

The Cogito: Knowledge of My Existence and Knowledge of My Nature

1. The Truth of the Cogito and Mathematical Truth

The Cogito, by which my understanding reestablishes within universal doubt a firm, unshakable point against the fiction of the evil genius, posits relative to the order of reasons a first reason that, by terminating the chain of uncertainties, dominates the chain of certainties. This first certainty, which is confined within itself, in no way destroys universal doubt outside of itself; it introduces an *exception* to it. It introduces an exception *of fact*, since universal doubt, which is based on the evil genius, remains as rule; yet it is also *necessary*, since we are constrained to conceive that what we are verifying in this case cannot be otherwise. This necessity certifies its rationality.

By furnishing some evidence appropriate to an indubitable truth, the Cogito allows one to consider everything that possesses comparable evidence in the same way. It therefore imparts, by furnishing an external mark of the true,¹ a pragmatic means to constitute science; but it is incapable of establishing it in the full sense of the word, since it leaves open the question of rule.

The Cogito is but an exception to the rule of universal doubt imposed by the fiction of the evil genius, because in reality the Cogito naturally falls outside the sphere of this rule. Universal doubt would apply only to what the I affirmed as an existential or essential truth valid outside of itself. Here the I affirms only itself: the object posited is nothing but the subject. By this exact coincidence between my thought and existence—reduced to the existence of the subject—the knowledge of an unshakable and, at the same time, existential truth is acquired, since it relates immediately to a given intellectual existence and since it includes the immediate actualization of the necessary relations, “in order to think, one must exist,” which establishes the indissolubility of the bond between existence and thought.² From the fact that I am certain of both the content of my assertion—“I think therefore I am”—and of the certainty I attribute to it—for it is impossible that I am deceived when I say that I necessarily exist if I am thinking—I acquire a certainty of my certainty that is infinitely superior to the initial certainty of

mathematical propositions, which have certainty with respect to their content, but lose metaphysically the certainty of this certainty as soon as the evil genius is evoked.³

But how can this superior certainty dominate the certainty of mathematics, since, despite its rationality, it is altogether different, being confined within the subject while the latter bears on objects—mathematical statements?

The answer is that mathematical essences are only considered insofar as they are ideas or thoughts that find in the Cogito their ultimate condition of possibility, and it is in virtue of the relation of subordination necessarily instituted by the order of reasons between the Cogito as simple absolute nature, and mathematical ideas, as simple natures relative to it. The twofold characteristic of greater simplicity and more elevated function in the order of the conditions of my knowledge works in favor of the Cogito with respect to mathematical truths, in the same way that it would work in favor of the latter with respect to the simplest sensible elements.

First, mathematical notions only condition the representations with respect to their possible content; they themselves constitute a content, namely, the necessary content of all possible representations, the necessary elements from which all these representations are *constituted*. They can therefore, in this way, possess only a relative simplicity and generality, this necessary content (extension and the multiplicity of shapes and possible relations) in itself offering some diversity and complexity. The Cogito, on the other hand, abstracts away any content; it has therefore an absolute simplicity. And certainty grows in direct proportion to simplicity. As the process goes from conditions to conditions, from the complex to the simple, doubt tends to be less and less pressing and natural, so that it finally becomes “light and metaphysical,” and it requires a maximum effort of will when it attains the region of mathematical ideas whose relative simplicity and generality would escape the natural doubt relative to complex and particular things. It must therefore completely vanish and make way for complete certainty, that is, something certain in itself, once the chain of reasons reaches an ultimate term that is absolutely simple and universal (the Cogito), and that dominates it: the Cogito and all the truths of connection—that things that have been created cannot have never been created, for example—have such clarity and *simplicity*, says Descartes, that it suffices for us to think of them in order for their truth to be manifest, so much so that it suffices to doubt them in order that they be true, since one must think them in order to doubt them.⁴

On the one hand, the mathematical contents are posited immediately as the conditions or *elements* of possible *things* (and not simply as the conditions for *my thinking* of these things; and I do not know whether the conditions that I perceive in my thought are effectively conditions of things in themselves, or simply conditions necessary in me of representations

without any objective validity. On the other hand, the Cogito raises me to the ultimate condition of the possibility of all my representations, and not to the conditions of the possibility of the content of these representations. This characteristic is affirmed by the fact that the Cogito is instituted by beginning with the doubt that abstracts away the contents themselves in order to allow only the fact of its representation or its thought to remain; it is not instituted by beginning with the thought of something. From this it follows that the reality posited in this case, meaning the reality of my thought, is completely based in the function that this thought assumes as the condition for all possible representation, whatever its content.⁵ Its validity therefore becomes incontestable. On the one hand, we have reached the "most simple and general" element, meaning consciousness, which is always identical and indivisible, abstracting away any diversity or complexity of its contents; and on the other hand, we have reached the ultimate condition, for, although we can abstract away the contents of thought, it is impossible to abstract away my thought, which must remain as condition of representation in general, whatever its content. In the same way that we can deny sensible knowledge without denying the ideas of the understanding, we can deny the ideas of the understanding without denying the Cogito, but not reciprocally. "The only thing that cannot be separated from Me . . . is that I am a thinking thing."⁶

2. The Order and Necessary Positing of the Existence of the Self and Its Nature

Thus returned to its place in the chain of reasons, the Cogito can be sheltered from aberrant interpretations.

First, its fundamental role with respect to mathematical truths is no longer in question: it establishes them by being the necessary condition as rule, in the same way that they would establish the sensible representations by their title of *sine qua non* condition. Second, as the ultimate term in the series of conditions of representation, it shows its necessity from without, because it is impossible for the understanding to abstract away the final condition—namely, the thinking self—just as the immediate apprehension of the principle "in order to think, one *must* exist" reveals it from within. Third, being that which remains when the rest is abstracted away, but without which the rest cannot subsist, and which cannot be abstracted away, it is a substance, according to the epistemological definition of the term, meaning insofar as it has a simple, absolute nature, *primo per se*, concrete and complete.⁷

The order of reasons therefore authorizes Descartes, beginning with *Meditation II*, to draw from the thinking self affirmed as substance, all the consequences required for the march of science, on the condition that one is restricted to the epistemological sense of the word substance, without

infringing on the metaphysical sense, which alone can ultimately confer to it divine veracity, to which is reserved the privilege of investing our clear and distinct ideas with objective validity.

Fourth, the fact that the Cogito finds in its characteristic of most simple and most general ultimate nature the deep justification of certainty that we are constrained to give to it, proves that the reality it entails is not that of my personal concrete self,⁸ but that of my thinking self in general, as universal condition of all possible knowledge.

Doubtless the Cogito, as a substance—in the epistemological sense—is, according to Cartesian terminology, something “concrete,” and something complete. But this term ought not seduce us, since Descartes merely uses the term in order to express the characteristic of substance to be self-sufficient and to be capable of being thought clearly and distinctly separately from other things.⁹

The term is similarly attributed to extension. In this way, though apprehended in an immediate experience, and though it is a singular reality and not a universal concept of all ways of thinking,¹⁰ the thinking being captured in the Cogito—without being an abstraction deprived of reality—is only an abstract being, in the strict sense of the word, since its self-sufficiency is only affirmed through its ability to be conceived clearly and distinctly *as a whole (totum)* apart from everything else, and to be posited as the ultimate residue of a process of elimination.¹¹ It is thus opposed to a real concrete; to Leibnizian substance, for example, whose self-sufficiency is disclosed, on the contrary, by its ability to sum up the infinity of its predicates, to be the reason for their integration, such that, far from being proven a substance by the possibility of being thought without them, it is only a substance by its express and necessary reference to them, insofar as it is revealed as the formula that accounts for their series.

However, one must not confuse the criterion that allows us to know that a thing is a substance (*quod*), meaning concrete and complete, with the definition of what is (*quid*) a complete or substantial thing; and Descartes specifies that “by a complete thing I understand nothing more than a substance endowed with forms or attributes that are sufficient to let me know that it is a substance.”¹²

That is why knowing a thing as substance is not knowing the substance itself. Substance, being substance only through the properties, forms, and attributes it renders possible, and manifesting itself through them, is known by them; a substance without attributes cannot be known to me—the more attributes it has the better I can know it, and reciprocally. Thus, when one abstracts away the modes of conceiving—by opposing to them thought as substance, properly speaking, meaning what remains under the change of accidents and what depends only on itself—far from acquiring in this manner a complete knowledge of the thing, we diminish the knowledge we can have of it.¹³

We ought to abstract substance from its modes only provisionally, simply with the view to *distinguishing it* from them, in order to authenticate it as substance, without ceasing to relate them to it.¹⁴ Further, the concept of substance cannot be thought clearly and distinctly if one abstracts away the concept of accident, for what has no modes cannot be substance, substantiality cannot exist without accidentality and vice versa: the relation between the two terms is necessary and reciprocal in this case.¹⁵ On the other hand, although no accident can be thought of without substance, substance can always be thought of without *this* or *that* of its accidents: the relation between the two terms is then still necessary, but is unilateral. Also, when what is at stake is only the recognition of what properly constitutes the substance in a complex, meaning what remains under its changing modes—or, what comes to the same thing, its principal attribute—I cannot do so except by seeking for what, in this complex, can be conceived clearly and distinctly without having to think of the rest.¹⁶

Consequently, when what is at stake is not instituting the first scientific truth that is affirmable with certainty, as is now the case, but looking at scientific thought as it exists in reality outside the first presentation of the science I now have (with which my future science will later attempt to be integrated as a certain truth, in any case) substance must be conceived as not being able to exist without its modes. In fact, science will later teach me that my thought has some modes, and then, referring to divine veracity, that God can create and preserve separately the things that I conceive clearly and distinctly as really distinct, but not those that I conceive as simply *modally* distinct.¹⁷ Although this later distinction has a basis in things, it is a fact of my mind, of my “reasoned reason,” and it does not correspond to an effective separation between things.¹⁸

But with respect to the Cogito, taken as the beginning of metaphysics, we are dealing with, not a thinking thing, which can be outside of what my thought represents to me as actually indubitable, but only with what I can affirm, at this point on the chain of reasons, as being a certain *truth* for my science. And what I can affirm then as scientifically certain, is only my own existence as pure intelligence. One therefore is dealing only with an abstract being here, since this pure intelligence has been affirmed only as the one thing that I could not abstract away in myself, after having abstracted away everything else.

This abstract being is a real being, and within its kind, the most real that can be, since this pure intelligence includes and conditions the reality of all my modes of thought, and since it is found within them, whatever their complexity. Similarly, extension is a real being because it involves the reality of all material bodies, however complex. This maximum of reality establishes the maximum of universality. Simplicity is, in fact, necessarily linked with universality, for the character of the simplest nature is to find itself in all composites.¹⁹ And what is found in every composite, without

itself being composite, is, as we have seen, the most certain. That is why Descartes said that arithmetic and geometry, insofar as they treat only extremely simple and general things, contain something certain and indubitable.²⁰ And, we have seen that the Cogito was for me still yet more simple and more general, and more certain than these things. If the Cogito were not immediately for me the most abstract and most universal being, it would not be the most real nor the most simple, and it would be incapable of establishing science. In fact, I find this simple and real, abstract and universal being in a complex, concrete (in the usual sense), individual, etc., self. Hence, it is bound to happen that I confuse it with the latter as soon as I lose track of the linkage of reasons. This confusion is easily engendered since it gains authority from the frequently stressed oppositions between axioms (for example, *in order to think, one must exist*) and general propositions (*everything that thinks is*) on the one hand, and the Cogito as the intuition of a singular reality and an existence—mine—on the other hand. But this singular reality is the reality of a simple nature possessing the universality proper to singular rational essences; and my existence is affirmed only insofar as it is reduced to the being of this singular nature, that is, to pure intelligence, the ultimate condition of everything I know or believe to know. That is the existence of my pure self, which has nothing in common with my individual, personal, concrete self, which can only be captured empirically, and not by a purely intellectual intuition. Actually, this concrete individual self *does not exist for my science*. Only what I can affirm with complete evidence and certainty exists for it, and is real and certain for it. And at the present stage, relative to the order, I can legitimately affirm nothing other than my self insofar as it thinks and it is only pure intellect.

