

10. Leibniz

10.1 Leibniz's Answer to the Guiding Question of Philosophy

The main reference for our study of Leibniz's metaphysics will be two short writings entitled, respectively, *Monadologie* (or *Principes de la Philosophie*) and *Principes de la Nature et de la Grace fondés en Raison* (*Principles of Nature and Grace Based on Reason*), both written in 1714.²⁰³ The latter title shows clearly that we are in a modern metaphysical setting — a setting to whose establishment this work itself contributes. In »nature« we hear the echo of *physis*; that is, the being as such and in whole, while »grace« reminds us of the highest being that is the principle of nature: namely, the ground of the beingness of beings in its two traits (i. e. whatness and thatness). However, as the remaining words of the title indicate, both the being *and* its ground rest on principles which are, in turn, based on reason, which brings us back to the characterization of modern philosophy as subjectivism. In order to get a rough measure of the distance between this metaphysical position and the (not yet metaphysical) thinking of Heraclitus, we can recall the dimension of the *Logos*, i. e. the gathering which attunes man so that the *logos* of the human soul — namely that which in modern terms we call »reason« — may in its turn tune in to it. This said, we must, however, keep in mind that, despite the distance (in terms of the respective experience of being) between the Greek onset of thinking and the metaphysics of Descartes, Leibniz or Nietzsche, the thinking of these philosophers remains within that onset and derives from it.

Where Plato's answer to the guiding question of philosophy is: *idea*, Leibniz's answer to this same question reads: the beingness of

beings is the *monad*. According to Leibniz, the beingness of beings consists in their monadic constitution. Hence, we must ask: what is a monad, what are its fundamental traits? We can once again begin the elucidation of this notion by looking at the word and its primary meaning. Leibniz himself gives us an indication at the beginning of his *Principes de la Nature et de la Grace* (hereafter *P.*): »Monas est un mot grec, qui signifie l'unité ou ce qui est un« (»*Monas* is a Greek word, which indicates unity or that which is one«; *P.*, §1). In fact, Greek *μονάς* (*monas*) comes from *μόνος* (*monos*), which means one, unique, only, alone, by oneself. At the beginning of the *Monadologie* (hereafter *M.*), Leibniz explains: »La *Monade* dont nous parlerons ici, n'est autre chose, qu'une substance simple, qui entre dans les composés; simple, c'est à dire, sans parties« (»The monad which we will discuss here is nothing other than a simple substance which enters into composites [into composite substances]. Simple means without parts«; *M.*, §1). Thus, the notion of monad, in turn, refers to the notion of substance. What, however, is a substance and what kinds of substances are there? Again, the *Principes* provide an indication:

La *substance* est un être capable d'action. Elle est simple ou composée. La *substance simple* est celle qui n'a point de parties. La *composée* est l'assemblage des substances simples, ou des *monades*. *Monas* est un mot grec qui signifie l'unité, ou ce qui est un. Les composés, ou les corps, sont des multitudes; et les substances simples, les vies, les âmes, les esprits sont des unités. Et il faut bien qu'il y ait des substances simples partout, parce que sans les simples il n'y aurait point de composés; et par conséquent toute la nature est pleine de vie.

Substance is a being capable of action. It is simple or composite. The *simple substance* is one that does not have parts. The *composite substance* is the assembly of simple substances, or *monads*. *Monas* is a Greek word, which indicates unity or that which is one. Composites, or bodies, are multitudes [multiplicities]; and simple substances, that is, lives, souls, minds, are unities [ones]. And there have to be simple substances everywhere, because without them there would be no composites. As a consequence, the whole of nature is full of life. (*P.*, §1)

Substance comes from Latin *substantia*, which, in turn, comes from the verb *sub-stare*, to stay under, to underlie. *Substantia* is the Latin transposition of Greek *ὑπόστασις* (*hypostasis*) which means the same as *ousia*, beingness. A substance is what underlies, in other words, it is what *already stays or lies there* (and is by us somehow understood) in our encounter with beings. Thus, the word substance

²⁰³ Both texts were originally written in French. The French text is quoted after the bilingual edition G. W. Leibniz, *Vernunftprinzipien der Natur und der Gnade. Monadologie*. Hamburg: Felix Meiner Verlag, 1982.

captures anything that, in some way or another, »is there«: that is, it captures *beings as such and in whole*, albeit on a level that still lacks a metaphysical determination. The only determination for something to be a substance is that its »already lying there« must be an *active* or *actual* lying; that is, it must have the capacity to act, the capacity for action. Where there is action, there is life; where there is life, there is a cosmos.

Two kinds of substance are distinguished: simple and composite. Simple substances are *monads* (ones, unities), composite substances are *bodies* (*corps*). Both monads and bodies are beings, and each of them has its specific form of *action*. The distinction between simple and composite is not merely quantitative (1 vs. [1 + n]), but a distinction in *kind*. It is the distinction between the *material* world, whose action is *movement*, and the *immaterial* world, whose action consists in *pursuing ends*. At this point, a question must arise: how can composites — that is, assemblies of monads — be different *in kind* from those things of which they are constituted; that is, the monads themselves? In other words: how can the assembly of substances that are not bodies bring about a substance that is a body? It seems that, no matter how we put together non-bodies, and no matter how many of them we put together, the result of this putting together can surely never be a body. Yet, this is precisely what Leibniz is claiming: »The *composite substance* is the assembly of simple substances, or monads.«²⁰⁴

Are we missing something? Clearly yes! Our difficulty is the result of the fact that, when we read »assembly of simple substances«, we think of the result of this assembly, namely a body, and therefore look upon the simple substances that compose it as being bodies themselves. Our thinking refuses to change over from composite to simple *and thereby* switch from body to non-body. What if, however, we consider the following: composites are multitudes, and on the level of composites, or bodies, we can only find bodies; in other words, on the level of multiplicities we only find multiplicities, and never what is necessarily that of which a multiplicity consists *as such*, namely,

²⁰⁴ A composite substance is the assembly of simple substances; however, by dividing a composite substance in its parts, or components, one never obtains a simple substance; in other words: what has no parts can never be a part, or a component, of a composite substance. Hence, the assembly of monads and the composition of composites are two different phenomena.

ones:²⁰⁵ no body can ever be a one, hence, a body can *ultimately* not be composed of bodies, but must necessarily consist of what is not a body. Put differently: the world *cannot* consist merely of bodies, because, no matter how small and »elementary« a body may be, it is still (namely, by definition, or rather by metaphysical determination) a multiplicity: that is, it has parts! Moreover, given that, as a consequence, a body must consist in what is not a body, a body cannot consist of just one non-body (i. e. of one monad), because then that body would itself be one, and therefore not be a body. In short: where there are bodies, there *must* be non-bodies; without non-bodies, no material world.

Is all of this just a logical gimmick? Or is it *possibly the simplest manner in which our sense for dis-contingency can awaken* (although this does not mean by any stretch that we are out of the cave yet)? In fact, in order for this native knowledge of ours to awaken, it suffices that we acknowledge this: while bodies necessarily consist of ones (i. e. of what is *constitutively* one), in the domain of bodies we simply cannot find any ones; that is, we can find no monads. For this reason Leibniz can say (*M.*, §3): »And these monads are the true atoms of nature, and, in a word, the elements of things«. An atom (from Greek *ἄτομος*, [*atomos*]) is what cannot be divided — that is, something which has no parts; indivisibility is one of the characters of the monad. The distinction between composite and simple substances, between bodies and atoms, is the difference between beings and their beingness, of which we can become aware if only we adopt a rigorous notion of unity and recognize the latter as constitutive of things as such.²⁰⁶ What constitutes a thing as such is its thingness; if, instead of thing, we use the Latin word *res*, the same proposition reads: what constitutes a *res* as such is its *realitas*, its reality. Hence, simple substances (monads) enter into aggregate substances (bodies) as the very reality of these corporal things, or as the invisible beingness of visible beings. Without the existence of monads, composites would lack any reality.

