as cogitatio of cogitata—that is, intentionality; he does not recognize it as a subject of investigation (indeed the most authentic subject of the foundation-laying investigations). He is blind to the whole distinction. The soul is something self-contained and real by itself, as is a body; in naïve naturalism the soul is now taken to be like an isolated space, like a writing tablet, in his famous simile, on which psychic data come and go. This data-sensationalism, together with the doctrine of outer and inner sense, dominates psychology and the theory of knowledge for centuries, even up to the present day; and in spite of the familiar struggle against "psychic atomism," the basic sense of this doctrine does not change. Of course one speaks quite unavoidably, [even] in the Lockean terminology, of perceptions, representations "of" things, or of believing "in something," willing "something," and the like. But no consideration is given to the fact that in the perceptions, in the experiences of consciousness themselves. that of which we are conscious is included as such—that the perception is in itself a perception of something, of "this tree."

How is the life of the soul, which is through and through a life of consciousness, the intentional life of the ego, which has objects of which it is conscious, deals with them through knowing, valuing, etc.—how is it supposed to be seriously investigated if intentionality is overlooked? How can the problems of reason be attacked at all? Can they be attacked at all as psychological problems? In the end, behind the psychological-epistemological problems, do we not find the problems of the "ego" of the Carte-