Andreas Blank

On Reconstructing Leibniz's Metaphysics

I. INTUITIONS AND THE QUESTION OF THE "TAMING OF PHILOSOPHY"

Leibniz is one of the early modern philosophers who lend themselves naturally to contextualizing approaches. One obvious reason is that he refers to literally hundreds of other thinkers; another, methodological, reason is that he adopts a conciliatory approach that tries to combine what is useful in different philosophical traditions while discarding what is less useful. Hence there is undoubtedly a strong need to trace the origins of the many philosophical views to which he responds and to clarify how he modifies and recombines them. Still, contrary to the suggestion that only contextualizing approaches to the history of philosophy can be justified (Garber 2003; Mercer 2019), a reconstructive approach to Leibniz's metaphysics may also have its merits. This is so for two reasons.

The first reason derives from the nature of the source materials that Leibniz has left us – mainly, a seaman's chest full of notes, drafts and letters; even the *Nouveaux Essais,* which looks like a book, is in fact nothing but a huge collection of reading notes on Locke's *Essay Concerning Human Understanding.* To be sure, his philosophical theology has found an orderly exposition in the *Theodicy*. Also, Leibniz produced some brief outlines of his metaphysics, but these shorter writings leave the reader puzzled as to the reasons that Leibniz had for proposing his views. Reconstructing Leibniz's metaphysics need not mean inventing an imaginary Leibniz attributed with views that the historical Leibniz did not hold. Rather, in scattered notes, drafts and letters, Leibniz did give a lot of arguments – one at a time. What requires reconstruction is the question of how these single arguments add up to a large-scale argumentative structure that supports the metaphysics of simple substances and pre-established harmony. Things are further complicated by the fact that the substantive views on metaphysics in the early Leibniz are very different from those in the later Leibniz, which raises the question of whether there are any argumentative continuities that bridge these substantive differences. I think there are such continuities and that, surprisingly, they may contribute much to understanding why Leibniz developed his later metaphysics.

The second reason for taking a reconstructive approach derives from goal-directed considerations. Certainly, reconstructing the logical structure of Leib-

niz's metaphysics would be more rewarding if some insight concerning certain more recent philosophical concerns could thereby be gained. Such an expectation may sound futile when, as Justin Smith has done, the history of philosophy is compared to an archeological excavation, where it would be misguided to expect that a jar found scattered to pieces would hold water (Smith 2013. 41). But this comparison only offers an emblem for an antiquarian view of the nature of philosophical historiography. If an emblem for the reconstructive approach is sought, what comes to my mind is Kintsugi, the Japanese art of repairing broken pottery with gold dust that makes the lines of fracture visible and thereby creates a functional vessel that is both old and new. In any case, I would like to defend the usefulness of taking a reconstructive approach to writing history of philosophy by addressing a problem that was recently diagnosed by Michael Della Rocca – a problem that he labelled "The Taming of Philosophy." The problem itself stems from developments in twentieth-century analytic philosophy, in particular the view that philosophy should, as much as possible, accommodate our everyday intuitions that are expressed in everyday language. There are three central concerns that Della Rocca voices: (1) The method of intuition is "too conservative: it doesn't allow for the radical changes in beliefs that are sometimes required by the aspect of reality that one is investigating" (Della Rocca 2013. 187). (2) In the method of intuition "one's focus is directly on our intuitions about the world, i.e., on bits of our psychology instead of on bits of extra-mental reality" (Della Rocca 2013. 191). (3) In the method of intuition, "when there is some kind of conflict between them, no one way of resolving the conflict is dictated" (Della Rocca 2013. 194).