... je croy que là où il n'y a que des estres par aggregation il n'y a pas même des estres reels. Et la raison est, que tout estre par aggregation suppose des estres doués d'une veritable unité, puisqu'il ne tient sa réalité que de celle de

²⁰⁵ Or also: on the level of multitudes we never find what constitutes *one* multitude as such.

²⁰⁶ The difference itself does not fall into the scope of Leibniz's thinking.

ceux dont il est composé, de sorte qu'il n'en aura point du tout, si chaque estre dont il est composé est encore un estre par aggregation, ou il faut encor chercher un autre fondement de sa réalité, qui de cette manière, s'il faut tousjours continuer de chercher, ne se peut trouver jamais.²⁰⁷

... I think that where there are only beings by aggregation, there aren't even real beings. The reason is that any being by aggregation presupposes beings endowed of a veritable unity, for it obtains its reality only from that of the beings of which it is composed, so that there won't be any (reality) if each being of which it is composed is in its turn a being by aggregation, or else one still needs to search for another ground of its reality, which in this manner, even if one keeps searching forever, can never be found.

For Leibniz (as in pre-metaphysical and previous metaphysical thinking) oneness, or unity, is constitutive of being (*Sein; essere*); therefore monads (much like Plato's ideas) are that which is in the first place: they are the true beings. On the other hand, beings (*das Seiende; gli enti o essenti*) are (or »have being«) only to the extent to which they can be said to be one; that is, according to the monads that compose them. In the same letter from which the preceding passage is drawn, Leibniz writes:

Pour trancher court, je tiens pour un axiome cette proposition identique, qui n'est diversifiée que par l'accent: savoir que *ce qui n'est pas véritablement un estre, n'est pas non plus véritablement un ESTRE*. On a tousjours crû que l'un et l'estre sont des choses reciproques. Autre chose est l'estre, autre chose est des estres. Mais le pluriel suppose le singulier, et là où il n'y a pas un estre, il y aura encore moins plusieurs estres. Que peut on dire de plus clair?

To bring the matter to a point, I hold the following identical proposition, which is diversified only by the accent, for an axiom: namely, that *what isn't veritably ONE being, isn't veritably one BEING either*.²⁰⁸ We have always thought that »one« and »being« are reciprocal things. One thing is being, another thing is beings. But the plural presupposes the singular, and where there isn't one being, it is even less possible for there to be several beings. What can we say that would be clearer than that?

Apart from being indivisible, monads necessarily also have »no extension or figure« (*ibid.*). Moreover, they can neither begin nor perish naturally (*M.*, §§4 and 5) since, in the natural world, »beginning«

means the same as »being formed by composition«, while »perishing« means the same as »decomposing«. As a consequence, monads can only come into being and end »all at once« (*tout d'un coup* [at one blow; *mit einem Schlag; d'un sol colpo*]; *M.*, §6); that is, they can only begin by creation and end by the opposite of creation, which is annihilation. Furthermore, the monad's oneness and partlessness implies that it »has no windows« (*M.*, §7); in other words: nothing outside of it that is itself created, be it of monadic or bodily nature, can have an influence on it; the reason for this is that such an influence implies that what is influenced is made of parts whose relation changes as a result of external action, which, however, cannot apply to the (partless) monad.

The monad, which has no parts and no windows, does however have *qualities* which determine it and which are unique, so that no two monads are identical (*M.*, §§8 and 9). Also, the monad, like any created thing, is subject to change (*M.*, §10), and this change can only be caused by an *internal principle* (*M.*, §11). However, if the monad is to change, it must contain a variety of distinguished features (*détail* in the original, »a complexity« in our translation), for the notion of change implies that something is modified while something else remains stable. This variety of distinguished features form a multitude or multiplicity *within* the unity or the simplicity. However, this multiplicity is not a sum of parts (if it were, this would contradict the very definition of a monad), but that which is unified by the monad itself. In other words, it is a multiplicity that is one. The monad itself is a unified, and, as such, simple multiplicity (*M.*, §§12 and 13).

The unified multiplicity is subject to constant change; therefore, at any moment it finds itself in a state that has just come to be and is about to be modified. Leibniz calls such a transitory state, which »envelops and represents a multiplicity in the unity«, (*M.*, §14) *perception*.²⁰⁹ Perception, here, does not refer to perceiving through the senses or through the mind, even though such perceiving, too, belongs to what Leibniz calls perception; the meaning of the latter is

²⁰⁹ »L'état passager qui enveloppe et represente une multitude dans l'unité, ou dans la substance simple, n'est autre chose que ce qu'on appelle la Perception, qu'on doit distinguer de l'apperception ou de la conscience.« »The transitory state, which envelops and represents a multitude in the unity [viz. of the respective monad], or in the simple substance, is nothing other than what one calls Perception, which one must distinguish from apperception or consciousness.« The word »apperception« will return in our treatment of Kant in *Chapter 11*.

²⁰⁷ From a letter to Antoine Arnauld (30.4.1687).

²⁰⁸ In English one would instead say: »... isn't veritably a BEING either«. In French, »one« and »a« are the same word (*un*).

instead much vaster and much simpler. In fact, the sense of this perceiving is that of *unifying*, and, more precisely, of a unifying that, as Leibniz says, »envelops and represents« that which it unifies. A monad consists of constantly changing, transient states of perception, or simply of perceptions, in which it envelops and represents — namely, envelops *and thus* represents — its own multiplicity, and thus the multiplicities of all other monads outside of it. Why do we say »envelops *and thus* represents«?

Indeed, enveloping (or enfolding) and representing appear to be contrary movements: enveloping or enfolding (*einwickeln oder einfalten; involuppare o implicare*) is a drawing in that involves and includes, while representing (*vorstellen; rappresentare*), is a putting out and »positing there in front«, and therefore an opening and, in a sense, a letting be. However, in any simple perception of the monad these two movements are one and the same: an enveloping *by* representing and a representing *by* enveloping. Perception in the form of enveloping representation is the manner in which the monad takes what is outside and *makes it its own* (*eignet sich an; rende addetto a sé*), at least *insofar as* what is outside is perceptible in the monad's action of unifying, i.e. *relative* to the monad; at the same time — namely, in the same act of unifying — the monad *lets* what is outside *be*, at least *insofar as* the act is that monad's own and unique representation; that is, again, *relative* to it. Thus, there is a trait of *perceptive relativity* in the monad's perception; in other words, due to the uniqueness of its various qualities and the peculiar character of the multiplicity which it unifies, each monad has its own particular *mode of perception*. Leibniz calls this mode of perception *modus spectandi*: the mode of regarding, looking, beholding. We can see clearly that, in Leibniz (as in all pre-metaphysical and metaphysical thinking), unifying or gathering into one never implies a reduction to uniformity; on the contrary, unification is the condition for the preservation of variety and uniqueness.