It is therefore not surprising that, since the existence that has been posited in all certainty as first truth is uniquely what could have been posited, by abstraction of the rest, as the simplest among them and as a purely intelligent nature, this nature possesses the generality that Descartes attributes to all *primitive notions*.²¹ It is not even a finite self in general, but a self in general: "It is an intellectual nature," specifies the *Summary of the Meditations*.²² And Descartes adds for Silhon that "by spending sufficient time on this meditation, one acquires little by little a very clear, and so to speak, intuitive knowledge of the *intellectual nature in general*; this is the idea that, considered without limitation, represents God to us, and considered as limited, is the idea of an angel or of a human soul."²³

Since I posit, in the Cogito, the certainty of my being only to the extent that I perceive myself simply as *intellectual nature, meaning* reason, soul, or thought, apart from any of its accidents (whether I am thinking this or that, the true, the false, the obscure and the confused, the clear and the distinct; whether I am doubting, imagining, sensing, willing, or conceiving; whether my thought is attentive or not, quick or slow, etc.), it appears that the self posited here as indubitable is this self common to all men, the specific form

establishing the difference between man and animal (namely reason), but not establishing any difference between men, that is, not containing the principle of their individual difference.²⁴ That is why Descartes can state that reason is “complete in each and every person,” and also state that reason or intelligence constitutes me totally (*totum*), for it is the whole essence of my substance.²⁵

The expression “little by little” that we lift from the letter to Silhon must not lead one to believe that we rise discursively from the Cogito as a particular truth to an approximative generality similar to the generality of the dialecticians’ universals.²⁶ The letter is concerned with “meditating” meaning “reflecting,” in order to attain, “so to speak,” the *intuition* of a *nature*. And this reflection is entailed by the constitutive process of the Cogito: it is not sufficient to discover the certainty that I exist, one must also discover *what I rightly affirm when I affirm my existence*. Lacking this clear and distinct knowledge, I risk including in this existence elements that must be excluded from scientific affirmation, meaning legitimate elements relative to the reasons. From this arises a new meditation that cannot be truly dissociated from the first, since it completes it. This meditation will reveal to me that the affirmed existence is, and cannot be other than, the existence of my pure intelligence constituting the whole (*totum*) of my thinking being. In this way, I will also soon know that I ought to posit intellectual nature as constituting my *nature*. When, having pursued my meditations, I come to know that what is necessary for me is necessarily true for things, I will have perceived that this nature is in itself my essence, and the essence of every thinking substance. I will have then attained, “so to speak,” the intuition of the intellectual nature in general whose properties are necessarily imposed on all intellectual natures. This is “so to speak” because the intuition that I have is in reality the intuition of my intellectual nature, whose universal validity I perceive. The universal validity of intellectual nature thus perceived does not diminish its singularity. However general a nature may be, it is always a singular thing that I capture by intuition. For example, in geometry, the triangle that my understanding captures before its particular imaginative realization is a singular mathematical being that has characteristic properties that are exclusive of the properties of the other mathematical beings. And I have a distinct intuition of them. However, this triangle is a general thing.²⁷ The worst error would be to dispute its *reality* on this ground,²⁸ and to judge as real only the particular (and not singular) triangle that the imagination presents to me under some sensible aspects, thereby endowing it with the status of concrete being to the eyes of nonmathematicians. It is therefore conceivable, and even unavoidable, that nonphilosophers, meaning those who remain estranged from the spirit of geometry, as Descartes has expressly told us, confuse the self of rigorous science, which is legitimately affirmable, an intellectual essence having necessary and universal properties, with the “concrete” self of the

psychology of common sense—the self that is pure intelligence, whose rational intuition was rendered possible by a rigorous process, with the self that is above all the self of imagination and sensation, which daily experience reveals to us “without any elaborate preparation,” as states Gassendi.²⁹ We understand that meditations burdening us with such “elaborate preparation” must be constructed “little by little.” They are “painful and laborious,”³⁰ for they are exercised against my imaginative and sensible faculties, from which I must abstract myself in order to release what is alone legitimately affirmable relative to the rigor of science. They end up with a disconcerting result for nonphilosophers, who do not conceive any self other than the empirical self. From this arises the necessity of meditating at length in order to familiarize oneself with these new and strange items of knowledge.³¹

3. The Cogito Is Not the First Given of an Introspective Psychology, but the Necessary Truth of a Science of Pure Understanding

The necessity that Descartes affirms of an “elaborate preparation” for setting out the Cogito as it should be set out, that is to say, with that “metaphysical certainty [. . .] which is all that is in question here,”³² brings to light its status of rational scientific truth and reveals that it has nothing in common with a simple act of self-consciousness, of psychological origin, within the power of anybody whatever. It differs from this, not only by its modality (necessity), but also by its content, insofar as it affirms only a pure intellect, an essence detached from everything that would mask it from natural consciousness, and which is affirmable as actual only insofar as it is perceived as the *sine qua non* condition of the possibility of all knowledge. It is consequently impossible to subscribe to the following valuation: “Consciousness of the self is neither the appearance of a new object for consciousness, nor the emergence in me of a pure or transcendental self, but an awareness of one’s consciousness. Cogito does not signify ‘*Cogito me cogitantem*,’ but simply *Cogito*; only this Cogito is now full of necessity, as it were.”³³ This language would perhaps have been accepted by Gassendi—except for the remark about necessity—but not by Descartes.

In addition, Descartes understands by *metaphysical* certainty no more than *scientific* certainty, that is, a certainty established rigorously as a true certainty, an evidence experienced as a true evidence. Metaphysics is, in effect, nothing more than another science such as mathematics or physics. It differs from them only insofar as its objects are taken wholly by pure understanding, excluding any other faculty; while the objects of mathematics and physics are also taken by pure understanding, but they require the concurrence of the imagination (construction *in concreto*) and sensible experience, insofar as it bears on the pure natures of material existing things and their combinations.³⁴ In fact, experience can teach us

about existence by itself. But the difference of object does not change anything with respect to the essence of science, which remains “always one and the same, no matter how varied are the objects to which it applies.”³⁵ Metaphysical certainty and evidence are of the same nature as the certainty and evidence of mathematics and physics, but are more rigorous, for they are absolutely indubitable: they are the certainty and evidence established as such—in brief, they are second-power certainty and evidence (certainty of certainty, evidence of evidence—it is evident that it is impossible that the evidence of the Cogito be deceitful), and they are soon to be carried to the third power (by divine warrant). In this book we use the term *science*, and not the term *metaphysics*, since the latter may hide from today’s reader the sense of a discipline “more certain than mathematics” that Descartes gives to this term. Thus we use the expression, *my science*, to denote that the truths necessary for my understanding cannot be affirmed originally as having outside of me a validity for things in themselves. It is because of *Meditation III* that *my science* will later become *the science*, and that the truths of my science will be held as the truths of things.³⁶

4. The Nature of the Self as Thought; the Nature of the Self as Pure Intelligence; the Possibility and Legitimacy of This Twofold Knowledge According to the Order

Obtained as it is from the analysis of the givens of knowledge, which are the necessary universal condition of representation in general, the Cogito posits the self as being essentially the intellectual power to know: “*Mens, sive animus, sive ratio, sive intellectus*.”³⁷ Will, in spite of its infinity, is posited only as a mode of this intellect; this power can subsist without will, while will cannot subsist without it.³⁸ Thus the position of the existence of my thinking self (*quod*) leads directly, according to the order, to knowledge of its nature (*quid*).³⁹

This knowledge exhibits two aspects.

First, Descartes places in evidence that this nature is purely spiritual, since it can only be thought apart from the body. In this way is introduced the notion of the substance of the soul as pure thought, heterogeneous with the substance of the body, a notion that will become the truth of the thing when, after *Meditation III*, the knowledge that I have of myself will be invested with objective validity—in brief, when the clear and distinct idea of my soul will be perceived as an essence. Second, Descartes places in evidence its purely intellectual nature, which leads him to distinguish it from what is not pure intelligence in the soul. In this way is introduced the notion of modes of the thinking substance that also will be converted into the truth of the thing later on.

If the knowledge of the various properties of my soul (knowing, willing, judging, desiring, sensing, etc.) is obtained, in the same fashion as the

knowledge of its existence, by an immediate reflection of consciousness on itself,⁴⁰ the knowledge of its nature—and later on, the right and necessity to attribute to it the modes that I can discover in it in fact and that “it seems to me” it possesses—is acquired by a rigorous methodical process that consists of reflecting on the conditions that render possible the knowledge of its existence as thought in general—in brief, by a reflection on my first reflection. In other words, the examination of the reasons that have rendered possible the position of my existence as thinking self in the certainty of knowledge, allows me to acquire, with equal certainty, the science of its nature by responding to the question: “What am I, I who exists?”⁴¹

In fact, the knowledge that I am a thinking thing, being the first (the first indubitable truth of science), could not have been conditioned by another: the first known thing cannot depend on things that are yet unknown and that consequently are assumed to be nothing.⁴² Its knowledge therefore could not have depended upon the things that are the object of imagination, that involve the bodies whose existence is unknown to me (rejected outside certain knowledge as doubtful, the doubtful being assimilated with the false), and that are consequently annulled.⁴³ In this way I understand, on the one hand, that if I want to know myself, according to the order of reasons, I must know myself through pure understanding and not through the imagination that speaks to me only of the body; and, on the other hand, I must know myself as being simply and uniquely, meaning essentially, pure thought (*intellectus*). By reflecting on the process that has allowed me to know rationally, with respect to the order, that I exist, I have been able to draw from this very process a complex conclusion, in part relative to a mode of knowledge that has allowed me to posit the existence of my soul, in part relative to the very nature of this soul. Since the knowledge of my existence can only be strictly intellectual, my nature can only be conceived as pure intelligence, and consequently, as pure mind. The order of reasons has constrained me to pass from the fact that the position of the existence of my thinking self is in no way conditioned by corporeal elements or objects of the imagination, to the two affirmations that nothing imaginative belongs to my pure essence and that nothing corporeal can be included in the true knowledge that I have of my nature: “It is extremely certain that this notion and knowledge I have of myself, thus precisely taken, does not depend on things whose existence is not yet known to me; and consequently, and for even stronger reasons, it does not depend on any of the things I can picture or invent in my imagination.”⁴⁴ And that is why “I know for certain that nothing of what I can understand by means of my imagination belongs to the knowledge I have of myself and that it is necessary to recall the mind from this way of conceiving in order that it may be able to know its nature with perfect distinctness.”⁴⁵

I have reached a dual conclusion. In fact, I have learned *what I am*: I

am a mind, meaning something thinking, exclusive of every corporeal element; and I have learned what is the nature of this mind: it is essentially an intelligence, by itself exclusive of the imagination and of the senses. In this way, the true meaning of the words *mens, animus, intellectus, ratio*, which were until then unknown to me, become known to me.⁴⁶ I now know that these different terms must be equated, since they all designate one and the same principle, intelligence, which by itself constitutes the one and only condition of the possibility of my knowledge in general.

By reflecting on the conditions that have rendered possible the certain knowledge of my existence, I have elucidated the clear and distinct idea of my own nature. But I have also produced other ideas in me, namely, those of the conditions that have rendered possible this first idea for me. I perceived clearly and distinctly that I cannot know my own nature except by setting aside imagination and senses. From this I see immediately that the conditions rendering possible the clear and distinct idea of my nature are identical to the conditions rendering possible the clear and distinct knowledge of my own existence. But was it not precisely because, in fact, I acquired for myself the clear and distinct knowledge of my nature by knowing myself simply as a thinking thing that I learned in all certainty that I existed (as thought)?

I thus immediately perceived that in order to have knowledge of my nature I must have simultaneously accomplished two proceedings, which, although different, are in fact but one. In fact, I had to posit myself as a mind, that is, as something incorporeal; and moreover, I had to posit my mind as pure intelligence—which is not the same thing, for could not philosophers have posited the essence of the pure mind elsewhere than in pure intelligence, for example, in will or sensation?

But it is impossible that I posit myself as incorporeal without positing myself as purely intellectual, at the same time. In fact, if I could not have posited the being of my self except by excluding everything corporeal from its idea and if I were thus constrained to conceive a real distinction between my soul and body, it is because I could not know my own nature except by turning away from what seems to involve the body in me, namely, imagination and senses. Thus I could not posit myself as incorporeal without positing myself as purely intellectual. Moreover, since I cannot *know* myself except through intelligence, I see immediately that I *am only* intelligence; and because I *am only* intelligence, intelligence alone, and not imagination and senses, is capable of allowing me *to know* what I am. That is why I must conclude that imagination and senses are alien to the nature of my mind, while intelligence, which alone is required in order to understand it, belongs to it alone.

Is that to say that intelligence must exclude imagination and senses from my nature in the same way that it excludes body itself from it? No, for imagination and sensations are grasped directly in my mind as thoughts,

while body is outside the mind and is unknown to me. Imagination and senses must therefore be related to the soul insofar as they cannot be understood without it. They can therefore not be excluded from it in the same way that the body is excluded from it; but, being alien to its nature, they can be related to it only as contingent properties, at least with respect to that in which they differ from intelligence.⁴⁷ They are modes of my soul, and there is only a modal difference between my soul and them.

Finally, given that pure intelligence is perceived as constituting the whole nature of my mind, since it alone is capable of letting us know it, we conceive that the other faculties (sensing, desiring, judging, willing, etc.), which are no more capable than imagination of letting us know this nature (because of what distinguishes them from pure intelligence), do not belong to my mind any more than imagination belongs to it, and that consequently they are also only contingent properties.⁴⁸

5. Reflection on the Conditions of the Cogito as First Truth; Deduction of the Notions of Real and Modal Distinction; Theory of Modes

The rational necessity that has constrained us, in order to attain the clear and distinct idea of our nature beginning with the Cogito, to exclude from it, in very different ways, body on the one hand, and nonintellectual faculties on the other, has not resulted in allowing me to know what I am. It has in addition brought me to the knowledge of the real distinction and the modal distinction. It has thus given me clear and distinct knowledge of the technique that allows me to determine these two kinds of distinctions.⁴⁹ It has promoted these various items of knowledge to the level of certain truths within my science.

In fact, to perceive that I cannot with absolute evidence conceive what I am except by excluding from myself, by means of metaphysical doubt, everything except thought, is also to perceive that the determination of a thing as a self-sufficient nature requires that one be able to exclude from it everything left over after thus rendering knowledge of it clear and distinct. At the same time, what defines the concept of real distinction as *criterion* of all substantiality is discovered. Further, to perceive that, while in order to conceive my nature clearly and distinctly, I can and must exclude imagination, senses, and other faculties from it, and that it yet is impossible for me to exclude from these faculties which I know immediately by my thought, that same thought which indubitably constitutes my nature, is to discover at the same time the modal distinction and the *criterion* of the accidents of substance.

The genetic demonstration of this twofold distinction is accomplished, as is that of the nature of my soul, by a reflection on the conditions that have rendered possible the certain knowledge of the existence of my thinking self.

These ideas therefore appear as possessing the same certainty as the Cogito, since their knowledge is drawn directly from the knowledge I have of it. They are, consequently, absolutely certain *for me* (even though I do not yet know whether they are truths of things).