Della Rocca offers his considerations explicitly in the context of the question of how writing the history of early modern philosophy should be done. For this reason, there is nothing forced in discussing Leibniz's metaphysics in connection with the problem of the "taming of philosophy." But it should be kept in mind that Della Rocca draws a *contrast* between a central trend in twentieth- and early twenty-first-century analytic philosophy and a divergent central trend in early modern philosophy. To be sure, Della Rocca takes the difference to be a matter of degree: "I acknowledge, one can find elements of the [method of intuition] in just about any historical philosopher" (Della Rocca 2013. 179). In particular, he notes that "Leibniz is more concerned than Spinoza is to preserve at least some ordinary beliefs and to show how his system enables us to preserve much of what we ordinarily want to say about the world" (Della Rocca 2013. 185). But this is compatible with Della Rocca's observation that "Leibniz arrives at shocking conclusions far from common sense" – an observation that he takes to imply that "Leibniz is little concerned with making intuitions, as such, focal points in his philosophy" (Della Rocca 2013. 185).

My response to Della Rocca's diagnosis is mixed. I agree that, by studying philosophers such as Leibniz, one could engage more seriously with reality than

by studying recent work on how intuitions can be used to evaluate philosophical theories. Also, I agree that there is an important sense in which Leibniz believes that our everyday ways of speaking can be preserved while at the same time overturning most of our everyday beliefs about the natural world. This sense derives from Leibniz's own distinction between the standpoint of the *système nouveau* – the theory of simple substances – and the standpoint of the *système commun* – the understanding of the world expressed in everyday language. (For detailed studies of this distinction, see Kaulbach 1973; Schüßler 1992.) Leibniz compared the idea of such a change of perspective with what happened in the emergence of Copernican astronomy: Just as talk about the rising of the sun retains its validity in everyday language after the Copernican turn, so too does the everyday view of the world retain its relative validity after the development of the theory of simple substances; just as the rising of the sun is reinterpreted from the standpoint of Copernican astronomy, so can the everyday view of the world be reinterpreted from the standpoint of the theory of simple substances. (*Discours de Métaphysique*, § 27; Leibniz, 1923– VI, 4, 1571–1572.) In fact, the propositions of the *système nouveau* seem to replace the everyday interpretation of the world with an entirely different one. For what could be further from the everyday understanding of the world than a universe constructed of simple substances: Of substances which have no extension and no parts, which can neither come into being nor pass away by natural means, which do not interact causally with other simple substances, but are active in the sense that all their changes result from an internal cause. This seems to be exactly opposite to an everyday view according to which extended objects are composed of parts and stand in relations of causal interaction and mutual dependence. We still can talk about one thing causing a change in another thing, but what really takes place are parallel chains of spontaneous changes in simple substances; we still can talk about the active and passive forces of material objects, but what underlies the phenomena that the natural sciences describe are really the primitive active and passive powers of simple substances; and so on. In this sense, preserving some of our everyday ways of speaking is compatible with overturning the everyday beliefs that these ways of speaking express.

In this sense, Della Rocca is certainly right that Leibniz's metaphysics is not primarily concerned with preserving intuitions. However, I would like to argue that one also could learn from Leibniz how intuitions could be used in a way that does not lead to the taming of philosophy. In what follows, I would like to ask where, in Leibniz's later metaphysics, there are considerations concerning our mental states that do not depend on the theory of simple substances and, therefore, can provide support for the theory. I think that such considerations occur in many places during Leibniz's later years. But their function may become clearer by pointing out some similarities between Leibniz's early and later writings. Of course, many of his metaphysical views have changed in between