Given that each perception is a state of the monad, and that monads undergo constant change caused by an internal principle, there must be a specific form of action that brings about the transition from one perception to another. Leibniz calls this action *appetition*, which we can translate with »appetition« or »appetite« (*M.*, §15). We need to hear in this word the literal meaning of »striving toward« (Latin *ad-petere*; see for instance centri-petal = striving toward the centre). In any state it reaches, the monad strives for a new percep-

tion; that is, a new state of unified multiplicity. As Leibniz points out, »appetite cannot always attain altogether the whole perception to which it tends, but it always attains some part of it, and so attains new perceptions« (*M.*, §15), which appetite, the action of the internal principle, will immediately surmount in view of a further change.

Monadic appetite, the change of perceptions driven by an internal principle, is the being of beings. However, Leibniz distinguishes between perceptions of different clarity and distinctness, and therefore between different manners of being and kinds of simple substances. At the lowest level of perceptive distinctness, there are *lives*. A stone, a river, a star, a tree — in short, what we call natural beings — are lives. But also, all things built from and after natural beings — for instance, a house, a road, a table — are lives. At a higher level of distinctness — more precisely, at a level of perceptive clarity involving memory — there are *animals*; that is, beings endowed with a soul (*anima*). At the highest level of distinctness, which involves what Leibniz calls »apperception« or »consciousness«, there are *minds*. While a life is never an animal or a mind, a mind is, in certain states of dimmed perceptive distinctness, also an animal and a life. For instance, when dinner time is approaching after a long afternoon of studying, it may well be that life and animality join forces, and blind hunger for that leftover pasta we remember someone put in the refrigerator is *nearly* the only thing we perceive.

Multiplicity unified in a simple substance is not an abstract notion, but can be *experienced*, for instance, »when we find that the slightest thought of which we are conscious in ourselves envelops a variety in its object« (*M.*, §16). Our simple monadic consciousness can unify its own multiplicity by enveloping and representing, for instance, the notion of a fountain pen. Within the appetition that strives for the perception of the perfect essay, we envelope and represent, according to our unique mode of perception (i.e. our very own »complexity«) and depending, i.a., on the present perception of the broken laptop, the simple monad ›fountain pen‹. The simplicity of the thus enveloped and represented object, however, includes a variety of traits, such as the capacity for being held in the hand, the capacity for tracing signs on certain surfaces, and so on. These traits are unified in the simple substance ›fountain pen‹ as enclosed and represented in the unity of our mind.

Perception, and what depends upon it — that is, the whole action and content of any monad — »is *inexplicable on mechanical princi-*

ples [or reasons]; that is, by figures and motions« (*M.*, §17). This is a decisive notion. In order to elucidate it, Leibniz offers the following image:

In imagining that there is a machine whose construction would enable it to think, to sense, and to have perception, one could conceive it enlarged while retaining the same proportions, so that one could enter it, as if into a wind-mill. Supposing this, one should, when visiting inside it, find only parts pushing against one another, and never anything by which to explain a perception. Thus, it is in the simple substance, and not in the composite or in the machine, that one must look for perception. (*M.*, §17)

What is said in this passage reminds us of the Aristotelian distinction between a knowledge that needs to be demonstrated and a knowledge that neither can nor needs to be demonstrated, as it can only be minded.²¹⁰ The distinction Leibniz draws in this example lies between, on the one hand, the *observation* of a mechanical process that is involved in the act of perception, and an explanation of this process in terms of *mechanical* laws, and, on the other hand, an explanation that *understands* the perception as such. No matter how detailed and proven the account of the mechanics of a perception, as long as the explanation remains on this mechanical level, strictly *nothing* is understood of the perception itself. The monad as an »incorporeal automat« (*M.*, §18) is entirely alien to anything mechanical; that is, to that which concerns the relations between bodies and the forces that are involved in these relations.

For instance, there is a monadic state which we call speaking. The act of speaking is a manner of perception; that is, of enveloping representation. We briefly considered the uniquely Greek notion of speaking that is *legein*. There is, for sure, a mechanics of speaking. It involves the vocal chords, different parts of our mouth, and so on, as well as, on a supposedly more fundamental level of causality, innumerable and complex neuronal events that occur in our brain. If we could take a walk through our throat and mouth and brain (which present day technology, in a sense, actually allows us to do), we would observe »parts pushing against one another«. We could start collecting data on these parts and their pushing, and eventually elaborate a demonstrable and tested knowledge of the causal relations that determine this reciprocal pushing. We will thus have explained the pushing, and yet, *nothing* will have been gained with regard to our under-

standing of what it is to speak. Such understanding requires that we mind the enveloping representation in which speaking consists. On the other hand, our explanation of the bodily substance »of speaking« is merely the explanation of mechanical relations. The very fact that these are movements of *speaking* is unknowable on the level of mechanics. Thus, when, for instance, a scientist pretends to *explain* speaking in terms of a certain brain activity, he is in fact only explaining a mechanism of what, from the outset of his investigation, he *assumed* speaking to be. This previous assumption, however, had to assume the notion of speaking in an operative concept, or format, that allows for it to be explained by taking a (virtual) walk through the brain. In other words, it had to assume that which can only be minded as something that can actually be demonstrated.

Simple substances — created monads — are further characterized as *entelechie*s. *Entelechie* is a word of Greek (and, more particularly, Aristotelian) origin, which Leibniz elucidates, according to its literal meaning,²¹¹ as »having [within itself] its accomplishment« or »perfection«, or, as we could also say, as »having itself [i. e. holding itself, being] within its accomplishment« or »perfection«. The monad implies accomplishment or perfection. The trait of perfection was already mentioned in our discussion of the *idea*.²¹² Monadic perfection is independent of any contingent influence. For instance, the simple substance »seed« has within itself (and holds itself within) its perfection, namely, the fully developed tree, independent of the fact that — for instance, due to adverse climatic conditions — the tree might never attain the accomplished perception for which it strives. Or, a new-born has within himself his perfection, namely, the unique accomplished human being he is, independent of the fact that, through successive changes, his being might take a turn for the worse and become somehow flawed. And so on. Also, while the successive perceptions of a monad are intertwined with the perceptions of all other monads, each monad is itself the source of its internal actions. In this sense, each monad is self-sufficient (or autarchic), namely, as mentioned above, an »incorporeal automat«. *Automat* is another word of Greek origin and indicates that which becomes by itself and from out of itself. However, the monad being a created substance, its self-suffi-

²¹⁰ See above, p. 190 sqq.

²¹¹ The word is formed from *en* »in«, *telos* »end, accomplishment«, and *echein* »have, hold«.

²¹² See above, p. 181.

ciency and automatic character are also created, and therefore not absolute.

Due to the monad's autarchic nature, successive perceptions are engendered from one another according to internal laws of appetition; that is, according to the *final causes* of good and evil with which the act of creation endows the monad. A final cause (*Zweckursache*; *causa finale*) is a purpose, end, aim or goal (Latin *finis*, Greek *τέλος* [*telos*]), or that for the sake of which something is what it is. The final cause is an accomplishment (or perfection), which as such is the steady and ruling onset of what finds its accomplishment in the purpose or end itself. For instance, being a human being who is capable of the peculiar kind of perception that is called »learning« (which, as we know, requires the awakening of the awareness of the *mathēma* in things) is the final cause of a university student. Thus, the goal of learning causes him to engage in studying as necessary and in a critical manner, participating in classes with a vigilant and constructive spirit, acquiring habits that sustain his efforts: in other words, whatever learning demands, he will provide, and the more he learns what it is to learn, the more he will offer his being to learning. Thus his more or less distinct awareness of the perfection of learning will cause him to strive for an ever more accomplished experience of learning.