Their demonstration involves a twofold segregation, established by the intersection of the evil genius and the Cogito: everything that can be negated by means of the evil genius is excluded from the soul; everything that cannot, and in this way is proven to be inseparable from the Cogito, to which even metaphysical doubt succumbs,⁵⁰ is included in it, like the soul itself. Thus the evil genius negates everything that is corporeal, however small, for this negation does not negate anything of my thought.⁵¹ As for the faculties of my soul that I discover in me to be alien to the pure essence of my thought, it cannot negate them, even though they do not properly belong to my nature, for although this nature can be known without them, they are *thoughts*, nevertheless, that can no more be denied than my soul, without which they cannot exist. In fact, if it is very certain that *what* I doubt, *what* I imagine, sense, will, etc., can be negated by doubt, it is no less certain that I cannot doubt that I doubt, imagine, sense, will, and that none of these faculties can be negated, since from the moment that they are, they are inseparable from the being of my thinking self. We rediscover in them the essential characteristics of thought, that is, the property of being posited as true once I try to doubt them and to reduce them to seeming falsities: "It is extremely certain that *it seems to me* that I see light, hear sound, sense heat; that cannot be false, and it is what is properly called sensing; and that is precisely nothing else but thinking."⁵² Thus the principle of segregation that is entirely negative with respect to the body is tied to a positive principle with respect to the nonintellectual faculties of my mind, since it requires relating them to it necessarily, inasmuch as, though it reveals them as contingent relative to it, it reveals them at the same time as inseparable from it, once I notice that they *in fact* exist in it.

This method of segregation is considered by Descartes to be the great novelty of the *Second Meditation*.⁵³

Although tightly bound to the real distinction between the soul and body, the modal distinction between intelligence as constituting the nature of the soul and the contingent faculties (accidents) is altogether different. By not perceiving this difference, Gassendi encumbered himself with pseudodifficulties, concluding that the nonintellectual faculties must be rejected from the soul in the same way as was the body, in such a way that a portion of the soul is amputated—and also that Descartes contradicts himself by referring sensation and imagination to the soul.⁵⁴

But if intelligence or the principle of thought as "first act" or "principal form of man" is what soul amounts to, the word refers not to a part, but to the unity and whole, thought having no parts, but becoming diversified into a plurality of functions,⁵⁵ although remaining indivisible.

Moreover, that the nonintellectual faculties are contingent with respect to what constitutes the nature of the soul, cannot exclude them from it, since they cannot exist except by participating in this nature.⁵⁶

However, the notion of modes and their distinction from substance is not always perfectly clear. We become particularly aware of this when the necessities of our mind acquire an objective validity by virtue of divine veracity. Thus, declaring in *Meditation VI* that it is sufficient that I can *conceive* a thing clearly and distinctly without another in order to be certain that the first is distinct from the second, “because they can be posited separately, at least by God’s omnipotence,”⁵⁷ and affirming that I can conceive myself clearly and distinctly as a whole (*totum*) without the faculties of imagining and sensing, and that consequently, these faculties are modes,⁵⁸ Descartes concludes that God could have me exist without them: although modes cannot *exist* without substance, substance can *exist* without them. This conclusion is confirmed at the beginning of the same *Meditation*, where it is stated that imagination being in no way necessary to my nature or my essence, that is, the essence of my mind, no doubt I could remain always the same as I am now, even if I were to have none.⁵⁹ This conclusion is extended to all the modes and for any substance, since imagination and sensation are expressly paralleled with the modes of the body—shapes, movement, etc.⁶⁰ The conclusion is therefore as valid for extended substance as for thinking substance: one and the other could have been created without any of their modes.

That is a thesis that seems to be in opposition to the affirmation that there is no substantiality without accidentality. But such a difficulty can only be a verbal difficulty. Certainly, if the definition of substantiality necessarily includes accidentality, God, when creating a substance, could not create it without modes; otherwise, he would not be creating a substance. But it is not necessary that God create a substance. Since essences can be conceived clearly and distinctly without modes, he can create them without making of them a substance, in the sense of a being that is subject to some accidents.

However, have we not stated that any substance must have modes by which we know it and that a substance without modes would be unable to be known? And what is unable to be known cannot be the object of a clear and distinct idea. Thus it would be impossible to conceive that God could have created a substance without modes, because of the clear and distinct idea that we would have of this. Nevertheless, it is not stated that these “attributes, properties, or forms” by which we know substance are only modes—although Descartes speaks only of accidents to Clerselier (cf. above)—for substance has essential and necessary properties that are not accidents. For example, extension has the property of being extended in length, width, and depth, and of being divisible. Such attributes, and even the *principal attribute* alone, would be sufficient to allow us to know a substance that is devoid of modes.

The true difficulty is elsewhere. Descartes extends to all the modes the conclusions that he has drawn with respect to imagination and sensation. And no doubt it is evident that thinking substance can be created without these modes, or that these faculties can be conceived as modes, that is, that thought can be conceived clearly and distinctly without them. In fact, they belong so little to essential thought that they could not have come to it except by the violence that our thinking substance suffers from the fact of its union, a union contrary to its nature, with an adverse nature from which it is *really* separated. The exclusion of these modes outside the essence of the soul therefore appears tied to the exclusion of the body outside the soul. That is why the soul is posited as radically incorporeal. Thus the position of the modal distinction is, in this case, tied to the position of the real distinction and in some ways is dominated by it. But there are other modes than imagination and sensation, namely, the clear and distinct ideas and will. The attribution of mode to will is given implicitly in article 53 of the first part of the *Principles*: "Thus, for example, we cannot conceive shape except as an extended thing; thus imagination, sensation, and will so depend on a thinking thing that we cannot conceive them without it. But, on the other hand, we can conceive extension without shape or without motion, and the thinking thing without imagination or sensation and so forth with the rest."⁶¹ The expression "*and so forth for the rest*" can only refer to will, although it seems that Descartes had shied away from stating this explicitly.⁶² It goes without saying that if the essence of my thought is pure intellect, will is not part of it. God could therefore have created a mind without will.

Moreover, it is evident that in this case, what allows the exclusion of sensation and imagination from the pure essence of thought, and what renders these into modes, cannot also serve as foundation to reject will and clear and distinct ideas from modes. The distinction of these modes with respect to the essence of thought can owe absolutely nothing to the real distinction between the body and soul and to the alteration that this essence suffers by its union with an adverse nature. Pure minds (angels), devoid of bodies, have ideas and will. The modal distinction cannot be linked with the real distinction.

Do not the clear and distinct ideas arise from my intellect alone, an intellect that is separate from a body? Is it not of the essence of a pure intelligence to have clear and distinct ideas? What would a pure intelligence created by God without any ideas be? And can he not create it without ideas, since I conceive substance clearly and distinctly separate from its modes? There remains here no foundation for the distinction between mode and substance other than the classical criterion of variability, the only criterion valid for extension. While ideas change, the intellect remains identical to itself in the same way that extension remains identical to itself while shapes change.

But cannot the criterion be valid for will, since this power remains while volitions change? Certainly, as Descartes remarks, will is nothing other than volitions, but could one not say as much for intelligence—it is nothing other than ideas? Hence by what right can one think of will as a mode, and the self as a purely intelligent thing? Why do we not institute the self as a willing thing? Although I can easily conceive that God could create an intelligence without imagination and sensation, can I as easily conceive that he could create a mind without will? That, in fact, is “what we experience as coming directly from the soul [. . .], what seems to depend only on it,”⁶³ and what is a facet of our mind, of which the understanding is the other facet: “*Volitio et intellectio differunt tantum ut actio et passio ejusdem substantiae.*”⁶⁴ Thus all the kinds of thought are brought back to two kinds that seem symmetric: understanding and will.⁶⁵ No doubt my will is conditioned by my understanding, “for it is certain that we cannot will anything without perceiving by the same means that we will it,” but on the other hand, “we scarcely (*vix*) ever understand anything without having some volition at the same time.”⁶⁶ Moreover, will is nobler than understanding;⁶⁷ it is the most noble of our faculties, the only faculty that is infinite in me as it is in God and the faculty by which I resemble God.⁶⁸ How can what is finite in me—understanding—have as mode something nobler and infinite—will?

And do not the *Principles* open up another path that, if always followed everywhere, would have led to the proposition, *I have free will, therefore I exist*? Even if we are always deceived, Descartes states, “we still experience in us a freedom such that, anytime we wish, we can abstain from accepting as a belief things that we do not know well.”⁶⁹ The immediate certainty of my existence results from this, because *we cannot doubt without existing*.⁷⁰ In brief, “I doubt, therefore I am.” Doubt, meaning the free act by which I suspend all judgment, makes me perceive the freedom of my will as undeniably existing while I doubt everything. “That which we perceived directly” and “that which we cannot doubt during so general a suspension is as certain as anything we can ever know.” “Free will can [therefore] be counted as one of our common notions.”⁷¹ From this it seems to follow that it is not the certainty of my intellect that leads to the certainty of my free will.

It is noteworthy that this sequence is found only in the first part of *Principles*. Everywhere else (*Meditations, Replies to Objections, Discourse*), the certainty of my existence is not attested to by the consciousness of my freedom within doubt, through the formula, *I doubt therefore I am*, but by the fact of the representation (whether true or false), whatever the judgment brought to the thing represented, according to the formula: “Even if he deceives me, I think, therefore I exist.”⁷² It is true that in the *Search for Truth*, my existence is attested to by doubt: “It is certain that you are doubting, and it is true that you who are doubting exist.” But the fact of doubting is used insofar as it implies the *knowledge* of the fact that I am

doubting, and not the *free act* of doubting: "You exist and you know that you exist, and you know this because you know that you are doubting."⁷³ This formulation is therefore in the same family as that of the *Meditations*, the *Replies to the Objections*, and the *Discourse*.

From what does this special character of the Cogito in the *Principles* arise? It arises from the fact that there we are dealing with physics, and not metaphysics. The task of the first part of the *Principles* is to supply the future physicist quickly with the metaphysical notions that are indispensable for blazing the path of the new science. And the first requirement on which the initial possibility of the scientific revolution hangs is an act of free will by which the physicist will reject all acquired prejudices and will decide to accept nothing that is not proposed to him by natural light alone. From this arises the need to awake in him a consciousness of the decisive role played by the act of judgment, on which the true and the false depend entirely. That is why the Cogito is presented as a function of judgment, meaning free will, and only secondarily from the point of view of the intellect by which I gain knowledge of this free will and which constitutes the essence of the substance of which this will is but a mode.⁷⁴ On the other hand, the *Meditations* is concerned with metaphysics; and its primary principle is that of the foundation of the objective validity of our knowledge. That is why the Cogito is not based on my freedom to doubt, but on the fact that I think or I know. The indifference of the *Principles* to the problem of the objective validity of ideas is denoted later on by the subsidiary role played by the a posteriori proof of God's existence, a proof that is of capital importance to the *Meditations*, since it is through it alone that this problem will be resolved.

But even in the *Principles* the voluntarist formula does not supplant the formula of the *Meditations*—I must necessarily posit myself as existing because I cannot doubt without thinking or think without existing.⁷⁵ In fact the demonstration that supports the Cogito necessarily involves the primacy of knowledge. All that I can assert at this point on the chain of reasons is that I represent myself as free when I doubt, but I cannot know whether effectively I am so. On the other hand, I know in all certainty that it is sufficient that I represent it to myself, meaning it is sufficient that I think in order to exist. Descartes replies to Gassendi, who objects that the certainty of existence can be inferred from any of my actions,⁷⁶ that Gassendi misunderstands him, for none of these actions is certain, none has the required metaphysical certainty that is at stake here, except thought.⁷⁷ Finally, any action in us is ours only to the extent that we have knowledge (or passion) of it.⁷⁸ No doubt it has been observed that if the understanding conditions any volition, the will conditions intellection, in return. But this is only approximately: *vix*. That is what occurs most frequently, in fact, but not always, nor necessarily. Intellection is, on the contrary, an absolute, necessary condition of any volition. For there is nothing in me whose

existence can be affirmed that must not first be known. And what I conceive clearly and distinctly as being the condition in my soul of all the rest must be really—on the supposition that my rational thought has an incontestable objective validity—held to be the independent foundation, hence the substantial foundation, of all the other faculties.⁷⁹ It is therefore idealism, the assertion that the inference from knowledge to being is valid, which, by virtue of the order, constrains Descartes, even though he acknowledges elsewhere the eminent nature of will, to confer on will the status of mode even though it is infinite, and the substance of which it is a mode is finite. The rigorous genetic process from which I have drawn, at the same time, the certainty of my existence and the knowledge of my nature imparts a geometric rigor to this conclusion that the essence of my thought is only *intellectus sive ratio*, because this rational faculty of knowledge is the *only* faculty that it is impossible for me to deny within the hypothesis of the evil genius. My will is only the consciousness I have of willing. One can doubt that I am willing and affirm that my will, my effort, is but an illusion, state that it only *seems* that I will, in the same way that it *seems* that I sense or imagine; but, in any case, one cannot doubt that I think that I will. And it is starting with this certainty with respect to my thought that one can later draw out the certainty that I have concerning the faculties I *seem* to possess. In this way the principle that we have called Descartes' voluntarism is necessarily limited: will no more belongs to the thinking essence that constitutes me than movement belongs to the essence of extension.⁸⁰

6. Intelligence as Essence of Substance; Intelligence as Mode; the Two *Quids*

These relations between modes and the essence of substance explain that pure intellect appears twice, in two different ways: as essence of the thinking substance and as mode of this substance. As essence of substance, pure intellect is present in all modes of thought, even in those that are the most alien to it, such as imagination, sensation, and will, for these modes must necessarily be related to "the intelligent substance" since "they embrace some type of intellection."⁸¹ But insofar as the intelligent substance cannot, because of the presence in it of these non-purely-intellectual modes, always appear to itself as a pure intelligence relative to its essence, it becomes an accidental manifestation in it, and it must, on this account, take its place as accident with the other non-purely-intellectual modes. From this stems the two definitions of the thinking thing, according to whether one understands by the *quid* the essence of the substance or quiddity, properly speaking: "*Res cogitans, id est mens, sive animus, sive intellectus, sive ratio*";⁸² or the substance including its accidents:⁸³ "*Res cogitans, quid est hoc? nempe dubitans, intelligens, affirmans, negans, volens, nolens, imaginans quoque sentiens.*"⁸⁴

Since pure intelligence appears as a mode, not by virtue of its nature,

but because of the other modes that are foreign to the true essence of substance and that sometimes mask its pure expression, it follows that the manifestation of pure intelligence is contingent, but pure intelligence itself is not contingent, in contrast with all the other modes that are contingent with respect to substance. That is why, when Descartes enumerates the modes that are such that I can conceive the thinking substance clearly and distinctly without them, he mentions imagination, sensation, and will, but not intelligence. From this it appears again that the intellect is the principal attribute among all the attributes that the thinking substance possesses, meaning, "the one that constitutes its nature and essence, and on whom the others depend."⁸⁵ All the others depend on it since, as we have seen, they cannot belong to it except by embracing some type of intellection; and moreover, when substance is manifested by means of them and not by means of pure intellect, it does not cease to be conceived as pure intellect in itself, since they are in it only by means of this kind of intellection.