(for reasons that will become clearer presently). But some of the arguments that support them already occur in his early years – and, since there is no such thing as a theory of simple substances in these years, these aspects of his thought must be independent of the theory of simple substances. If similar considerations occur later, they, too, can plausibly be taken to be independent of the perspective of the theory of simple substances. In spite of the substantial discontinuities in Leibniz's philosophical development, there remain some meta-philosophical continuities. These continuities derive from the use that Leibniz makes of our everyday understanding of and speaking about the structure of the mental activities and the essential qualities of material objects. These arguments bear significant similarities with some of the currently accepted view of what arguments from intuition consists in. Leibniz's analysis of the mind starts from the Cartesian view of intuition as intellectual perception – a view that shaped a part of the modern and contemporary debates about the nature and justificatory role of intuitions. (For a historical overview, see Chudnoff 2013. 3–6; for defences of this approach to intuitions, see Jackson and Pettit 1990; Chudnoff 2013, chapter 1.) Leibniz's analysis of matter starts from an analysis of the concepts that we use in describing the physical objects we encounter in everyday life – again, something that has a counterpart in contemporary debates about what is called "physical intuitions" (which turn out to be reliable with respect to the qualities of objects of ordinary size at moderate speed but highly unreliable with respect to the qualities of extremely small and extremely fast objects). (See Bealer 1998; Steiner 2000; Köhler 2003.) I will argue that the development of Leibniz's metaphysics shows that intuitions about mental experience are irreversible and infallible, whereas intuitions about the physical world are reversible and fallible. By showing this, I also argue for the use of reconstructivist methodology, since the argument I present cannot be developed using contextualist methodology.

II. INTUITIONS AND LEIBNIZ'S ANALYSIS OF MIND

Famously, Leibniz took up Descartes' view that we have an intellectual perception of our thought and existence. As Leibniz understands it, the proposition "I exist" is not proven by the proposition "I think;" rather, the proposition "I think" is identical with the proposition "I exist thinkingly" – which for him is one of the first factual truths based on immediate experience (*experience immediate*). (*Nouveaux essais*, IV 7 §§ 2–4; Leibniz 1923– VI, 6, 408.) With a view to knowing our own existence, Leibniz also speaks of an "immediate intuition" (*intuition immediate*). (Quelques Remarques sur le Livre de Mons. Lock, intitulé Essay of Understanding; Leibniz 1923– VI, 6, 8.) Much of what he says about the mind can be understood as an amplification of this approach. For instance, Leibniz points out that the experience that many differences are to be found in

our thoughts also belongs to the first truths that we perceive immediately within us (De synthesi et analysi universali; Leibniz 1923– VI, 4, 543). This truth, in turn, forms a source for the knowledge of the concept of change (Leibniz to de Volder, 10. November 1703; Leibniz 1875–1890, II, 258). The same use of intuitions can be found with a view to some other concepts central to Leibniz's later metaphysics – the concepts of a connection between perceptions, spontaneous activity, unity and representation. These concepts, too, derive from Leibniz's analysis of mental operations that are common to all humans and about which all humans have intuitions.

One strategy Leibniz uses to establish the existence of a real connection between perceptions is through the analysis of the relation between noticeable and unnoticeable perceptions. Evidently, the existence of unnoticeable perceptions can only be made plausible by pointing to the traces that these perceptions leave in the noticeable perceptions. As Leibniz argues, there must be perceptions which are not accompanied by attention, memory or reflection but nevertheless must exist either because they have noticeable effects or because we sometimes consciously note that we had them before. (*Discours de métaphysique*, § 33; Leibniz 1923– VI, 4, 1581–1583; Quelques remarques sur le livre de Mons. Lock intitulé Essay of Understanding; Leibniz 1923– VI, 6, 6–7; *Nouveaux essais*, préface; Leibniz 1923– VI, 6, 53–61; *Nouveaux essais*, II 1 § 15; Leibniz 1923– VI, 6, 116; *Monadologie*, § 23; Leibniz, 1875–1890, VI, 610.) As examples of such perceptions, Leibniz cites the uncounted impressions that enter into a particular sense perception without being able to be distinguished individually (as in the case of hearing the sound of the sea). (*Discours de métaphysique*, § 33; Leibniz 1923– VI, 4, 1582–1583.) Further evidence for the existence of *petites perceptions* is provided by the observation that some thoughts come back that we have forgotten we had. These need not always take the form of a conscious recollection, as in the example of the poet who, without noticing it, uses a phrase he once read. (*Nouveaux essais*, I 3 § 20; Leibniz 1923– VI, 6, 106–107.) Leibniz also mentions the observation that we grasp some things more easily because we have grasped them before, even though we have no conscious memory of this (*Nouveaux essais*, I 3 § 20; Leibniz 1923– VI, 6, 107). In addition, Leibniz points out that, in our dreams, thoughts can reappear that we had at an earlier time, independently of whether we remember that we had them before. As an example, Leibniz mentions that while Justus Julius Scaliger was working on an account of the famous personages of Verona, a grammarian named Brugnolus, unknown to him, appeared in a dream and complained that he had been forgotten in this account; only later did it turn out that this person had actually lived in Verona. Leibniz explicitly cites this in defense of the thesis that even perceptions of which we have no memory leave traces in later mental states (*Nouveaux essais*, I 3 § 20; Leibniz 1923– VI, 6, 107).