On the other hand, in the domain of bodies all changes take place according to the laws of *efficient causes*; that is, according to the laws of movement. An efficient cause (*Wirkursache*; *causa efficiente*) is a body that has a certain effect on another body, causing its movement or rest. For instance, my hand is the efficient cause for the fountain pen (insofar as its action consists in movement) being lifted from the desk where it was lying, while the pen, in turn, is the efficient cause for the pain that it caused to my eye when it was lifted too quickly and made contact with my face. And so on.²¹³

What is the relation between the realm of monads and the realm of bodies: in other words, between the system of final causes and the system of efficient causes? Answer: there is no *direct* relation be-

²¹³ It should be noted that, as will be mentioned below, bodies are »indifferent« to movement, i.e. there is no strict necessity in the manner in which bodies move. In fact, we need to distinguish between the forces that drive bodies, on the one hand, and what we perceive as their movement and try to capture in its lawful regularities, on the other. Put differently: whatever we discover as »laws of movement« is not a (necessary) character of nature but an addition to nature: nature as such is not lawful at all, but simply »behaves« according to the design of the monad of monads, i.e. God.

tween these two realms or systems; neither can a monad be an efficient cause — that is, cause the movement or rest of a body — nor (as we know from the definition of monad as a simple substance that »has no windows«) can a body be a final cause — that is, cause an internal action of a monad. Thus, the mechanical laws that govern the movements of bodies are entirely independent from the monads and the laws that drive their changing perceptions. On the other hand, as we have seen, there is a relation between the two realms or systems, which is given by the fact that the simple substances or monads in their perceptions *represent* what is outside of them. For instance, when my eyes see a fountain pen, or even when I simply use one, the simple substance that I am represents the body »fountain pen« (the bodily being; *das Seiende*; *l'ente*) as well as what a fountain pen is (the monadic being; *das Sein*; *l'essere*); while the body »fountain pen« is represented through the infinite monads that form the composite substance that is the organ »eye«, the fountain pen's being is represented by the central monad that is the mind. On the other hand, the representation of the bodily states of a fountain pen in, say, a chemical perspective, requires a peculiar collaboration of the eye and the mind.

This manner of conceiving beings as such and in whole has two implications:

- (i) since each body is connected, through a chain of efficient causes, to all other existing bodies, and since the movements of bodies are represented in the monads, »it follows that each monad is a living mirror — or a mirror capable of internal action — that represents the universe according to its point of view [its *modus spectandi*], and just as regulated as the universe itself« (*P.*, §3); in other words, each monad is, literally, a microcosm;
- (ii) since there is no influence between the two realms, while one represents the other, »there [necessarily] is a perfect harmony between the perceptions of monads and the movements of bodies, pre-established from the outset between the system of efficient causes and the system of final causes, and this is that in which the accord and physical union of soul and body consists, without one being able to change the laws of the other« (*ibid.*).

What distinguishes reasonable souls, or minds, or »spirits«, from other simple substances, and more particularly from animals, is »the knowledge of necessary and eternal truths«, such as those of logics and geometry (*M.*, §29). This knowledge »provides us with *reason*

and the sciences, elevating us to a knowledge of ourselves and of God« (*ibid.*) through »*Reflexive Acts*« (*M.*, §30). These acts »enable us to think of what is called I« (*ibid.*). The first and fundamental reflexive act is the act of *self-reflection* of the *ego*. This act *implies*, as further objects of reflexive reasoning, the thought of being, of substance, of simple and composite, of the immaterial, and, finally, by conceiving of what is limited in us and without limits in him, of God himself (*ibid.*). Hence, all reflection is, in itself (i. e. by its own constitutive structure), self-reflection; that is, a reflection in which the reflexive mind — the I — at the same time reflects itself, thus forming the subjective ground for all thought objects (in other words, the »I think« is implicit in any thinking of something). However, all reasoning, Leibniz says, is in turn founded on two great principles: the principle of *contradiction* and the principle of *sufficient reason*. Both of these principles are principles of *thinking* and at the same time principles of *being*.

10.2 The Principle of Sufficient Reason

In the *Principes*, after having introduced the notions of monads and bodies, perception and appetite, final and effective causes, and after having distinguished different kinds of monads according to the nature of their perceptions, Leibniz writes (*P.*, §§7 and 8):

7. Jusqu'ici nous n'avons parlé qu'en simples Physiciens; maintenant il faut s'élever à la Métaphysique, en nous servant du Grand principe peu employé communément, qui porte, que rien ne se fait sans raison suffisante, c'est-à-dire, que rien n'arrive sans qu'il seroit possible, à celui qui connoitroit assés les choses, de rendre une Raison qui suffise pour déterminer, pourquoi il en est ainsi, et non pas autrement. Ce principe posé: la première question qu'on a droit de faire, sera, pourquoi il y a plus tôt quelque chose que rien. Car le rien est plus simple et plus facile, que quelque chose. De plus supposé, que des choses doivent exister, il faut qu'on puisse rendre raison, pour-

7. Up to this point we have talked only as mere Physicists; now it is necessary to rise to Metaphysics, by availing ourselves of the commonly little used Great principle, which states the following: that nothing comes about without a sufficient reason; that is, nothing happens without it being possible, for someone who knew things well enough, to give a Reason that is sufficient for determining why it is so and not otherwise. Given this principle, the first question one has the right to pose is this: why [for what] is there rather something than nothing? For the nothing is simpler and easier than something. Moreover, supposing that some things must ex-

quoi elles doivent exister ainsi, et non autrement.

8. Or, cette Raison suffisante de l'Existence de l'univers, ne se sauroit trouver dans la suite des choses contingentes; c'est à dire des corps, et de leurs representations dans les Ames: parce que la Matière étant indifférente en elle-même au mouvement et au repos, et à un mouvement tel ou autre; on n'y sauroit trouver la Raison du Mouvement, et encore moins d'un tel mouvement. Et quoique le present mouvement, qui est dans la Matière, vienne du precedent, et celui-ci encore d'un precedent; on n'en est pas plus avancé, quand on ira aussi loin qu'on voudroit: car il reste toujours la même question. Ainsi, il faut que la Raison Suffisante, qui n'ait plus besoin d'une autre Raison, soit hors de cette suite des choses contingentes, et se trouve dans une substance, qui en soit la cause, et qui soit un Etre necessaire, portant la Raison de son existence avec soi. Autrement on n'auroit pas encore une raison suffisante, où l'on puisse finir. Et cette dernière raison des choses est appelée Dieu.

ist, it is necessary that one be able to give a reason [to account for] why they must exist thus and not otherwise.

8. Now, this sufficient Reason for the Existence of the universe couldn't be found in the sequence of contingent things; that is to say, of bodies and of their representations in the Souls: for, since Matter is in itself indifferent to movement and rest, and to such and such other movement, one wouldn't be able to find the Reason of Movement, and even less of such a movement. And even though the present movement, which is in the Matter, comes from the preceding one, and the latter, in turn, from one that precedes it, even by going as far as one wants one won't have made any progress: for the same question always persists. Thus, Sufficient Reason, which doesn't need yet another Reason, must be outside this sequence of contingent things, and must lie in a substance which is its cause, and which is a necessary Being that bears within itself the Reason for its own existence. Otherwise, one wouldn't yet have a sufficient reason, (that is, a reason) where one could stop. And this latter reason for things is called God.