The confusion of these two *quids* would immediately falsify the doctrine.

Yet no mistake is easier to make. In fact, as I know more attributes of a substance, the better I know the substance, and as I perceive more attributes of a thinking substance, the better I know it. That is why, after having enumerated the modes, *dubitans*, *intelligens*, *affirmans*, etc., Descartes concludes: "As a result I begin to know what I am (*quisnam sim*) with a little more clarity and distinctness than before."⁸⁶ There is only a short step from this and the conclusion, Hamelin's conclusion for example, that the *true definition* of thought is ordinary psychological consciousness in its widest sense and that the first *quid* is to be reduced to the second,⁸⁷ instead of basing the second in the first, as Descartes does.

Certainly, the definition by enumeration of modes is a *true definition*; it is the most immediately accessible, and it designates without ambiguity the thing in question. Thus it figures at the head of the definitions of the *Geometric Appendix to the Replies to Objections II* and at the beginning of the *Principles* (art. 9). But detached from what links it to the definition of essence and what gives it a rational character instead of its empirical character, it is only a definition *quid nominis*.⁸⁸ The *real definition* is the one that, detached because of the scientific *apparatus* of the Cogito, announces the essence of the thing—in this case, pure intelligence insofar as it establishes the legitimate attribution of the various modes to the substance they manifest and insofar as it is confirmed as the first absolute condition of all psychological consciousness, whether purely intellectual or not. To have consciousness is to know, and to know is merely to understand or to grasp (*comprehendere*, *intelligere*). If I know that I exist (*quod*), it is because I know what (*quid*) I am: namely, thinking; if I know that I am thinking, it is because I *understand* that it is *necessary* that I think since I err, doubt, deny, etc.; if I know that I am once I think, it is because I *understand* that it is

necessary that I exist once I think. All knowledge, being intellection, involves a necessity: I only know myself as pure thought because I *understand* that it is *necessary* that I exclude from my being everything that is not pure intelligence, etc. It is the same for the knowledge of all things other than myself. We will see that if I know the wax, that if I perceive a man under a moving hat and overcoat in the street, it is because I understand (*comprehendo, intelligo*)⁸⁹ that that is the wax and that that is a man. I could not have known *that* that thing is (*quod*), without understanding that it is truly itself, and therefore without first knowing *what* it is (*quid*). And I know what it is by conceiving clearly and distinctly that it is really separate from everything else, that is, by *understanding* that it *necessarily* excludes all other things from itself; for example, I conceive that wax necessarily excludes from its substance what defines the substance of iron or stone.⁹⁰ The faculty of knowledge, consciousness in its essence, is—and the analysis of the piece of wax will confirm this—an understanding that constitutes for myself, by means of clear and distinct ideas that are in it from all time, what I posit as known.

Descartes legitimates the attribution of nonintellectual modes to intellectual consciousness from the fact that he perceives in them an intellection that renders necessary their attribution to thought for me. Transforming the nominal definition of thought (by the enumeration of its empirically certified modes) into a demonstrated theorem, Descartes makes progress in the clear and distinct science of the mind. He reconstructs ordinary (psychological) consciousness with all its modes beginning with its essence, pure intelligence, in the same way that he will reconstruct the material world beginning with its essence, pure extension or geometric extension. From this one sees an unfolding of reality, for as we shall see, essence being everywhere identical to existence, the existing things are nothing more than the actuality of their essential realities and their combinations. In the same way that the existence of the self is already only affirmable as actuality of the pure thinking essence, or intelligence, the existence of matter will only be affirmable as actuality of purely extended essence, or geometric extension. Finally, there will be a being whose “nature” will be fashioned from the mixture of the two others.

And this unfolding of essential reality as a single existing reality goes clearly against common sense, which is imbued with imagination and sensation. Common sense has as much difficulty in conceiving that the reality of the self is *completely* reduced to pure intelligence as it has difficulty in conceiving that the reality of the matter outside us is *completely* reduced to pure geometric extension.

The result of the confusion between the two *quids* is fatal. In effect, by substituting ordinary psychological consciousness for mathematico-rational intelligence, as the essence of thought, we are led to see in the Cartesian knowledge of self only a pure and simple introspection based on our

attentiveness (that was already Victor Cousin's interpretation), and we are led to see the *Meditations* as solely an intellectual biography, an account, the history of an experience, etc. We are brought in this way to see the Descartes of the *Meditations* as a psychologist. To do so would be to confuse necessary and sufficient conditions. For, if freedom of autonomous judgment detached from all prejudice and attentiveness are the sine qua non conditions of the discovery of the true, they are no more sufficient conditions for this than for mathematics. Montaigne had recognized this. In addition, a rational apparatus is needed, meaning the notion and adherence to the order that mathematics give us, and the application of precepts that the *Rules* has thought indispensable to formulate. One is brought, in addition, to subordinate the main thing to the accessory thing, the basic doctrine to the literary presentation, because of the charge imposed on the philosopher by the necessity to persuade a rebellious reader captured by imagination. Thus the spirit of Cartesianism is finally destroyed at its roots, a spirit that is not psychological but geometrical—thus a psychologism without rigor and without vigor is substituted for it.

Certainly since the subject is myself, no instrument is possible other than reflection on oneself. Moreover, the doctrine does contain great psychological wealth. The spirit of geometry does not exclude for Descartes the spirit of finesse, the psychological sense.⁹¹ But psychology is nonapodictic, and the *Meditations* is a linkage of completely apodictic truths. Psychology thus serves a rational speculation; reflection is required by an order that also requires mathematical enquiry. What is at stake is not only to observe and to relate what happens in me, but to attain the essence of my self—which exceeds the ability of any psychology—and to account, by means of this essence, for everything that is discovered in my soul according to the order, and also, above all, to determine the limits of my mind, to establish the objective validity of my ideas, and in this way, to establish the objective validity of science. Doubtless, finally, the method itself has been discovered by a reflection on the spontaneous proceedings of my mind in the search for truth,⁹² and it is not imposed on it externally and from on high as a canon, a pure logic expressing an ideal order in itself independent of the fact of my knowledge, which would subsist even if my original consciousness, indeed every thinking being whatever, should cease to exist. In this way Descartes represents a tendency opposite to Leibniz's, and Husserl would have reproached him with psychologism for this—as would have Kant.⁹³ But what I discover by means of this reflection on my mind are rational necessities inherent in my intellectual essence; and this return to the laws of my essence considered as deciding the structure of my mind itself has nothing to do with psychology, even if the logic that flows from it is tarnished by psychologism.

7. The Process of Internal Demonstration of the Various Notions of Distinction

One ought not confuse the genetic process that, beginning with the Cogito, allows the ideas of real distinction and modal distinction to be acquired, and allows their validity as certain scientific truths to be established, with the process of drawing the real distinction or the modal distinction from the direct intuition of the ideas of things. For example, I can draw directly the real distinction between thought and extension from the fact that I perceive in these ideas that one of them includes indivisibility and the other divisibility, and that consequently they radically exclude one another;⁹⁴ thus I can also demonstrate that I have the clear and distinct idea of a thing as substance because I can conceive it clearly and distinctly while abstracting it from everything else. But these proceedings and their legitimate use presuppose that I am already in possession of clear and distinct ideas of substantiality, of real distinction and of modal distinction, that I know that they are truths which are valid for my science, and that I know the criteria allowing their recognition and the conditions making possible their knowledge. However, I lack these items of knowledge, and the process begun by *Meditation II* has as its consequence getting me to know them and validating them as truths of science.

Certainly, these truths are in me before the light of my mind reveals them, for "internal consciousness always precedes the acquisition,"⁹⁵ and the reality of my understanding precedes the science that I could have taken from it. But insofar as they are outside my science, they are unknown and therefore they do not allow me to reach the known. Thus in order to know them, meaning in order to posit them in my science, I needed to start from the one thing that was first known to me, namely, that I am (*quod*). I then produced in me, in the light of nature, the idea of my nature (*quid*), and then through this, the ideas of substantiality, and of real and modal distinction, and discovered finally the conditions that render possible the knowledge of these ideas. Thus the discovery of the properties of the clear and distinct idea of my soul and of other subsequent ideas (substantiality, modality) has been rendered possible in me by the knowledge of the conditions that have themselves rendered possible the production of the idea of my nature in the light of my mind, exactly as, in geometry, the subsequent properties of a figure can be perceived by reflecting on the conditions that have rendered possible its generation or construction. And this analytic method is completely different from the one that consists in drawing from the intuition of the completely constituted figure the necessary properties it could include.

8. Conditions of the Subjective Validity of the Knowledge of the Nature of the Self

To what extent can the rigorous process that has just been set forth allow the attainment of true knowledge of the nature of the soul?

This is a twofold problem. First, it concerns knowing whether I can establish, within a science so constituted, that this science itself—meaning, for my own understanding isolated from the rest—this knowledge, can present itself legitimately as being necessarily the knowledge of my whole nature, and not simply a partial knowledge that does not authorize me to restrict the definition of this whole to my thought only.

Second, it concerns knowing whether the knowledge of my nature, such that the understanding represents it to myself as complete, possesses an objective validity, meaning whether in myself my nature is reducible to what my science represents to me necessarily—in brief, whether in itself it is reducible to my thought.

These two distinct problems sometimes interfere in the discussions that Descartes holds with his opponents; they have often been badly distinguished by the commentators. This is because, although they are extremely different, they can be condensed into the formulation of a single objection: is it certain that the nature of my soul is reducible only to thought?

In fact, if the science that I have just acquired from my soul does not have any objective validity, or if one cannot establish that it has any, I cannot affirm that my thought constitutes *in itself* the whole of the nature of my soul, even if my understanding is required, by virtue of the chain of reasons, to represent it to me as constituting this whole; in brief, I am not authorized to exclude from *the thinking thing in itself* the body that I exclude from *the knowledge that I have given myself of it*. And moreover, if the science that I have of the nature of my soul as pure thought cannot be legitimately posited within this science as the knowledge of the whole of my nature, I am not authorized to exclude from *the idea of the thinking thing* the body I have abstracted in order to obtain an independent knowledge of the idea. The first case concerns the right I have to exclude the body from the thinking thing, and the second case concerns the right I have to exclude it from the idea that my science has given me of it. The first case concerns an external problem: Must what is valid, according to the order of reasons, be held as the truth of the thing? The second case concerns an internal problem: Is the conclusion I have drawn been justified effectively by the order of reasons whose linkage constitutes my science?