In his early writings, Leibniz describes the phenomena occurring in dreams providing evidence for "the wonderful connectedness of dreams" (Demonstrationum catholicarum conspectus; Leibniz 1923– VI 1, 494). He describes various aspects of how mental states are connected in dreaming:

> [I]t should be noted that the sleeping person at times becomes aware of the fact that she is asleep, and that she nevertheless continues to sleep. Here, we should consider the fact that someone wakes up for a very small interval of time and, once again asleep resumes the previous mental image. But it should also be noted that some human beings can wake up themselves, and this is very familiar to myself, such that when I am oppressed by some unwelcome image, I recall that I am asleep, and I try to open my eyes […]. it should also be considered leaps out of bed arise […] which occur to some people sometimes at the border between being awake and being asleep […]. When this happened to me once, I was unable to fall asleep again for the whole night. For as soon as I was about to fall asleep, I recollected myself and had a feeling of this and jumped up. (De vi persuadendi. De somnia et vigilia. 1669-summer 1670?; Leibniz 1923– VI 2, 276.)

The reflective awareness of the state of sleeping or of the situation of falling asleep indicates that, even in these situations, there is a connection between mental states – a connection between the reflective awareness and the state that is its intentional object. Leibniz also notes that dream images are related to previous experiences: "One thing is most admirable in dream, […] namely the formation of images, which happens by spontaneous concourse in a moment […] This example is well-known: 'hac sunt in fossa Bedae *Venerabilis* ossa', which a poetic monk substituted in a dream for the unsuitable word 'presbyteri.'" (De vi persuadendi. De somnia et vigilia; Leibniz 1923–; Leibniz 1923– VI 2, 277.) Replacing the generic characterization of Beda as a priest by the epithet by which he was to be remembered by posterity presupposes great familiarity with how such commemorative verses work. Hence, if such a replacement can take place while dreaming, this is the indication of the presence of complex active powers of the mind even during sleep. Leibniz argues that the connection between mental activities in dreaming implies that in the mind there is an internal principle of action (De vi persuadendi. De somnia et vigilia; Leibniz 1923–; Leibniz 1923– VI 2, 277). Moreover, his claims about the active nature of mind are seen as being implied by observations that are common to all human beings:

> I do not believe that there is anyone among the mortals who would not confess to me that while dreaming there occur spontaneously … elegant and artfully fabricated images … hence, necessarily there is something I know not what in our mind that is constructive [*architectans*] and harmonious, which as soon as it is liberated from disentangling ideas turns to joining them together. (De vi persuadendi. De somnia et vigilia; Leibniz 1923–; Leibniz 1923 VI, 2, 278.)

In this way, dreaming not only provides evidence for connections between mental states but also for the active powers of the mind. The notion of activity, of course, is another central concept in Leibniz's analysis of the mind. In the *Nouveaux Essais*, Leibniz agrees with Locke that the clearest idea of activity comes from our own minds. Philalèthe voices Locke's position:

> We find in ourselves the power to begin or not to begin, to continue or to terminate various activities of our soul and various movements of our body, and this simply by a thought or a resolution of our mind … This faculty is what we call will. (*Nouveaux essais*, II 21 § 5; Leibniz 1923–; VI, 6, 172–173; see Locke 1975, II, xxi, 5.)