What does the first sentence indicate? »Talking as a physicist«, here, means: talking about »*physis*«; that is, beings as such and in whole, *without*, however, (as, on the other hand, beings in this already discontingent state expect) indicating and grounding their principle, namely, the first cause of *what* they are and, at once, the ultimate ground of the circumstance *that* they are. Only the step (or leap) into the knowledge of the principle of beings elevates thinking to the metaphysical level. In order to rise to this level, thinking avails itself (Leibniz says: *se servir* [*sich bedienen*; *servirsi*]) of a principle that is called the »great principle«. How can we indicate the difference between a principle and a great principle? What can be greater than a principle? Answer: a principle that, in its character of being first and

ultimate, *determines*, in the first place, the character itself of a principle of beings. In other words, the *great* principle is its own principle and, as such, the principle of principles. This self-sufficient principle is formulated thus: »that nothing comes about without a sufficient reason; that is, that nothing happens without it being possible, for someone who knew things well enough, to give a Reason that is sufficient for determining why it is so and not otherwise.« We can elucidate the content and implications of this determination of the great principle as follows:

1. The principle presupposes a certain experience of beings, namely, an understanding of *what* they are, while at the same time it concedes *that* there are such beings. In other words, the principle implies an experience of beings as such and in whole (an experience that is analogous to, but fundamentally different from, the experience of *physis* for the Greeks). We already know the character of this *what* from the very beginning of the *Monadology*: a substance (i.e. anything that »is already there«, or any stable abiding) is a being »capable of action«. The internal action of simple substances (or monads) takes place in the form of appetitions, which cause the monad to change from one perception to the next. The principle of these appetitions is what Leibniz calls »primitive active force«. ²¹⁴ The primitive active force, with its appetite, is the beingness of the monad. More precisely, it is the *unity* of *what* a monad is (i.e. its essence or possibility) and *that* it is (i.e. its existence or actuality). How so? The primitive active force, the principle of the monad's internal action, is the monad's essence or possibility (for instance, the essence or possibility of a student), which, however, in itself (i.e. *as* an essence), is *inclined* and *strives* to come to existence, to become actual. The monad's actuality, on the other hand, is such that, as soon as a certain actuality is attained, this actuality calls for (or exacts: *fordert heraus; esige*) a new possibility (i.e. what is *not yet*, but *still can* become actual) for it to strive for, and give rise to, another actuality. And so on. As we can see, the primitive active force, in which the action of the monad consists, has the character of an actuality that enacts itself, or, in one word, of a self-enacting actuality. This implies that, while the beingness of beings still has its two aspects — whatness and thatness, or essence

²¹⁴ Apart from the primitive active force (*vis primitiva activa*), the monad is also characterized by a primitive passive force (*vis primitiva passiva*), which we will not treat here.

and existence —, compared to Plato's experience of being as *idea* (i.e. *what* something is), the primary accent has shifted towards the *that*-aspect, which, in turn, now has the distinct character of actuality or capacity for action.

2. With regard to that which *is* in the just elucidated manner, the great principle says that it must have a *sufficient* reason. Sufficiency implies that a complete account or explanation can be given for why something *is* (rather than not being), and why it is *thus* (rather than otherwise); in other words, why it exists in a certain state rather than in another state. Completeness of the account, in turn, implies that nothing is left unexplained or unaccounted for, and that the account be such that it does not require to be itself accounted for (or that the explanation be such that it does not require to be explained in its turn; or again, that the reason does not need a further reason that acts as its ground). In other words, as Leibniz says, the reason or account is sufficient only when it reaches the (only) point »where one can stop«. Only completeness in the sense of the attainment of this ultimate halting point satisfies the notion of sufficiency. Even though in most cases we do not *actually* know the sufficient reason, it must, however, *as a matter of principle*, always be *possible* to know it. Hence, the great principle states that the trait of being *thoroughly explainable* — meaning *available for man in an explanation* — characterizes beings as such.

The principle of sufficient reason exhibits both the methodical and the subjective character of Leibniz's foundation of the being as such and in whole. The *methodical* trait shows in the claim of exhaustive explainability; that is, in the fact that the ground of beings is an explanatory ground, or a ground of (complete) explanation, where explanation implies that what is explained is made »plain« and thus bare of what would impede its availability for man; moreover, thanks to its sufficiency, this ground or reason is *certain*. The *subjective* trait shows in the circumstance that it is reason that must set out to find this ground and, in a sense, to *be* this ground, even though the sufficient reason is eventually found *by reason itself* in a being called God. In other words, man must — in answer to the exacting claim of method — offer the fundamental trait of his being, i.e. reason (*Vernunft; ragione*), not only in order to recognize a sufficient reason (*Grund; ragione*) which is already given, and waiting to be discovered, as the ultimate ground and first principle of everything; rather, man must be instrumental to substantiating the »spot« of subjectivity, and thus,

in a sense, underlie beings in whole as a their sufficient reason, to the extent to which, through reason, he posits the actual sufficient reason (God) according to the claims of method and of its truth: namely, certainty. Thus, reason — the manner of being in which man recognizes his true self; in a word: man's true »selving« — constitutes the ultimate basis for the principles of being (i. e. the principles of nature and grace), and therefore the subject for objects given in a certain and perfectly known objectivity.

3. After the great principle has been spelled out, the text continues with what is called »the first question one has the right to pose« once this principle is stated, namely the question: »Why is there something rather than nothing?«. This question asks for the ultimate ground of *existence* of beings as such in whole; that is, for the ground on which rests the *that* of the wholeness of beings, or the circumstance that there *are* beings *at all*. Why is this »the first question one has the right to pose«? We can answer this question by considering once again what the »great principle« itself *presupposes* and *states*.

As to what the principle *presupposes*, the following holds: according to the initial experience of thinking, there are beings, beings exist, beings are actual; these existing, actual beings are beings capable of action, or beings »in action«. More precisely, these actual beings are self-enacting actualities, namely possibilities of action which, in themselves, strive to actuality; in other words: they are self-enacting or self-actualizing possibilities.

We can now consider again what the principle *states*. In the above outlined initial experience of beings in whole is heard the attuning claim of a certain ground, namely the claim that each perception or state of a self-actualizing possibility must have a sufficient reason. The latter, in turn, implies that, as a matter of principle, that state must be entirely explainable through a chain of causes that, from the most immediate cause, goes right down to a first or ultimate cause; that is, a cause that is itself not the effect of a further cause but rather its own cause (in Latin: *causa sui*).

All of this given, it is clear that, in the first place, a first ground of actuality (or: a ground-laying, »grounding« actuality) must be established. For, unless there is a certain ground for action-capable beings to exist at all, the principle of sufficient reason cannot be satisfied. Or, put differently: What the principle of sufficient reason demands in the first place is that an actual ground of the actuality of what is actual

be found. Moreover, this ground will need to be an actuality that is *absolutely* self-enacting or self-actualizing; in other words, it will need to be a possibility that relies entirely on itself for its own actualization, or, likewise, it will need to be a being whose possibility (or essence) *implies* its actuality (or existence) — in a word: it will have to be a *necessary* being.

Thus, it becomes understandable why, once the great principle is stated, the first question one has the right to ask is: »Why is there something rather than nothing?«. The right to ask this question comes directly from the principle itself. It is not a right in general, but a right that can be claimed by a thinking for which »it is necessary to rise to Metaphysics«; in other words, for a thinking which answers the need to constitute the subjective ground for beings in whole, and which, in order to do so, in the first place avails itself of — *and thereby obeys* — the ground-giving and ground-shaping principle of sufficient reason.