In *Meditation II* Descartes replies succinctly and without the least ambiguity to these questions. On the one hand, it is incontestable that science has proceeded rigorously and that from its perspective, we are authorized, even required, to conclude that thought alone constitutes my

entire nature.⁹⁶ On the other hand, it is no less incontestable that I do not absolutely know yet if my science has an objective validity. Better yet, I am required, given that the evil genius still reigns, to consider provisionally that it has none, such that I cannot yet know whether in itself the nature of the soul does not contain, besides thought, other constitutive elements that are unknown to me.⁹⁷

First of all, considering the validity of the theory from the perspective of science or the order of reasons, its conclusion could have been contested. For, from what I am assured of being because I think thus, while yet I deny the body, it would follow simply that I can acquire some knowledge of myself without any knowledge of the body, and not that this “knowledge is complete and entire so that I am assured that I am not deceived when I exclude the body from my essence.”⁹⁸ Similarly, from the fact that I can think clearly and distinctly about such and such a property of a right triangle by abstracting away another property that the triangle holds, I cannot affirm that the essence of the right triangle is reducible to the single property that I am considering and that the property I am negating by abstraction is excluded from it.⁹⁹

Descartes replies that in order to know that two things exclude each other, meaning that there is a real distinction between them, it is necessary to know them as complete, but not to know them completely. No doubt, to know something completely is sometimes possible, but it is always impossible for me to know that this knowledge is complete, for my power to know would have to equal God’s infinite power for me to be certain that “God has put no more in this thing other than what my understanding knows.”¹⁰⁰ On the other hand, I can know something as complete, and I can have the certainty that this knowledge is such, if I can conceive this thing *clearly and distinctly* while denying everything else from it. The comparison with a single, separate property of a right triangle is utterly inadequate, because this property is not something complete, because it cannot be understood clearly and distinctly if one separates it from the right triangle, and because the triangle itself cannot be clearly and distinctly known if one denies this property of it. On the contrary, since I conceive my nature very clearly and distinctly by denying the body and everything belonging to the body from my nature, while it is impossible for me to deny thought, it is legitimate to conclude that the nature of my soul is constituted only by thought.¹⁰¹ One must therefore distinguish between *abstraction of the mind* that renders inadequate, obscure, and confused a complete idea by restricting thought to the consideration of one of its parts, and *exclusion*, which, separating a complete idea from what does not belong to it, allows one, on the contrary, to have a clear and distinct idea of it.¹⁰² “There is a great difference between *abstraction* and *exclusion*. If I said simply that the idea I have of my soul does not represent it to me as dependent on the body and identified with it, this would be merely an abstraction, from which I

could form only a negative argument, which would be unsound. But I say that this idea represents it to me as a substance that can exist even though everything belonging to body would be excluded from it; from this I form a positive argument and conclude that it can exist without the body."¹⁰³ And the knowledge that one thing excludes another can be obtained in different ways. It can be obtained by the intuition of one of its fundamental properties that is the negation of a fundamental property of the other thing. Thus "the exclusion of extension can be clearly seen in the nature of the soul, from the fact that one cannot think of half of a thinking thing."¹⁰⁴ But it can be acquired also, which is the case in *Meditation II*, by the necessary process that has rendered possible the knowledge of the thing considered. The possibility to negate the corporeal thing without anything of my soul being destroyed, and the necessity to negate it in order that we can arrive at the knowledge of the nature of this soul, together prove, not just that I can acquire some knowledge of my soul without any knowledge of the body, but that the body must be excluded from my nature in order that I could truly know my soul, and that thus I know my nature as having to exclude the body, and as complete, when it is reduced to my thought without my body. "It seems to me very clear that the idea I have of a thinking substance is complete in this sense [meaning because I can conceive it alone and deny all other things of which I have ideas of it—M. G.] and that I have no other idea that is prior to it in my mind and that is joined to it in such a way that I cannot conceive them while denying the one of the other."¹⁰⁵

It is therefore indubitable that my science can legitimately claim to know in an absolutely adequate way the nature of my soul as pure intelligence. This conclusion is confirmed by the consequences that the *Rules* drew from the implications of the method. The process of elimination that has allowed me to attain the Cogito, in fact, has left only an absolutely simple residue that is incapable of being broken up; it is, moreover, the first reason, and consequently, it is the simplest of all the simple natures. And a simple nature cannot contain in itself anything other than what I know of it; otherwise, it would no longer be simple, but composite. It must be known completely, or not at all.¹⁰⁶ Therefore, once I know this simple nature that constitutes *the essence of the soul*, I know it completely. This in no way means that I have a complete knowledge of the *soul*: on the contrary, there are a multitude of properties in it that I do not yet know, and that perhaps I will never know. But it means that I have a complete knowledge of its *essence*, which is plainly revealed to me as such and which no longer hides from me what it is: it is thought, purely and simply. In this way, I know in advance that all the unknown properties that it includes in itself cannot not include thought and must exclude everything foreign to thought. I therefore do not have a complete knowledge of my soul, but a complete knowledge of its nature as such.

**9. Conditions of the Objective Validity of the Self.
Objective Validity of the Knowledge of the Existence of
My Self; the Merely Subjective Validity of the Knowledge
of the Nature of Self at the Level of the Cogito**

As for the objective validity of this knowledge, Descartes himself declares it null, for the moment, and declares that its truth resides only in the internal necessity of science.

The rational link that attaches the representation I construct for myself of the nature of the soul to the position of the Cogito as first reason, gives this representation in and for my thought a complete necessity and a certainty equal to the certainty of the Cogito itself. As it is certain that I exist for myself, it is certain that my thought cannot escape the necessities involved in the position of its own existence and which concern its own nature. It can no more subtract itself from their affirmation than from the affirmation of self. There is therefore no other science of the nature of my soul possible for my understanding than the one just developed.

However, although this science is as certain as the Cogito for my understanding, it has certainty only within it, that is, for my self enclosed within itself. One sees in this way the introduction of a fundamental distinction between the two truths that the Cogito brings to me linked to one another. Although it furnishes me the knowledge of my existence (*quod*) and at the same time the knowledge of my nature (*quid*), these two items of knowledge each involve an extremely different order of certainty. The first is not only certain for me, but it already possesses a full objective validity, for it suffices that I *think* that I exist to know that I exist *in myself*. The second has only a purely subjective validity as of now, for the fact that I *think of myself as being by nature* pure thought in no way implies that I *am exclusively in myself a nature* that thinks. I only know that the *necessity* to represent my own nature to myself in this way exists in myself as certainly as I exist and as certainly that I can posit this existence only insofar as I think.

The science of my nature, while calling for the rigorous certainty of a perfectly rational science, therefore remains purely subjective as long as I have not established that, in its rationality, I have captured the truth of *the thing itself* whose nature I *represent* to myself. It is absolutely certain that the subject cannot represent his own nature to himself other than according to this science. But when I speak of *my nature*, I understand by this the essential reality of the subject such that it exists *in itself*. And nothing guarantees me that my subject possesses *in itself* the nature that it is necessarily constrained to attribute to itself:¹⁰⁷ “to belong to my essence and to belong to the knowledge I have of myself are two completely different things.”¹⁰⁸ In other words, the science that I have thus obtained is absolutely necessary and certain, like the Cogito, but I do not yet know whether this science has *an objective validity*, and if, in itself, *in essence*, I am as I

represent myself to be. That is why Descartes does not fail to emphasize that his conclusions have no validity except within the system of reasons that he has just developed: "I am now admitting nothing except what is necessarily true; I am, therefore, speaking precisely (*praecise tantum*), only a thing that thinks."¹⁰⁹ That is *for me* the only valid residue, the one remaining when one has "rejected everything that can be rendered even slightly doubtful by the arguments that I have just now offered, so that there will remain only what alone is certain and indubitable."¹¹⁰ But in order to have rejected from my certain knowledge all the things that are in this way unknown—for by definition what is rejected outside knowledge is unknown—I cannot say whether these unknown things are "*in rei veritate*"¹¹¹ different in themselves from the self that I know. How could I know this since I do not know them? "I know nothing of this; I am not discussing this now, since I can only pass judgment on things that are known to me."¹¹²

Truly, this observation involves two different interpretations, one restricted, and the other general, which basically are both present in the thought of the philosopher.

1) I do not know the body. How could I affirm validly that it is or it is not different from myself? Once I know the body, I shall be able to know whether its nature is in itself exclusive from mine.

This natural interpretation is a minor consideration. What is here in question is the nature of the self that I know, not the nature of the body that I do not know. And if I know that the nature of my self is radically different from the nature of body, I cannot suppose that the nature of body, which I do not yet know, can be the same as the nature of the self, for the nature of the self could not be different from the nature of body if the reciprocal were not true. Yet, it suffices for me to know the nature of my self in order to know, *ipso facto*, that the nature of body must exclude that nature of self, since the two exclusions are only two complementary aspects of one and the same incompatibility. And do I not have a clear and distinct knowledge of the nature of my self? As a result, am I not already, with complete certainty, obliged to exclude the nature of body from it and to assert that the nature of body, even though it is unknown to me, must necessarily be different from mine? But that is precisely the obligation that Descartes contests. The argument can have sense only if it places into question the objective validity of the knowledge I have of my own nature.

2) Certainly I know myself as having a nature that excludes the nature of body—in other words, in order to know myself, I must exclude body from myself. But can I assure that "*in veritate rei*" I am as I represent myself to my consciousness, *in veritate rationum*? That consequently, *in itself*, my nature is different from the nature of body? For that, I have to have known that my consciousness has an objective validity. But that is precisely what I do not know. And I can only speak about what I have indubitable knowledge of; therefore, for now, I do not know whether *in itself*, the

essence of my self is really different from that of body: "I know nothing of this; I am not discussing this now, since I can only pass judgment on things that are known to me." Truly, it is the objective validity of my knowledge that is put into question here.

The Replies to the Objections brings forth the literal details necessary with respect to this: "It is not true that I assumed something I did not know; for, on the contrary, because I did not know whether body was the same as mind or not, I made no assumption about this, but only treated the mind, until finally, in *Meditation VI*, I not only proposed, but demonstrated very clearly, that mind was really distinct from body."¹¹³ Consequently, if I have the right to exclude body from my science, meaning from the knowledge of *the clear and distinct idea of my nature*, I do not yet have the right to exclude body from *the very nature* of my self. In order to exclude it legitimately from the thinking thing in itself, in the same way that I exclude it from the idea I have of it, I must demonstrate that the necessity of my thought is the very necessity of things. Therefore, what is *an exclusion with respect to my idea* is yet only *a simple abstraction with respect to the thing*: "Because I have said in one place, that while the soul doubts the existence of all material things, it knows itself precisely, *praecise tantum*, only as an immaterial substance; and seven or eight lines lower down, in order to show that by these words, *praecise tantum*, I do not mean an entire exclusion or negation, but only an abstraction of material things, I said that, in spite of that, I was not sure that there was nothing corporeal in the soul, even though nothing of the kind was known in it; my opponents are so unjust to me that they wish to persuade the reader that by saying *praecise tantum*, I wished to exclude the body, and that I have thus contradicted myself afterwards by saying that I did not wish to exclude it."¹¹⁴ From this one sees that what is *exclusion* from the point of view of science can only be *abstraction* from the point of view of the thing. Thus the words *exclusion* and *abstraction* have different meanings according to whether one takes as point of view the truth of science or the truth of the thing.¹¹⁵

But if the truth that I have demonstrated has validity only for myself, the nature of my self possibly being entirely different from what I know, have we not spoken and deduced for nothing? That is a question that comes naturally to Arnauld's mind: "But he himself admits that, by the argument he proposed in his treatise, on the *Method*, the proof has proceeded only so far as to exclude from the nature of the mind everything that is corporeal and dependent on body, and not with respect to the truth of the thing, but only following the order of his thought and his reasoning—meaning that nothing was known to him to belong to his essence, beyond the fact that he **was** a thing that thinks. Hence, it is evident from this reply that the argument is still at the same place it was, etc."¹¹⁶

It is incontestable that the demonstration is not completed. In order for it to be completed, I will have to prove that the clear and distinct idea I have

of my nature is an essence, meaning that it responds to the constitutive nature of the thing such as God has instituted; in brief, I will have to establish the objective validity of science: "Therefore . . . the problem whose solution he promises us remains in its entirety . . . namely, how it follows from the fact that he does not know anything else belonging to his essence except the fact that he is a thing that thinks, that there is nothing else that belongs to his essence."¹¹⁷ This demonstration will be furnished in *Meditation III*, by means of the demonstration of divine veracity.¹¹⁸

The fact that the science of my nature has still only a purely subjective validity, however, does not diminish its own certainty in any way, since it is entirely evident and necessary. It is just that we will need to find a means of conferring on this certain science the objective validity that it still lacks.

Moreover, to have established that *for my science* it is necessary that it be so is a first result which is considerable and indispensable. From now on, it is certain that, in order to contest this truth, one would have to refuse to recognize an objective validity to every possible rational human science. Already and from now on, the question is enclosed in an alternative that excludes all the objections based on properties that I could not know, for only one of the two alternatives is viable: either human science as knowledge of truth of things is possible, in which case, that thought constitutes by itself the whole essence of my soul, is a truth of things, or else the proof that the truths of my science are truths of things and that an objectively valid, rational human science is possible would never be able to be administered, in which case we would no doubt never be able to prove definitively that, in itself, the nature of the soul really excludes the body, but we would also never be able to prove the contrary, either. We would purely and simply have recourse to the deep chasm of absolute skepticism, in this respect.

Besides, since it is necessary to proceed in an orderly manner beginning from the first indubitable certainty, and since the latter resides in the certainty of the existence of my thinking self, and in the subjective knowledge that I acquire of its nature in this way, it is impossible to constitute a science that is objectively certain, other than by beginning with a science that is subjectively certain; and if an objective science ever becomes possible, it will have to arise, in accordance with the order, from within the necessities of my subjective science itself.

The following is therefore incontestable from now on: first, I know at least something of my soul, since I know with certainty, if not all its properties, at least some of them;¹¹⁹ second, I know it apart from the body—that its nature is known clearly and distinctly only by excluding the body; for that reason I necessarily represent it to myself as constituted by my thought alone; that it is impossible to argue in any way against the internal certainty of this knowledge; and that since the latter sums up all the science that is certain and possible at the present stage of the inquiry, the objections addressed to it could not be drawn from any science whatever, but from the

unknown, that is, from a lack of knowledge; and that these objections are therefore null a priori, as is this unknown rejected as outside my knowledge. Certainly there are properties still unknown in me,¹²⁰ properties that may even remain unknown forever.¹²¹ But they would not prevent me from knowing what is my soul,¹²² in the same way that “if there were several properties in a triangle that no mathematician would ever know, they would not prevent one from knowing what is a triangle.”¹²³ Moreover, I am assured from now on—if this science is valid—that these unknown properties cannot be repugnant to the ideas that this science has given me about the nature of my soul and that if even I discovered properties in my soul that would be repugnant to it, they would not be arising from its nature but from its composition with an adverse nature.¹²⁴ It is equally impossible, for any conceivable rational human science, that the knowledge I have of my nature and of the properties that I actually perceive can be deduced from unknown properties that can be in me, since knowledge of the former necessarily precedes knowledge of the latter in the order of reasons:¹²⁵ “it is certain that the knowledge of my being thus taken precisely in no way depends on things whose existence is yet unknown to me.”¹²⁶ Therefore my soul is definitely posited as independent from these unknown properties, from now on, *for my science*. And that alone suffices. Science has to account only for itself. It must preoccupy itself with nothing other than what is necessarily inscribed, according to the order of reasons, in the sphere of certainty that is the sphere of complete certainty for me. Similarly, in geometry one cannot argue against demonstrated properties from unknown and undemonstrated properties; one does not worry about knowing whether things correspond objectively with the properties thus demonstrated, but only about the dependence of reasons that allows one to pass from the certain knowledge of one notion to the certain knowledge of another.