Leibniz essentially agrees with this in the person of Theophile, and only draws attention to the fact that the same results can also follow from unconscious inclinations, which are better called "appetitions" rather than "volitions" (*Nouveaux essais*, II 21 § 5; Leibniz 1923– VI, 6, 172–173). Later, Theophile resumes Locke's strategy and argues for an active faculty of the mind by observing that we can set chains of thoughts in motion arbitrarily and stop those thoughts that come to us involuntarily. (*Nouveaux essais*, II 21 § 12; Leibniz 1923– VI, 6, 177; *Nouveaux essais*, II 21 §§ 17–19; Leibniz 1923– VI, 6, 180; Draft of the letter to de Volder 19. January 1706; Leibniz 1875–1890, II, 282, note.)

Again, this line of argument has parallels in Leibniz's early writings. For example, in *On the Analysis of Thoughts* Leibniz writes:

> *Willing* is thinking and tending towards that which it thinks, striving at something insofar as it represents the same.
> *Willing* is tending towards thinking.
> *To be tending* towards something is to be striving towards it in the highest degree. It should be known that one can strive towards different things, but that among several strivings something is selected towards which the thing tends …
> *To be striving* towards something is being determined insofar as being active …
> *Being determined* is to have all the requisites; viz. the absolute ones insofar as the thing has them.
> *To have the absolute ones insofar as having them;* is to have such requisites that, if their existence is supposed, they do not involve another ultimate subject. (De cogitationum analysi; Leibniz 1923– VI, 4, 2768–2769.)

Moreover, Leibniz claims that this view of the nature of volition only makes our everyday concept of wanting something explicit. This becomes clear in *Elements of True Piety*, where he explicates the concept of will as follows:

> The *will* is a belief about good and bad. That this is understood by human beings under the term 'will' is obvious from standard ways of speaking, in which, if the definition is substituted for the defined, the sense remains the same. Thus, we say that all people want the good and flee the bad, that No-one wants the bad for the sake of the bad. We want what we think good, and, conversely, what we think good, we want. But if someone rejects this notion of will, he gives it a meaning other than the one that humans are accustomed to, and probably he will not even be able to say what willing is. (Elementa verae pietatis, sive de amore Dei super omnia; Leibniz 1923– VI, 4, 1360–1361.)

Thus, the connection between belief and will is seen as something implicitly already contained in our everyday concepts and behavior.

A further line of argument leads from the analysis of thinking to the concept of spontaneous activity. Thinking is understood by Leibniz as "acting upon itself" (De affectibus (10. April 1679); Leibniz 1923– VI, 4, 1411; Introductio ad Encyclopaediam arcanam (ca. 1683–1685); Leibniz 1923– VI, 4, 530–531; Reflexio (1683–1685?), Leibniz 1923– VI, 4, 1471). which is why he thinks that the phenomenon of thinking proves the existence of a "principle of a truly inner activity" (Leibniz to Bayle, Dezember 1702; Leibniz 1875–1890. III, 69.) One of the arguments that Leibniz gives for this claim is the consideration that "[t]hinking is nothing but the sense of comparing, or more briefly, the sense of many things at the same time, or of the one in the many" (De conatu et motu, sensu et cogitatione. spring-autumn 1671[?]; Leibniz 1923– VI, 2, 282–283). A possible explanation for the view that every thought involves comparison can be found in the consideration that "[i]t is necessary that in what can be thought there is a reason why it is perceived, that is, why it exists, and this is not in the thinking of a single thing, it is therefore in a multiplicity" (De conatu et motu, sensu et cogitatione; Leibniz 1923– VI, 2, 282). This passage suggests that a mental activity that represents only a single feature of the world would not carry within it an explanation of why sensation arises. The contrast between the notion of thinking of a single object and thinking of a multiplicity suggests that Leibniz is particularly concerned here with an explanation of the complexity of the content of our sensations. For this reason, sensations must arise through the processing of a multiplicity of mental activities that are not yet sensations themselves. Similarly, Leibniz argues, the pleasure or pain that accompanies sensations could not occur without our ability to compare impressions: "Whatever acts on itself, has some memory (for we *remember* when we sense that we have sensed); and consequently, the perception of harmony or disharmony or of pleasure or pain, through the comparison of an old and a new sensory impression" (Elements iuris naturalis, sixth MS [1671]; Leibniz 1923– VI, 1, 483). If no sensation occurs without a feeling of pleasure or pain, then the ability to compare impressions is a requisite for sensation: "two factors, action and reaction,