4. The question »why is there something rather than nothing?« asks for the ground of the circumstance *that* there are beings at all, and thus for the ground for beings in whole. More precisely, it asks for an *explanation* for this circumstance. The alternative to the existing of things is that nothing exists; that is, the absolute failing of any existence. What kind of experience of this alternative; to wit, what experience of the nothing, do we find in Leibniz? What is this nothing in the first place? The answer to this question lies in the following proposition: »For the nothing is simpler and easier than something«. Thus, the actual challenge for thinking lies in giving an explanation for the existence of something that exists, while accounting for the failing of existence is »simpler and easier«: non-existence is *in itself* simpler, and easier *for thinking*, in that it does not ask for an explanation, or for an explanatory ground, in order to become an object that is thoroughly available to man (i. e. to the being that, via the principle of sufficient reason, provides the subjective ground of everything): concerning the nothing there is not much to explain!

This tells us that in Leibniz there is no experience of the nothing as *the other* with respect to the being as such and in whole; that is, as *pure discontinuity*. The nothing as a phenomenon of discontinuity, in the sense of that which can never be a thing, does not appear within the scope of this thinking — as indeed it never does within the scope of metaphysical thinking. Within this scope, beings find their principle *in themselves*; namely, in the fundamental trait of discon-

tingency (or rather, in the »spark« of discontinuity, as we have been calling it) that constitutes them as such, and which, according to the paradigm set by Plato, has the form of a being »beyond beingness«: a being that is, in a sense, completely other with respect to (or towards) all beings, *and yet still a being*.

The circumstance that the other with respect to (or towards) beings (*das Andere zum Seienden; l'altro verso l'essente*) is, so to speak, touched in passing, but never experienced nor originated as a phenomenon in its own truth, is confirmed by the next sentence: »Moreover, supposing that some things must exist ...«. This implies that a phenomenon that is entirely independent of existing beings is not thinkable. At this point the principle of sufficient reason — and therefore the fundamental traits of the wanted ground that can actually serve as a sufficient reason — can be formulated in a more complete manner: »... it is necessary that one be able to give a reason *why they must exist thus* and not otherwise«. The wanted sufficient reason is twofold, in that it has to explain (i) why existing things *must exist at all* rather than not existing (in other words, it is the cause of the existence or actuality of each thing in every one of its perceptive states), while at the same time it must act as the reason (ii) why existing things *must exist precisely thus* and not otherwise (in other words, it is the cause of the essence or possibility of each thing in every one of its perceptive states). It is not clear, at this stage, in what sense the sufficient reason is the cause not only of the circumstance that things exist at all and thus (rather than otherwise), but of the circumstance that they *must exist at all and precisely thus*. In other words, it is not clear what kind of necessity is implied in the manner in which the sufficient reason acts as a ground for beings.

5. The following paragraph leads up to the indication of the sufficient reason. It begins with the following statement: »Now, this sufficient Reason for the Existence of the universe couldn't be found in the sequence of contingent things; that is to say, of bodies and of their representations in the Souls«. The wanted reason must be a sufficient ground for the being as such and in whole; that is to say: for both the domain of material things (»bodies«) and the realm of monads (»representations in the Souls«). Leibniz refers to the whole of these two spheres as »contingent things«. The meaning of the word »contingent« in Leibniz is different from the one we have introduced within our diagnostic perspective. For now, it suffices to know that, for Leibniz, »contingent« is anything that is not *strictly* necessary. And what

is that? Everything except for God and the eternal laws of logics and mathematics (on the other hand, the laws of physics, for instance, are not necessary, but contingent). Thus, not only beings are contingent, but also their monadic being. Both being and beings are created by God, and there are no stringent reasons why they couldn't also not exist; their necessity is, as we shall see, not a strict one, and not comparable to the necessity of God and of the eternal truths.

A body is defined in terms of movement and rest. Each bodily state can be seen as the effect of a preceding movement, which, in turn, has its cause in a movement that comes before this movement, and so on. In this manner, the domain of bodies is characterized by sequences of bodily constellations that are linked to each other by relations of cause and effect. Since these sequences are represented by the monads according to the pre-established harmony, there must be corresponding sequences in the monadic realm. These sequences, however, are not determined by efficient causes, but rather by final causes. Together, these two kinds of sequences constitute the »sequence of things«, of which Leibniz says that it cannot contain sufficient reason. In order to show why this is so, it suffices to give a proof in the domain of matter and movement, for, if a sufficient reason cannot be found in that domain, there cannot be one in the realm of representations either, since, as we know, these representations represent the movements of bodies.

The proof of the fact that the sequence of contingent things cannot contain a sufficient reason — that is, a reason »which doesn't need yet another Reason«, or, in different terms, a reason »where one could stop« — is quite straightforward. To begin with, one must mind that »Matter is in itself indifferent to movement and rest«. What does this mean? In order to understand this, we must, in the first place, acknowledge the following: *matter is not movement and movement is not matter*. Matter moves and is moved, but movement is not something material; matter rests, but rest (i.e. the »null case« of movement) is not an instance of matter. In other words, movement is the action in which matter, as such, consists: whether it be moving or resting, it is always already »matter in movement«, and movement is what is expected from it in terms of action. Now, while movement is ruled by mechanical laws of cause and effect, these causes, however, are not intrinsic in matter itself; put differently: matter, which has the capacity to move and to be moved, *does not move itself!* Moreover, for any given moving matter there is no stringent (necessary) reason

why it should move in a certain way *rather than in another*. As a consequence, in our search for a sufficient reason of the existence of the universe, we must turn to movement and ask: what initiates and determines movement (and precisely this or that movement), what is its primary source or first cause; in a word: what is its principle? It soon becomes clear that, while movement in general is caused by movement, and a particular movement by another particular movement (or a number thereof), as long as we stay at the level of movement, the search for a *first* cause is doomed to failure. In other words, at this level we are bound to incur an *infinite regress*, a going backward which leads from one movement to the preceding one, from there to the one before that, and so on *ad infinitum*.

The problem of infinite regress, which in Leibniz appears both in the domain of efficient causes and in the realm of final causes (see *M.*, §36), is a *metaphysical* problem. We rise from physics to metaphysics when, in acknowledging this infinite regress, we can actually follow it *to its end*, which requires that we are in the first place stricken by the *need* for an ultimate cause where this regress comes to an end and whence it springs. In this need speaks the cause itself; in other words, the need is already a manner in which the cause itself shows, and it shows precisely in a *difference* with regard to movement. Becoming aware of this difference is a primary metaphysical experience, i. e. an experience in which the metaphysical domain alerts us to itself. The already quoted passage from Aristotle's *Metaphysics* ($\Lambda 2$, 1070 a4): ἀνάγκη δὲ στῆναι (*anankē de stēnai*), »it is, however, necessary to come to a standstill«, bears witness to the original motivation of metaphysical thinking: if the point of standstill, or halt, is not attained and founded in thinking, beings remain without a ground: that is, senseless.

6. The experience of what is beyond »contingent things« (in the Leibnizian sense of »contingent«) as a ground of contingent things is always an attuned experience, in which thinking itself is attained by a likely ground and claimed to offer itself to sustain and ground it. In Leibniz, the attunement of thinking calls for a certain foundation of the existence of the universe — a foundation whose certainty is in its turn based on the absolute certainty of the fundamental (self-)reflexive act of the thinking I. This ground, the sufficient reason which lies outside the sequence of contingent things, »must lie in a substance, which is its cause, and which is a necessary Being that bears in itself the Reason for its own existence«. Thus, the sufficient reason lies in a

substance (i. e. in a being capable of action), which is the cause of the sequence of contingent things, while it is itself not contingent, but necessary.