In philosophical science, however, it will happen that a reason will be seized at one point on the chain—the veracious God who will suddenly invest the truths obtained according to the order of reasons with an objective validity. That is where the superiority of this science over geometry resides: it is capable of drawing the demonstration of its own objective validity from itself, a validity that geometry postulates for itself, without having established it and without even having put it into question. In the same way that the Cogito, in opposition with geometric truth, immediately drew the certainty of its certainty from its content, philosophical science, by means of its internal development, will draw from the subjective necessity imposed by the order of reasons, the objective validity that will sublimate it as the truth of the thing. And, certainly, philosophical science will be wholly transformed in this way, since it will be completely metamorphosed as the truth of the thing; but in itself, in its internal certainty, it will suffer no modification, no more than in geometry the body of truths already

demonstrated is modified by the addition of a new truth, discovered by virtue of the bond that links it to prior truths.

10. The Absolute Identity of Consciousness and of the Consciousness of Consciousness in the Cogito. The Cogito, an Indivisible Intuition of a Singular Thought

By abstracting away everything that is not simply pure thought in me, I allowed my mind to focus on itself and only on itself. This process of analysis and abstraction is to be identified with the process of reflection, because reflection, being only the attention of the soul restricted to itself, can only occur by abstracting away what is not purely soul. It was natural that this process ended up with the Cogito as reflective knowledge: *mens in se conversa*.¹²⁷ It was equally inevitable that, pushed to the extreme, it ended up with the Cogito as pure intellection, since it belongs to the definition of the reflection with which the soul could not have dealings, except with it alone.¹²⁸ Finally this reflection, like all attentiveness, is no more than the concentration of the whole capacity of intelligence on a single point that then becomes the sharp focus of light, the other points ceasing, or almost ceasing, to receive the light, and finding themselves rejected in the night, meaning in a void of knowledge.¹²⁹

But in order to be conscious of one's thought, must one not first think, and then think that one is thinking? "But how can you be conscious, since to be conscious is to think? And, in order to think that you are conscious, you must go on to another thought; and thus you no longer are thinking of the thing you were thinking earlier; and thus you are not conscious that you are thinking, but of having thought."¹³⁰ My thought before the Cogito is doomed to escape irretrievably the actual intuition of itself in the Cogito, and the Cogito is then no more than a mirage.

Descartes' reply to this objection, whose origin stems from the Sophists, at first appears as an *ad hominem* reply, that only half reveals the thought of the philosopher, at least as it is reported to us by Burman, his interlocutor.

"To be conscious," he replies, "is to think and to reflect on one's thoughts; but it is false that this reflection cannot occur while the previous thought is there, since the soul can think of several things at the same time, persevere in its thought, reflect on its thoughts as often as it likes, and be conscious of each of them in this way." Descartes therefore seems to agree that thinking and thinking that one is thinking are two really different things, and that the consciousness of the Cogito, as reflective consciousness, can only be saved by the possibility of thinking two really distinct things at the same time. Moreover, this "at the same time" itself would be some time of greater or lesser duration, and not rigorously an instant. That is the reason for the two correlative propositions: a) "It is false that thought occurs

instantaneously, since all our actions are in time, and I can be said to be continuing to persevere in the same thought for some time"; and b) "It is not true that our mind can only think of one thing at a time; no doubt it cannot think of many things at the same time, but it can still conceive more than one—for example, I am now conceiving and I am thinking at the same time that I am speaking and that I am eating."¹³¹ Similarly, an eye can see several things during the same instant.

If these texts were held literally, the problem would not be resolved. For if the reflective consciousness of the Cogito is only explicable insofar as we can think several thoughts at the same time, and if consequently we recognize that the Cogito has the character of complex, and not simple thought—if it is several thoughts at the same time—its certainty is ipso facto compromised. Its certainty was absolute, in fact, only because it was given as noncomposite, simple, and unitary, a thought separated from others, self-sufficient, and because of this, grasped in an instantaneous intuition, which is itself indivisible. Moreover, Descartes observes that in optics if I can see several objects at the same time, it is because I see them confusedly, for in order to see an object clearly and *distinctly*, one must, on the contrary, concentrate all one's vision on it alone.¹³² And he tells us that it is the same for thought. The more the light of the mind is dispersed on a greater number of objects at the same time, the more confused is the knowledge; on the other hand, the more it concentrates on a smaller number, the more distinct is the knowledge.¹³³ That is what one could call the principle of conservation of the same quantity of thought, a principle to which Malebranche will accord an important role.¹³⁴

Consequently, it is possible to think several thoughts at the same time, but on the condition that the thought is confused. The Cogito would therefore be a relatively confused thought, in this case. Besides, since the intuition of a single particular thought is always clearer than the knowledge of several, the Cogito, as the knowledge of several thoughts at the same time, would be less clear and distinct than the thought on which it reflects, which is not double, but simple; and generally, reflective or philosophical consciousness would be less distinct by a degree than nonreflective consciousness—which is contrary to the hypothesis. The Cogito, being an absolutely clear and distinct thought, can therefore be only the intuition of a single thought, and not the confused knowledge of several. Science, having clear and distinct ideas as object, must, in fact, always insure that the mind has only a single thought at each instant, and not several.¹³⁵ That is why science requires *perspicacity* first, "which consists in grasping the distinct intuition of each thing (*res singulas distincte intuendo*)."¹³⁶ It requires "one to become accustomed to embrace by thought such simple things so few at a time that one thinks one never knows anything of which one does not have an intuition as distinct as the intuition one knows most distinctly of all"¹³⁷—for example, the movement at the same time of the extremities of a stick or the indivisible instant in which the weight raises one side of a balance and

lowers the other.¹³⁸ And it is evident that my thought cannot embrace anything so simple and so unique as my single thought itself, and that the Cogito, which is preeminently a scientific truth, since it is the first and fundamental scientific truth, could not escape the condition that governs the scientific knowledge of all truth.

It is true that science also has as object to conceive distinctly, as much as possible, several things at the same time (*plura simul quantum fieri potest distincte concipere*).¹³⁹ Science is less the isolated knowledge of each link than the knowledge of their linkage.¹⁴⁰ Deduction, although constructed from singular intuitions, aims at this linkage. And science, in addition to perspicacity, requires *shrewdness*, which is the art of discovering the links between several terms. Since it claims clear and distinct knowledge of a multitude, it would not be satisfied with memory for joining past intuitions with present intuitions because remembered intuitions are neither intuitions nor items of evidence. From this stems the process of repeated enumerations designed to suppress time and substitute for memory the actual vision of all the items of evidence perceived at the same time in their rationality.¹⁴¹ This is a process whose success is conceivable only because in themselves all the truths are linked together outside time, at every instant. But if an intuition can grasp clearly and distinctly several things at the same time, there would be no reason to refuse to see the Cogito as a clear and distinct intuition of several thoughts at the same time.

There remains, however, the task of resolving a seemingly serious contradiction between the definition of the conditions of clear and distinct knowledge and the definition of science. Can the necessity for all clear and distinct knowledge to be the intuition of a single object at one instant be reconciled with the definition of science as clear and distinct knowledge of a multitude of objects at the same instant? Surely that can be done if the result of science is precisely, after having isolated each nature, to discover the rational link that reduces the plurality to the singular unity of their *ratio*. The mind is not dispersed once it captures the absolute nature that, at a *single point*, delivers to it the secret of an infinity of cases. In brief, the indivisibility of truth¹⁴² establishes the single intuition of all truths, which is only the intuition of a single truth.¹⁴³ No doubt, this single intuition of the whole set at an instant remains just an ideal for man, memory and the movement of thought in time never being completely reduced to zero by the repetition of long series of terms.¹⁴⁴ Still, the indivisibility of the whole is equivalent for completed science to the indivisibility of each singular lower reason of incompleted science, in the same way that the indivisibility of the instant as elementary time corresponds to the indivisibility of eternity, which is beyond time.¹⁴⁵ And the vision of the multitude in clear and distinct intuition is possible only when the multiple reabsorbs itself in a superior indivisible unity, which is then the true singular object of the intuition.

The solution of this apparent contradiction leads us again to conclude

that, within these conditions, the Cogito could not be the clear and distinct knowledge of several thoughts. In fact, a result of the above is that science can only know distinctly several things at the same time after having known them separately, clearly, and distinctly, and after having discovered their rational link, in order to reduce them finally to an indivisible unity by means of this link, such that the knowledge of this ordered plurality becomes an instantaneous and indivisible intuition of a singular thing, as was each of the successive items of knowledge of the relative natures taken one at a time.¹⁴⁶

Consequently, the Cogito cannot be clear and distinct knowledge of several thoughts at the same time except by a decomposition that allows one to grasp by a distinct intuition each of the ideas it encompasses and their link, ending up with an instantaneous intuition of the singular reason that would establish their indivisible unity beyond their plurality. But this cannot amount to anything: the Cogito is itself the final element that is unable to be broken up, the element on which the analysis rests definitively; it is therefore necessarily a simple and singular thought immediately grasped as such in an instantaneous and indivisible intuition.

Thus, in virtue of the assimilation established by Descartes between the spiritual light and material light, in virtue of the *Dioptrics*, in virtue of the scientific—meaning completely clear and distinct—character of the Cogito, in virtue of the completely indefeasible conditions of all clear and distinct knowledge—and we are concerned, in this case, with the most clear and most distinct knowledge of all—the Cogito, as reflective consciousness, must be a radically simple and unitary thought, not the vision of two different thoughts at the same time. The “I think that I think” that characterizes the reflexivity of the Cogito therefore does not imply any internal duality between my thought insofar as it is *thought* by my thought, and my thought insofar as it *thinks* my thought. Within the Cogito, consciousness and consciousness of consciousness are identical. From this it results that there is no difference between the thought that precedes the Cogito and the Cogito itself, between (nonreflective) consciousness and (reflective) consciousness of consciousness. It is therefore not necessary to conceive that my antecedent thought perseveres in time—in the sense that one understands by this that it continues into the following thought—in order that the following thought is assured, in the Cogito, of effectively thinking the true thought, such as it was in the preceding thought, and such as it is naturally when I do not expressly think that I am thinking.

This philosophical reply, which consists in refuting the objection by means of the identity of the subject and proper object of all thought, has been formulated by Descartes on another occasion, when replying to Bourdin: “The first thought, whatever it is, by which we perceive something, does not differ more from the second, by which we perceive that we have already perceived it, than this second differs from a third, by which we perceive that we have already perceived that we have perceived it.”¹⁴⁷

Spinoza, and above all Fichte, would reply in the same way, by positing the identity of the idea with the idea of the idea, or the identity of the thought with the thought of the thought.¹⁴⁸ And this reply amounts to saying that there is no real difference between the thought and the thought of the thought, but only a difference of reason.

Burman's objection implicitly converts thought into a thing, introducing a real distinction between the thought on which one reflects and the reflecting thought, a real distinction that is allowable only between thought and body, or generally, between two different substances.¹⁴⁹ And it is evident that there is no difference of this kind between the thought and the thought of the thought. No doubt there are differences between them. The definition of consciousness itself implies this difference: "to be conscious is to think and to reflect on one's thoughts."¹⁵⁰ Similarly, one can note that "since the action by which one believes is different from the one by which one knows that one believes, the two actions often occur one without the other."¹⁵¹ Philosophy or science, which is only reflective consciousness, is itself different from the ignorance that is the absence of reflection. Further, philosophy is often absent from the human mind, which remains most of the time in a state of unreflectiveness. Moreover, it is impossible to deny the fundamental identity between what is explicitly in science and what is implicitly in our ignorant minds. That is why science or Cartesian philosophy can, in spite of its novelty, appear simultaneously as something "very ancient, since nature itself has engraved and printed it on our minds."¹⁵² Hence, once this science is revealed to us, it imposes on us, in spite of ourselves, the consciousness that we possessed it already from all time.¹⁵³ That is because the difference between the degrees of consciousness of a single thought do not make it different thoughts. Thus my belief, with or without the express consciousness that I believe, remains the same belief. The difference between nonreflective thought and reflective thought is not, in fact, a difference in itself, but only a difference for my thought. And "a distinction constructed by thought" is neither a real distinction nor a modal distinction, but a distinction of reason.¹⁵⁴

Then, in what does this difference consist that, although a distinction of reason, is an important difference, since it separates philosophy from nonphilosophy, science from nonscience, and the Cogito from ordinary thought? It is completely based, as we have seen, on the abstraction of everything that is not properly my own thought, which allows to concentrate the light of our mind on it alone. Thus my thought appears in a maximum light that renders it distinctly explicit for me as consciousness of self. One can therefore state, with respect to this, that it is the thought that perseveres through time (which is not to say that this perseverance does not imply as many creative acts and as many distinct founding institutions as there are instants in this duration); but this thought is here at its most luminous point, instead of being obscure and confused, as it was before abstraction and

attentive concentration. From this it also results that within the Cogito the thought of the thought is but one thought and not two thoughts, for, borrowing a comparison inspired by the *Dioptrics*, an object may be illuminated twice as much, or seen twice as well, due to the fact that one has concentrated twice as much light on it, but this object remains one, and does not become two objects. Thus, reflection on oneself must not be understood as an act by which thought, tearing away from itself, then turns on itself in order to contemplate itself from the outside, as if dividing itself in two; reflection must be understood as an operation by which thought detaches itself from what is not itself's (by means of abstraction), in order to restrict its field of vision to itself alone.¹⁵⁵ "To turn one's sight on oneself" is for Descartes a metaphor designating the concentration of all my light on a sharp point—myself—such that I *myself become better illuminated* and consequently *become clearer to myself*. There is no real division into two things, but a better vision of what I am by a condensation of my own light. That is why the consciousness of consciousness, immediately perceiving that "internal consciousness always precedes its acquisition,"¹⁵⁶ already encloses the knowledge that expressly constitutes the latter. It perceives that the light was already there. This type of reflectivity will be Spinoza's.