or the comparison and therefore *harmony*, are required for *sense*, and – without which there is no sense – for *pleasure* or *pain*" (*Theoria motus abstracti* [1671]; Leibniz 1923– VI, 2, 266). Moreover, retaining previous mental states in memory, comparing them, and experiencing them as pleasant or painful implies that sensation involves some higher-order mental operations – operations that have the "actions and passions of the mind" as their object (*Theoria motus abstracti*; Leibniz 1923– VI, 2, 266). In this sense, sensation involves a sense of the mind's own actions and passions. And it is this structure of reflexive mental operations that Leibniz has in mind when he maintains that thought presupposes an active capacity.

The notion of unity derives from Leibniz's analysis of a particular kind of mental activity: self-consciousness. This can be seen in his discussion of the distinction between personal and real identity. In a first version of *Nouveaux Essais* II 27 § 9 one finds the view that personal identity *consists in* self-consciousness (*Nouveaux essais*, II 27 § 9; Leibniz 1923– VI, 6, 236). In a second version of the same passage, Leibniz holds that self-consciousness *proves* personal identity (*Nouveaux essais*, II 27 § 9; Leibniz 1923– VI, 6, 236). As he argues, a person preserves his identity even if his memory has gaps or he loses consciousness. A certain degree of conscious connection between mental states is sufficient for the preservation of personal identity and can be supplemented by reports of other people as a further basis for personal identity (*Nouveaux essais*, II 27 § 9; Leibniz 1923– VI, 6, 236). Real identity, on the other hand, persists according to Leibniz even when consciousness and memory cease altogether (*Nouveaux essais*, II, 1, § 12; Leibniz 1923– VI, 6, 113–114). At the same time, Leibniz considers self-consciousness as evidence of real identity because, as he argues, "the identity that appears to the same person, who feels himself to be the same, presupposes real identity at each subsequent transition, together with reflection or the sentiment of the I: for an intimate and immediate perception naturally cannot deceive" (*Nouveaux essais*, II 27 § 9; Leibniz 1923– VI, 6, 236). In this passage, self-consciousness and consciousness of one's mental activities seem to be inseparable: The consciousness that has as its object certain mental activities is always accompanied by the consciousness that they are my mental activities; and the consciousness that they are my mental activities does not occur without the consciousness of those activities.

Leibniz uses the Aristotelian distinction between parts that are prior to a whole and parts that are posterior to a whole (*Nouveaux essais*, II 17 § 1; Leibniz 1923– VI, 6, 157). In the first case, parts can exist independently of the whole; in the second case, parts cannot exist independently of the whole (See Aristotle, *Metaphysics*, 1036a12–26; *Metaphysics*, 1019a2–14). But how can the concept of a whole that is prior to its parts be applied to the human mind, given that there is a sequence of ever-changing mental states? Leibniz points out that "we do not act as a simple machine, but out of reflection, i.e., of action on ourselves" (De

unione animae et corporis. February 1676?; Leibniz 1923– VI, 3, 480; Leibniz, 1992. 37). And it is the perception of perceptions is what constitutes the *per se* existence of a mind (De origine rerum ex formis; Leibniz 1923– VI, 3, 518; Leibniz, 1992. 75). Leibniz puts the point also as follows:

> *To think* is being the reason of change, or to change itself. Also being the reason of itself. *To think* is indefinable, in the same way as *to sense*, or rather *to act*. And nevertheless, once assumed they are reflected in themselves. Because *we think*, we know that we are ourselves, because *we act*, [we know] that there is something else. (De conatu et motu, sensu et cogitatione; Leibniz 1923– VI, 2, 282–283.)