What is the reason for the necessity of this necessary substance? Answer: the principle of sufficient reason! *If* the ground is to be sufficient, *then* it cannot be contingent, but *must* be necessary. Moreover, in order to be sufficient, the necessary substance must bear in itself the reason for its own existence. In other words, the substance that acts as the sufficient reason must be its own cause (*causa sui*), to wit, it must effect itself, or actualize itself, without depending on another source of actualization. The self-effecting being, the only sufficient reason, is the being we identify as God. The principle of sufficient reason is the self-imposing thought of a simple, primitive substance, which, as the ground of all contingent things, is itself necessary and self-effecting. To be necessary and self-effecting is the essence of this ground, its possibility, or that in which this ground consists. But does this essence also exist, does this possibility become actual? It does, and indeed necessarily so, provided that *anything* exists. On this assumption, the very essence of the sufficient reason *implies* its existence, or, in other words, its possibility *implies* its actuality; in short: given that it *can* exist (i. e. that its existence is thinkable), it *must* exist. In this manner, the principle of sufficient reason — as a principle that rules over all thinking based on the self-reflexive »I think« of reason — provides a proof of the existence of God, which is, however, contingent, or dependent, on the existence of something. This kind of proof is called an *a posteriori* proof.²¹⁵ *A posteriori* means »from after«, namely, in this case, from after (i. e. based on the previous assumption of) the existence of contingent things, or once this existence is admitted: given that contingent things exist, and given the principle of sufficient reason, God (i. e. the being which exhibits the traits required from sufficient reason) must exist. Moreover, since all contingent things are linked with one another, there is only one God, and he is sufficient.

God is the unique, universal, necessary substance that »has nothing outside it that is independent of it« (*M.*, §40) and is a simple consequence of its being possible. This implies that this substance »must be incapable of limits and must contain as much reality as is

²¹⁵ The existence of God can also be proven *a priori* on the basis of the principle of non-contradiction (see *M.*, §§43–45).

possible« (*ibid.*). God is the most real being (in Latin: *ens realissimum*). »Real« here does not mean »existent«, but rather: having the consistency of a thing (Latin: *res*), having that »thing-like« content that makes a thing a thing. God is, so to speak, more of a thing than any other thing; in fact, he contains all possible thingness. Why? Because a thing cannot cause another thing if it is »less of a thing« (i. e. less real) than the thing it is supposed to cause. And since God causes (the existence of) all things, he must be endowed with all the thingness possible, only some of which is actualized in existing things. This, in turn, implies that God is the most perfect being (Latin: *ens perfectissimum*); in other words, it implies God's absolute perfection, perfection being the reality one gets if one puts aside »the limits or bounds in the things that have them. And where there are no bounds at all, namely in God, perfection is absolutely infinite« (*M.*, §41).

However, God is not only the source of existences (actual things), but also of essences (possible things), »insofar as they are real« (*M.*, §43). In other words, God is the source of that which is real in a possibility, of the thing-consistency it contains, of the what-it-is of that which is possible. The reason for this is that, »if there is a reality in essences or possibilities (...), this reality [must] be founded in something existent and actual, and consequently in the existence of the Necessary Being, in whom essence includes existence, or in whom being possible suffices for being actual« (*M.*, §44). Why must the reality of possibilities be founded in something existent and actual (and thus, ultimately, in the existence of the necessary being)? Because the reality of possibilities (i. e. their what-content) has an existence of its own, and therefore needs an existing origin, which ultimately can only be the necessary existence of the being whose possibility strictly implies its actuality. This existing origin is God's mind, which contains all possible reality in itself. In conclusion, without God, not only would there not be anything existent, but neither would there be anything possible.

Thus, »God alone is the primary unity or the simple substance of which all the created or derivative monads are products. They originate, so to speak, through continual fulgurations²¹⁶ of the divinity

²¹⁶ While in Heraclitus the lightning that »steers the being in whole« is a trait of fire, to which man is alerted by the god Zeus, in Leibniz fulgurations emanate from God as the sufficient reason.

from moment to moment, limited by the receptivity of the created being, to which it is essential to be limited« (*M.*, §47). God, the monad of all monads, contains in himself three (or a triad of) fundamental traits, which characterize him as the monadic principle: »Power, which is the source of all«, namely God's being the ground as a centre of force, from which the monads' primitive active force, and thus their subject-character is derived; »Knowledge, which contains the detail [or complexity] of the ideas of things« — this is God's being the ground of all capacity of perception, from the less distinct up to the (self-)consciousness of spirits; »finally, Will, which effects changes or products according to the *principle of the best*«, and which is the ground of all capacity of appetite that is found in the monads (*M.*, §48).

10.3 The Original (Harmonic) Economy of the World

Given the triadic constitution of God as the monad of monads, and the fact that the attributes of power, knowledge and will are, in him, »absolutely infinite and perfect« (*ibid.*), the principle of sufficient reason demands that the following question be posed: »Now, as there is an infinity of possible universes in the ideas of God, and as only one of them can exist, there must be a sufficient reason for God's choice, which determines him to one rather than another« (*M.*, §53). In other words: given that God can create any universe he likes, why does he, in each instant, create precisely this (i. e. the actually existing) one and not one that is different? The answer to this question has already been anticipated in the characterization of God's will and is now spelled out in detail in the next two paragraphs.

The sufficient »reason can only be found in *convenance* [meetness, suitability; *Angemessenheit*; *convenienza*] or in the degrees of perception which these worlds contain, each possible world having the right to lay claim to existence to the extent of the perfection it envelops« (*M.*, §54). »And this is the cause of the existence of the best: that his wisdom [i. e. his perfect knowledge] makes it known to God, his goodness [i. e. the perfection of his will] makes him choose it, and his power [i. e. his capacity to actualize whatever he wants] makes him produce it« (*M.*, §55). Thus, as a consequence of the onto-theological determination of the principle of beingness *in light* of the great principle of sufficient reason, the existing world is, in each moment,

the *best of all possible worlds*, coming from the best of all possible worlds and leading to the best of all possible worlds. As we can see, this is not an »optimistic worldview«, but an ontological necessity: in fact, there would be no way to account for a »sub-optimal« world without violating the perfection of God and, consequently, invalidating his status as the only sufficient reason. In short: given the principle of sufficient reason, any actual world must be the best of all possible worlds.²¹⁷ The necessary character of the optimal world does not dispense us from doing all we can in order to actualize the best of all possible worlds. On the contrary, that necessity awakens in each one of us (according to the created perfection of his or her monadic being) the appetite for collaborating in the actualization of that optimality.

Due to the fact that each monad has its own *modus spectandi* and is a unique living mirror of the universe, each monad sees a different world from that of any other monad. But the world is only one, namely the best possible one. Thus, »through the infinite multitude of simple substances there are, as it were, just as many different universes, which, however, are only the perspectives of a single one according to the different *points of view* of each monad« (*M.*, §57). »And this is the way to obtain as much variety as possible but combined with the greatest possible order; that is to say, it is the way to obtain as much perfection as can be (*M.*, §58).²¹⁸

Thus, the world, and each single thing that is in it, is in any moment the result of a divine calculation, by which God thinks through all possible combinations of monadic and bodily states, as ruled by final and effective causes respectively, chooses the best, most perfect (i. e. most diverse and most orderly — in a word: *the most harmonic*) combination, and actualizes it. As Leibniz writes else-

²¹⁷ The perfection of God's will does not lie in an unrestrained arbitrariness: in fact, God is restrained in his choice, in that, once he has recognized the best (most convenient, »meetest«) constellation of monads, he cannot but choose it over any other. However, this does not imply that, since he is bound by the outcome of his calculation to discard all sub-optimal choices, even God is not free in his actions; in fact, the contrary is true: God's freedom, too, is *perfect*, or rather, God is freedom. (In fact, the thought that freedom is attained precisely when, notwithstanding the infinite number of choices and possibilities, *there is no alternative*, is not alien to the human mind.)