The reply to Burman that one can have several thoughts at the same time and that thought is not accomplished in an instant, perhaps may be reconciled with the contrary assertion of the *Rules* that there is only one distinct thought per instant and that clear and distinct thoughts are accomplished in an instant. Has not Descartes declared, in his physics, that no movement is accomplished in an instant, but that all movements are composed of elementary, instantaneous, therefore nontemporal movements?¹⁵⁷ The same concepts preside on the true science of physical things and the science of clear and distinct thought. The *Rules* seems to testify that thought is, like movement, amenable to notions inspired by analytic geometry, in contrast with our current perceptions of things, but intended to account for them. The indivisible instants of elementary movements, whose summation imparts real movement, meaning temporal movement, do not each admit of any assignable course and are ultimately rests;¹⁵⁸ in the same fashion, the instantaneous intuitions, whose sum constitutes my thought in time, are nontemporal rests that are to be contrasted with "the continuous movement of thought,"¹⁵⁹ which is "always temporal like my actions." That is why, according to this point of view, several apparently contradictory languages are possible, in the same way that several languages are possible in physics with respect to movement. First, my thought appears as a continuous duration that is infinitely divisible; but in concentrating itself on itself by means of attention and abstraction, it perceives itself as intelligence, a pure light grasped by an instantaneous, indivisible, nontemporal intuition. It sees that time is essentially foreign to its constitutive act.¹⁶⁰ Repeating this intuition, my

thought can make the Cogito persevere through time. God creates my existence at each indivisible instant, and this continual repetition of these indivisible creative acts gives rise to the duration of my existence, a duration that I represent to myself as length, an indefinitely divisible quantity. Similarly, God creates an indivisible elementary movement at each instant, and by continually repeating this creation, he gives rise to what I represent to myself as a temporal movement describing an infinitely divisible course. And similarly, my thought in time is a summation of instantaneous, indivisible, nontemporal intuitions.

The passage to the Cogito is consequently only the free establishment, in my instantaneous intuition, of a thought (my consciousness) that is identical to the previous thought (nonreflective), but more distinct than it. However, this identity does not prevent the previous thought from being entirely abolished, since duration is identical to existence and since the past is no longer. Certainly, I can, in the very instant in which I institute the Cogito, evoke the previous thought through memory—which, because of a lack of spiritual concentration, would not expressly be perceived as such. For I can think of several things at the same instant, once I am not thinking them absolutely distinctly. But this comparison through memory clearly does not belong to the Cogito itself, which is a clear and distinct intuition, and which is only so because of the singularity of what it knows actually. I know myself in this present instant as existing insofar as I think, and *I necessarily conceive in this way that my nature can be nothing other than pure consciousness. I therefore know in this way that, in the previous instant, my consciousness could not be anything other than the one I represent to myself actually as necessarily constituting my whole nature.* I therefore do not need to preserve my previous (nonreflective) consciousness in order to know that it is the same consciousness that I represent to myself actually as constituting my being.

Such is at least the necessary condition of the Cogito in this location on the chain of reasons, which like all scientific chains in the process of being forged, requires that each link be an intuition separate from a singular thing.

**11. Applications in the *Principles*, with respect to the
Determination of Particular Substances, of the Rules of Real
and Modal Distinctions Deduced in *Meditation II*;
Particular Material Substances and
Particular Spiritual Substances**

The knowledge of the nature of my soul as pure intelligence, the second truth established according to the order of reasons, has allowed me to discover, in all certainty, the conditions that render possible the clear and distinct knowledge of the essence of a substance and thus to establish the universally valid *criterion* of all substantiality—or what comes to the same

thing, to discover the real distinction—and to discover also at the same time the *criterium* of the accident. The use of these criteria for the determination of thought and extension as substances and for their real distinction, as well as for the attribution of their respective modes, does not occur until much later in the chain of reasons, during *Meditation VI*, when what is at stake is to prove the real distinction between soul and body, once the necessities of our understanding have been reendowed with their objective validity, and the truths of my science have been transformed into the truth of the thing (since *Meditation III*).

But does not the rule of the determination of substantiality include more than that? Since it is capable of allowing us to discover any substantiality, any real distinction, must we not affirm that there is actually substance and real distinction everywhere the rule is applicable? In addition to the clear and distinct knowledge of universal substances, thought and extension, does it not impart the means to make pronouncements that are no less clear and distinct, no less indubitable and certain, on particular substances as such, whether physical or psychical—in brief, to perceive real distinctions between a *multitude* of particular physical substances, as well as between a *multitude* of individual psychical substances?

However, this application and the formulation of this application are not evoked in the *Meditations*, which is devoted to metaphysics only and which has no other task than to establish the real distinction between the soul and body, and to establish rigorously the knowledge of the substantiality of the *res cogitans* and of the *res extensa*.

But the problem ought to be necessarily posed once one is no longer dealing with pure metaphysics but with physics, meaning a science whose primary mission is to account for the different substances that are located in the material world. That is precisely the object of the *Principles*, which deals with “examining generally how the whole universe is composed; then, particularly, what is the nature of this earth and all the bodies that are found commonly around it, such as air, water, fire, the loadstone, and other minerals.”¹⁶¹ This is the task that occupies the second, third, and fourth parts of the work. The first part, which announces the truths of metaphysics, not in and for themselves as in the *Meditations*, but only as principles that allow the establishment of physical science, could not fail to envision the *criterium* of substantiality from the point of view of the eventual determination of the particular physical substances that constitute the central object of the inquiry, even though there exists, in reality, but a single extended substance of which they are but modes. And, by means of a natural parallel, it also poses the problem of particular psychical substances (individual souls), even though this problem does not fit in the sequence.

The process that serves to establish the substantiality of a being by excluding elements that can and must be separated from it, outside its idea, in order that we may conceive it clearly and distinctly, is then presented

without ambiguity as allowing one to pass from the conception of created universal substances, *thought* and *extension*, to the conception of created particular substances, whether they are individual souls or different bodies (wax, stone, wood, etc.)

With respect to bodies, we can conceive of such substances when we can think each of them clearly and distinctly, by excluding the rest of extended substance from their idea. For example, what establishes in me the singular substance of a body, such as wax or stone, is that I can think clearly and distinctly of this part of extension by excluding all the other parts from it: "Two substances are really distinct from one another from the sole fact that we can conceive the one clearly and distinctly without thinking of the other. . . . That is why from the fact that we all now have the idea of an extended and corporeal substance, although we do not yet know clearly whether such a thing exists in the world, we can conclude that it may exist, because we have an idea of it, and in case it does exist, whatever portion we can demarcate [in it—M. G.] by our thought must be really distinct from its other parts."¹⁶² In brief, the exclusion of one of the two parts of the extension that we can each think of clearly and distinctly, by means of this exclusion, itself establishes a real distinction between these two parts, which constitutes them as substances in our eyes. For "real distinction is properly speaking found between two or more substances."¹⁶³ The determination of particular material substances therefore closely imitates the determination of universal substances (intellectual nature in general, extension): we conceive the latter as substances in virtue of their reciprocal exclusion, which allows us to think them clearly and distinctly, and in the same way we conceive really distinct substances in extended substance when we can think them clearly and distinctly as extended beings by exclusion from the rest of universally extended substance. Under these conditions, a certain mode of the universal substance of bodies, itself diversified by an infinity of lower modes, may be considered as a substance in contrast with the other modes of this substance that we reject outside it, in order to have a clear and distinct knowledge of it.

Thus wax and stone are simple modes of extension, on the one hand, but on the other hand, each of these modes (for example, wax, an extended mode considered as the unity of various modes or properties that are the properties of wax) appears as a substance with respect to the rest of extension. In fact, we can think of wax clearly and distinctly by excluding all other modalities of extension from it, meaning all the "geometric variations" that do not belong to it, and that belong to stone, iron, wood, etc. Each of these substantial modes appears as really separated from the other, a stable element that accounts for, without resort to the rest of extended substance, the various lower modalities that are related to it as something identical and permanent, which we call a substance. Thus we understand by the substance *wax* the subsistence of a particular mode of extension, under the various

lower geometric variations that constitute the properties of wax (degree of hardness and elasticity, malleability, coefficient of liquifaction, weight, a stable relation between the variation of the different shapes stemming from the variation of physical actions exerted on the body, etc.). This mode, which is immutable under all these changes, limits the sphere of these changes, the degree of their possible amplitude, etc. The set of these changing lower modes is related to the substance wax, which is an immutable mode, in the same way that the modes of extension in general are related to the extended substance. They cannot be conceived without it, but it can be conceived without them, being the *quid proprium* that I always recognize behind their metamorphoses. And, of course, I cannot know the wax without these changing properties by which it reveals itself. But I can know it through these, only because I understand through it that these properties are its properties and that they express it.

As the immutability of a mode of extension that can present lower modifications, the substance of wax is nothing more than the subsistence of a certain quantity of extension under the diversity of its geometric aspects. In brief, the unity and identity of a physical body, by which we identify it as being such a substance, is the capacity it possesses to preserve *a same quantity* under various aspects, adding in length what it loses in width or depth, and inversely: "The one and same body, retaining the same size, may be extended in many different ways, sometimes being greater in length and less in width or depth, and sometimes, on the contrary, being greater in width and less in length."¹⁶⁴ The particular substance of a body is therefore nothing more than a *numerical invariant*, which thus renders it independent from the rest and which constitutes it as a principle of explanation autonomous from the various aspects it assumes. This conception is the basis of the Cartesian theory of molecules or corpuscles, and of the Malebranchian theory of "configurations" and "shapes." It is an extremely modern conception, which is the seed of the theory of specific weight.¹⁶⁵ One sees that, in spite of the archaic vocabulary, we are miles away from Scholasticism.

In this way the apparent contrast between articles 63 and 64 of the *Principles* is explained. According to article 63, I have a distinct notion of extension insofar as I conceive it as substance of bodies. According to article 64, I can also conceive it distinctly as a mode or attribute of the particular substance of a body, for example, when I consider that the same body with the same magnitude can be extended in various ways. Then if I conceive these various modes of extension by separating them from the particular substance of which they are modes, I cease to have a distinct conception of them, taking them as things subsisting in themselves and confusing the idea we ought to have of substance with the idea we ought to have of its properties.¹⁶⁶ Article 63 is concerned with universal substances, particularly extension. Article 64 is concerned with particular substances of various

kinds of bodies. In the first case the modes of extension are explained by the universal extended substance. In the second case, the various modes of extension that wax can take are explained by the substance, wax. It is the constitutive numerical invariant of the substance, wax, that makes us be able to think it clearly and distinctly apart from the other modes of extension and that, accounting for all the geometric modalities which it can include, allows me to understand them and at the same time to understand wax—therefore to know wax—on which they are dependent and which remains immutable under their transformations. If, on the contrary, we consider them apart from this substance, we would believe that they could subsist without it, although they are subordinate to this invariant that makes them what they are. We would then be confusing the idea that we ought to have of the substance, wax, and the idea of its properties. That is the error of the empiricists who reduce wax to its external properties. They believe that they know wax only by its changing properties (by the sensible changes that are the obscure expression, in my composite nature, of its real geometric variations), when it is through the knowledge of the geometric invariant, which remains in spite of the changes in its variable forms and coordinates them, that it is possible for us to recognize it as identical, and consequently, to know it as wax.

One finds in this indistinct application of the concept of substance to created universal substances—extension and thought—as well as to particular extended substances that are modes in reality, but that are thinkable clearly and distinctly in abstraction from the other modes, the same absence of univocity as in the indistinct application of this concept to God, as well as to extension (and thought). In reality, God is alone worthy of substantiality, because he is the only being to be self-conceived in the full sense of the word, the only being to cause itself and to sustain itself. He can forgo extension, while extension cannot forgo him. However, a created substance, although it is unable to be conceived absolutely by itself, since it depends on God, which causes and sustains it, does not need any other created substance to exist and to be conceived. It can therefore be conceived without its modes, but they cannot be conceived without it. It can therefore, in this manner, be conceived by itself and be given the title of second-order substantiality.¹⁶⁷ Moreover, the particular substances could not be substances in the sense in which extension is, for they are modes of it, and they cannot be conceived without it, while it can be conceived without them. But they can be given a third-order substantiality, insofar as being modes, they have no need of other modes of the universal substance to which they are related, in order to be conceived clearly and distinctly.

According to the *Principles*, it seems that one can go in this way up to the individual substance of each soul; and Descartes expressly establishes an exact parallel between the determination of particular material substances, beginning with extended substance, and the determination of psychical

substances, beginning with the thinking substance. What establishes this individual substantiality for my knowledge, he asserts, is the possibility that I have to think of my soul excluding any other thought from it, in the same way that I have been able to exclude extension from it: “*Similarly* because each perceives in himself that he thinks and that in thinking he can exclude *all other substance*, whether *thinking* or extended, from himself or from his soul, we can *also* conclude that each of us, thus considered, is *really* distinct from *all other thinking substance* and all other corporeal substance.”¹⁶⁸

Thus in the same way that I conceive, clearly and distinctly, wax, wood, or stone as different physical substances, by excluding the rest from the proper and invariable extension of each (actually conserving the same total quantity of magnitude under the variations of magnitude in the three dimensions), I conceive the individual soul as a distinct substance really distinct from any other psychical substance, by excluding it from everything that, relating to thinking substance in general, does not belong to its own thought and that can be excluded from it without rendering obscure and confused the knowledge I have of it. Correlatively, articles 63 and 64 are concerned with thought as well as extension. If I have a distinct notion of thinking insofar as I conceive it as constituting the nature of the soul, I can also conceive it distinctly as a mode or attribute of the particular substance of a soul when I consider that a soul can have various thoughts. Then, if I conceive these various thoughts by separating them from the particular substance of which they are modes, I cease to have a distinct conception of them by taking them as things that remain by themselves—thus confusing the idea that we ought to have of the substance with the idea that we ought to have of its properties.¹⁶⁹ Thus we see Descartes describe the substance of wax and the substance of the soul in the same way: “Everything falling within the domain of taste, smell, sight, touch, and hearing is changed, and yet *the same wax remains*. . . .” Whatever are the infinite variations of extension the imagination teaches us that the wax can receive, “it is *the same* [wax—M. G.] that I see, that I touch, that I imagine, and it is *the same* that I knew from the beginning.”¹⁷⁰ “The human soul . . . is a pure substance, for even if all its accidents change, as for example if it conceives of certain things, wills others, and senses others, etc., it is always *the same soul*.”¹⁷¹

Article 63 is concerned with the thinking substance in general (as it is concerned with extended substance in general). Article 64 is concerned with particular thinking substances, namely, individual souls (as it is concerned with particular material substances, namely, the different kinds of bodies). In the first case, we account for all the possible modes of thought through the thinking substance in general; in the second case, all my possible thoughts are explained through my soul, as an individual substance, exclusive of all other individual substance. Descartes’ reflection, which we have already explained, is then illuminated anew: “By spending sufficient time on this meditation [on the Cogito], one acquires little by little a very

clear, and so to speak, intuitive knowledge of the intellectual nature in general; this is the idea that, considered without limitation, represents God to us, and considered as limited, is the idea of an angel or a human soul."¹⁷² We know our soul as individual substance by thinking it clearly and distinctly by exclusion of everything that, as intellectual nature, is not perceived as belonging to our own intellectual nature.

In this fashion arise the comparisons that Descartes sometimes draws between the soul and particular physical substances. Thus he declares to Mesland that "he places no other difference between the soul and its ideas than the difference between a piece of wax and the various shapes it can assume."¹⁷³ Moreover, there is a numerical invariant—or its equivalent—in each soul, namely, the conservation of the same quantity of thought through all the changes. We should note to what extent the theory of attentiveness is modeled on a physical theory: in the same fashion that all corporeal substance preserves the same quantity of extension, whether it is contracted or condensed, or whether it is dilated or rarified,¹⁷⁴ each spiritual substance, each soul, preserves the same quantity of thought, whether it is contracted or condensed by attention, whether it is dilated or rarified by distraction.¹⁷⁵

However, although each corporeal substance has its own invariant of extension, Descartes has not asserted that the invariant of thought is not the same in each spiritual substance. He categorically asserts the contrary, in opposition to Spinoza and Leibniz (this is not merely an affectation of modesty; it emphasizes the decisive role of the method). For Descartes, every human mind has the same capacity for intelligence, and all differences arise from whether we employ it better or worse.¹⁷⁶ It is true that elsewhere he asserts that men are containers with different capacities and that some are so small that "a few drops of water are sufficient to fill them up." But there the subject is not souls alone, but souls united substantially with a body.¹⁷⁷

However that may be, this parallel and analogy between individual psychical substances and particular substances of material bodies immediately raises some serious objections. To proceed from the concept of universal substance to the particularity of my individual substance seems to contradict the spirit of Cartesian philosophy and the legitimate process that begins with *my thought*, as a substance in the epistemic sense of the word, captured immediately in the Cogito. It is the same for the parallel between the relations of the extended substance and particular physical substances, with the relation of the thinking substance in general and my substance in particular. Other than that Descartes always goes from the particular to the universal, there is no analogy between the corporeal substances, which are not real substances, but perishable modes, and souls, which are genuine substances and, as such, naturally indestructible. A substance is what depends only on God, without the help of any other created thing; if my soul fits this definition, corporeal substances, which are only modes, exist only by their interdependence with the set of other modes on which their

appearance and disappearance depend. The extended substance in general is the only corporeal being that depends only on God and that shares indestructibility, and hence substantiality, with my soul. That is what Descartes specifies in his *Summary of the Meditations*: “Generally all substances, meaning all things that cannot exist without being created by God, are by their nature incorruptible. . . . Body taken in general is a substance; that is why it does not perish. But the human body, however much it differs from other bodies, is only formed and composed by a certain configuration of members and by other similar accidents; whereas the human soul is not thus composed of accidents, but is a pure substance. . . . From this it follows that the human body may easily perish, but the mind or soul of man (I do not distinguish between these) is immortal by its own nature.”¹⁷⁸

One must note, however, that the case for material bodies, especially simple bodies, is not the same as the case for the human body; the physical world presents, in fact, a series of bodies that have the property of remaining the same *indefinitely* under the constant change of their aspects or their form. They therefore have some measure of the indestructibility of genuine substances *in fact*. That is why common opinion has given them the title of substance. Whether it is cold or hot, liquid or solid, wax “*remains*” and remains “*the same*.” And if some agents can destroy it effectively by decomposing it, wax as a species *remains* in the universe. Which is to say that the simple bodies or molecules constituting the first elements, although arising from the division of extension, are perishable *as a rule*, conserving a true indestructibility *in fact*. There are therefore, in addition to genuine substances that are naturally unperishable (souls), things—namely, the various kinds of bodies—that, although naturally perishable, have a permanence in fact and an indestructibility sufficient for us to treat them as substances. And the determination of these substances is brought about according to the universal rule that allows us for certain to distinguish among our ideas those that are ideas of modes from those that are ideas of substances.

The method of the determination of substances by means of exclusion, a criterion of real separation, is drawn from a process by which, beginning from the Cogito, the rational science of my nature is constituted and is validated. This method is the process itself, clearly and distinctly perceived, expressly stated as a universal rule applicable to ideas, striving to discern which of our ideas represent substances and which represent modes.

And it is only insofar as particular material substances are justifiable according to this rule, in the same fashion as individual souls are, that the comparison can be instituted among them; and in this way the comparison is limited, leaving intact the fundamental difference that makes them opposite. In fact, the basis of the application of the rule is not the same in both cases. In the case of my soul, the rule was produced at the same time as it was

applied, since I saw that it was impossible to posit myself as a certain truth in science without excluding from myself everything that was not pure thought. I perceived in this way that 1) I could not know myself and posit myself with certainty except by knowing myself and positing myself as self-sufficient, meaning as substance; 2) that it was necessary that everything known clearly and distinctly apart from the rest be substance ipso facto. My science having *ab ovo* annulled a priori everything not in me (by metaphysical doubt) there was nothing left for it posited outside me that I ought really exclude. I alone am known; I alone exist. Do there exist other substances outside of me, whether corporeal or spiritual, that I ought to exclude? I know not; I cannot speak of this, and I cannot presently oppose my being to theirs. I therefore attain a truly absolute self, which is absolutely pure at the same time, for it could not be posited except as pure intelligence. One sees how little this self is individual; for the "I" of the individual implies the "you" of the other, that *I exclude* from myself certainly, insofar as I posit myself as a substance, but that *I am positing*, at the same time (outside of myself). One sees by this to what extent Descartes is at the ends of a transcendental intersubjectivity. My self does not have to detach itself from a set to which it belongs. It is originally affirmable alone, *for science*. Nevertheless, I already know that *if ever there existed other spiritual beings*, I would have to exclude them from myself, as they have to exclude me from them.

If the *criterium* of real distinction, consisting in the possibility of knowing myself clearly and distinctly without thinking of the rest, cannot serve toward the determination of individuals as long as I do not know whether anything exists outside of me, on the other hand, once (divine veracity having guaranteed the objective validity of my clear and distinct ideas and the informational value of my sensations) I know that there really are other men outside of me, I would know them as individuals then, by excluding them from me, and by knowing that each of these souls is self-sufficient and excludes all other souls from itself as validly as I exclude them from myself.

But this reciprocal exclusion of individual spiritual substances in virtue of their self-sufficiency does not occur in virtue of a numerical invariant present in them, as it happens for corporeal substances, even if each of them has in itself this numerical invariant that constitutes the conservation of the same quantity of thought. Indispensable as a criterion of substantiality with respect to a divisible body within divisible extension, the numerical invariant has no role to play with respect to knowing or establishing indivisible substances that are in no way relatively autonomous parts of a divisible substance. I acknowledge these indivisible substances as substances, recognizing in them the principle of autonomy that I know in myself. The innate idea of spiritual substance, which is identical with the clear and distinct idea of my self, and which renders possible the perception

of their existence outside of me as being that of intelligent substances, by allowing me to understand them, will be, in this case, the foundation of the application of the rule of reciprocal exclusion that allows their knowledge as individuals. The principle of permanence and identity, which constitutes the positive reality of substance, is not in fact, for souls, a simple numerical invariant given as a fact, for all thought, being unextended is without parts, and subtracted from quantity and number. It has an indivisible spiritual unity laying the foundation of a natural indestructibility, without which there is no real substance. Individual corporeal substances, having parts, are without intrinsic foundation, and if they are not destroyed, in fact they remain exposed to destruction by nature. If they subsist, it is not in virtue of themselves, but in virtue of the laws of physics and the play of the set of other modes. Thus, on the one hand, the subsistence of the numerical invariant allows one to think of such a body, as long as it persists, by excluding from it all the other modes that are distinct from it, and thus to conceive it as independent, meaning as substance; on the other hand, physics, by revealing that this persistence itself depends on the mechanical agreement of the set of modes of extended substance, assures that the independence of such corporeal substance with respect to the other modes is in the end only apparent. Nevertheless, the factual stability presented by the numerical invariants allows us to conceive the different kinds of bodies as substances and to treat them as if they were substances absolutely. But these are third-order substances, substances according to common opinion, not second-order substances, or substances rigorously.

Given the above, one understands that Descartes can reserve the title of substance *stricto sensu* to the individual souls that are naturally indestructible because of their indivisibility and to extended substance in general, which alone, and in contrast to particular corporeal substances, is naturally unperishable. Correlatively, he will accord real unity to the human body only to the extent that the latter is informed by a soul united to it. In itself it has only a precarious unity, subject to the renewal of its parts.¹⁷⁹

In the *Principles* Descartes respects this difference, since a body (wax, for example) is said to be substance insofar as it is determined by our thought as *part* of the extended substance that is really distinct from *other parts*, while my soul is called substance insofar as it is determined by *all* thinking as excluding from itself *all other thinking substance* and can thus "be considered as really distinct from all other thinking substance."¹⁸⁰

These texts from the *Principles* attest to the falsity of the theory of individual substance. Laporte's interpretation, which we have had to avoid, in a sense is explained by this real Cartesian difficulty, by the absence of a link between the concept of general substance and the concept of individual substance. The difficulty cannot be posited for extension. First, there are no true individual extended substances, but only bodies that behave like substances; these bodies, being only modes, are only specifications—they

are modes of extension variously extended. But it is not the same for thought and, in certain respects, if one considers the thinking substance in general, the *res cogitans*, it appears as an abstraction with respect to individual substances, for these individual substances are not modes and contain something extra. Moreover, the way in which the Cogito was posited in the certainty of science implies necessarily that one has come upon something that resembles the Kantian "I think" or rather the Fichtean Self, in some respects. And in order to go from the self, as universal condition of all knowledge, to the concrete, individual self, one must *add* something. It is noteworthy that, in his philosophy, Fichte believes impossible the deduction of the individual concept from the finite Self in general: science can only posit a priori the reality of my finite self; one must have recourse to experience in order to determine this self as a concrete individual. As for Spinoza and Leibniz, they establish the individual substance only by setting aside this process belonging to Descartes, which is essentially a process of the critique and consists of positing the thinking self as the necessary residue of a series of eliminations.

The knowledge that we can have of the individual substance (whether material or spiritual) is far from being the first in the order of reasons. Although I capture myself originally only in the self that is mine and that consequently is individual, *in fact*, the Cogito, taken in itself, does not reveal to me that I am an individual substance: it reveals to me that I am a thinking self (identical in each). Indeed, there is no science except for the science of the mathematically necessary. It is therefore not sufficient that the "I" that pronounces the Cogito is at the same time a concrete individual *in fact*, in order that I have a science of this individual as such in this way. In fact, this "I" is also united to a body, but this body does not yet exist as rule for my science. A science of the self as an individual, a person, etc., cannot appear until I am conscious that it is *necessary* that I recognize myself as an individual. Thus I have the science of my own existence once I perceive that it is *impossible* that I do not exist the moment I am thinking and as long as I am thinking. The Cogito imposes on me, secondly, the necessary knowledge of myself as a purely intellectual nature (common to all men), since I perceive, by reflecting on my first reflection, that I know myself clearly and distinctly only by excluding from myself everything extended and everything that is related to extension in me. I see at the same time that in this way I clearly and distinctly know the nature of thought and extension only by their reciprocal exclusion. Thirdly, it is only by another reflection that I can conceive the possibility of a necessary knowledge of my self as an individual substance, by means of my capacity to conceive myself clearly and distinctly by excluding all other thinking substance from myself, because I do not yet know whether any such substance exists. I also perceive that I can know by means of a necessary and certain science a particular corporeal substance as such (using the very attenuated sense of the word *substance* applying to

74 **COGITO: KNOWLEDGE OF MY EXISTENCE**

various particular bodies), when I can think of such a part of extension clearly and distinctly by excluding all other parts from it.

Let us add that the substantiality of individual souls and of particular bodies does not figure among the “main points” of the deduction that the *Meditations* takes as its task.