²¹⁸ »As much variety as possible, combined with the greatest possible order« is one way of characterizing *convenience* or *meetness*.

where: »Cum Deus calculat et cogitationem exercet, fit mundus«;²¹⁹ that is: »As God calculates and puts his thinking into effect, the world arises«. What guides God in his choice is the principle of the best, or, put differently, the principle of *meetness* or *convenience*. Since God cannot but choose what is best or most suitable, there is, in each perceptive state of each monad, a certain necessity based on its sufficient reason. However, this is not a necessity in the strict sense of the word, since actualized (created) things are, after all, ontologically contingent. Only eternal truths — which do not even depend on God's will, but only on his mind (insofar as they form the content of his mind) — are strictly necessary.

Now, the actualized perfection of the world can be broken down into a series of elements which are combined in it: in the plan God has chosen, which comprises at once all monadic states from the beginning to the end of the world, there will be, as we have seen, the greatest variety along with the greatest order, but also »the best arranged [managed] land, place, and time; the maximum effect produced by the simplest means; in created things the highest levels of power, knowledge, happiness and goodness which the universe could allow« (*P.*, §10). While, in God's understanding, all possible things can claim to come into existence according to their degree of perfection, the actual world will always be the one outcome of these claims in which the use of land, place and time, effects relative to means, power, knowledge, happiness and goodness, are maximized. Only a thus determined world has a sufficient reason for its existence and for being thus and not otherwise.

We have seen how Leibniz elaborates an answer to the guiding question of metaphysics: »What is beingness?« on the basis of the principle of sufficient reason, which is implicit in his experience of the being in whole. His answer is: the abidingness of the abiding is the monad — as determined in its monadic substance by the monad of all monads, which, based on the principle of sufficient reason, is the being that creates all monads (rather than leaving them in the state of mere possibilities), and creates them in the way they are created (rather than otherwise) according to the principle of *convenience* or *meetness*. This insight into the ontological constitution of beings must of course be respected in the manner in which we acquire a

²¹⁹ The phrase is a handwritten note by Leibniz found on a page of his text entitled *Dialogus* (1677).

specific knowledge of things both in metaphysical terms and in the sciences. In other words, from the answer to the guiding question of metaphysics we can derive maxims of knowledge which reflect the content of that answer. One of these maxims, which is spelled out in one of Leibniz's Latin works (*De rerum originatione radicali* — »Of the radical origination of things«), reads as follows:

Semper scilicet est in rebus principium determinationis quod a Maximo Minimove petendum est, ut nempe maximus praestetur effectus, minimo ut sic dicam sumptu.

In fact, there is always within things a principle of determination which must be sought for on the basis of the maximum or the minimum, and precisely in such a manner that the maximum effect is made available, so to speak, at the minimum cost.

We can see how this maxim for seeking the principle of the determination of things — to wit, the principle that determines them from a metaphysical point of view — is a direct consequence of the principle of meetness or of the best choice that shapes God's plan: since God, according to that principle, can only have produced things in such a way that, in their being, the maximum effect is made available at the minimum cost, when it comes to finding the principle of the determination of beings — in other words, when it comes to establishing the *truth* of things — this principle must respect the criterion »maximum effect combined with minimum cost«. Put differently, the specific being of a thing can be found by looking for the principle that determines it in the sense of effect maximization and cost minimization. While in any created being this trait of meetness will have some limitation, in God himself effect maximization along with cost minimization is actualized in perfection. In fact, in his *Discours de métaphysique*, Leibniz writes:

Il est vray que rien ne couste à Dieu, ... puisque Dieu n'a que des decrets à faire pour faire naistre un monde réel.

It is true that God doesn't have any cost, ... for God simply needs to make decrees in order to produce a real world.

While the production of the maximum effect by the simplest means is only one character of the best possible and therefore only actual world, we can trust that, due to the overall economy of God's creation, a principle of determination that satisfies the criterion of effect maximization along with cost minimization will not contradict the

character of the best arrangement of time and of place, of the highest level of power and of happiness, and so on. However, in letting ourselves be guided by this criterion for a sufficient principle of the determination of contingent things, we need to take into account its metaphysical nature and its full metaphysical scope. This implies that beings cannot be determined in terms of maximum effectiveness and efficiency on a *merely bodily level*. Why so?

The answer is known: a sufficient reason cannot be found on this level. In the *Principes*, Leibniz reaffirms this point with regard to the laws of motion, which are studied in physics. God's supreme wisdom without doubt enabled him to create forces that result in the most well-adjusted, adequate laws of motion: to wit, those that are *most convenient with regard to metaphysical grounds*. Such a well-adjusted law states, for instance, that action is always equal to reaction, and that the total effect is always equal to its full cause (*P.*, §11). Now, Leibniz says, it »is surprising that, if one considers only *efficient causes*, or matter, one cannot demonstrate these laws of movement« (*ibid.*). In order to do so, one needs to resort to the final causes, because »these laws do not depend on the *principle of necessity*, as do the logical, arithmetical and geometrical laws, but on the principle of meetness; that is, on the choice of wisdom« (*ibid.*).²²⁰

This statement implies the following: in order to find the laws of all things mechanical — that is, of things belonging to the domain of bodies, whose movements are ruled by efficient causes — one cannot do so without resorting to the reign of final causes, and thus, ultimately, to the first metaphysical ground. In the case of sciences which investigate the material circumstances that go along with the pursuit of final causes, such as a science of economic needs, it is even clearer that a reference to a harmonizing, measure-giving principle is necessary. Without such a reference, the criteria for the best choice are lacking, and what is optimal in terms of maximum effect and minimum cost cannot be determined.

There is a moment, in the form of knowledge we call science, which contains, though implicitly, the reference to the original economy based on the principle of meetness or of the best choice. This is the moment in which a science defines its scope and object starting from basic assumptions which it takes as evident. In economic theory,

²²⁰ Leibniz in fact states that he couldn't have discovered the laws of physics which he did find without taking as an initial reference the principle of *convenance*.

for instance, the realm of final causes — that is, the monadic truth of man — is in some way assumed in the form of »individual preferences«, in the appetite that strives to »maximize utility«, and so on, while the principle that warrants the »best of all possible worlds« is hidden in the assumption of the »invisible hand«, according to which, if each individual only pursues the optimal outcome (i. e. the maximum effect at minimum cost) for himself (in terms of his interests and appetites), then the optimal overall outcome is assured. Both final causes and their harmonizing principle are thus assumed in operative concepts. Leibniz's metaphysical position, his attempt at answering the guiding question of philosophy, alerts us that, in regard to this scientific endeavour, it is necessary to ask: What guides economic theory, in its present technical-mathematical form, when it makes its assumptions on the human being, on nature, on laws, on art and artefacts, etc.? To what extent is the sufficiency of the principle of determination, in terms of the maximization of effects at the minimum cost, sought in the realm of final causes, and therefore in the principle of meetness which harmonizes beings as such and in whole? Finally: What kind of truth does economic theory pursue, given that, according to Leibniz, there are two kinds of truth: namely, the eternal truths, determined by the principle of necessity, and the contingent truths, determined by the principle of meetness, or of the best choice?