Leibniz here seems to take up the view that sensation, like thought and acting, essentially involves higher-order operations by means of which we are aware of our sensations, thoughts, and actions. But by being aware of our sensations, thoughts, and actions, we are at the same time aware of ourselves (and also of the beings that are presupposed in our actions). The relation between self-awareness and awareness of our sensations and thoughts exemplifies the connection relation since the relation of existential dependence here seems to go in both directions. On the one hand, self-awareness does not occur independently of the awareness of thought. In this sense, self-awareness depends on the awareness involved in thought. On the other hand, our awareness of sensations and thoughts also does not occur independently of self-awareness. If this is what Leibniz has in mind, the structure of thought involves two different kinds of higher-order mental operations – awareness of thought and self-awareness – that stand in the connection relation to each other: Awareness of thought cannot exist independently of self-awareness, and vice versa. If the reflexive structure of thinking is characterized by the relations of mutual existential dependence just described, it becomes clear in what sense the analysis of the structure of thinking leads to the insight that perceiving, thinking and acting, the consciousness of perceiving, thinking and acting, and self-consciousness form a unity in which the parts cannot exist independently of each other.

The analysis of sensation also provides content to the concept of representation or "expression". As Leibniz explains, "one things expresses another thing when there is a constant and regular correspondence between what can be said about one and what can be said the other" (Leibniz to Arnauld, 9. October 1687; Leibniz 1923– II, 2, 240). And he argues that "[o]ne cannot doubt the possibility of such a representation of several things in a single thing because our soul provides us an example of it" (Leibniz to Arnauld, 9. October 1687; Leibniz 1923– II, 2, 240, note 9). Likewise, Leibniz claims that we experience multiplicity in a unity by becoming aware that every perception comprises a multiplicity in its object (*Monadologie*, §16; Leibniz, 1875–1890. VI, 609). As he analyses it, this multiplicity involves both bodily states and aspects of the external world. As to

the former, Leibniz draws attention to the phenomenon that we have a confused perception of many processes in the body, which must be based on a multitude of *petites perceptions*, but which we cannot distinguish (Leibniz to Arnauld, 6. October 1687; Leibniz 1923– II, 2, 241). Similarly, Leibniz draws on the phenomena of well-being and indistinct discomfort or indistinct restlessness as evidence for the existence of *petites perceptions*, which have as their object indistinctly recognized bodily processes (*Nouveaux Essais*, II 20 § 6; Leibniz 1923– VI, 6, 164–166). Leibniz also elucidates his thesis that we always perceive our bodies in this way: "[N]othing happens in the body without the soul perceiving it, even if it only notices new impressions that stand out. But even new impressions in the body would not be immediately felt by the soul if it had not previously felt the usual ones." (Semper corpus nostrum percipimus. ca. 1683–1686; Leibniz 1923– VI, 4,1493.) In a note probably written around 1686, Leibniz points out that mental representation involves perception by means of the states of an organic body, and – in addition – the representation of the temporal position of past perceptions and perceptions anticipated in the future:

> The mind has the ability to connect together different states of the body, so that past and future exist together by its help, the past by a kind of reminiscence, the future by presentiment. And although it is true that a body, too, relates to its past and present states, there is, however, this difference: in a body there is nothing but a present state, even if it is an effect relating to a cause in the past and likewise, a cause relating to an effect in the future. But in the soul every state is represented per se, past as past, future as future, present as present: each state is not only expressed as a consequence, but is also represented. (Infiniti possunt gradus esse inter animas (ca. 1686); Leibniz 1923– VI, 4, 1524–1525.)

The idea that the soul represents bodily states, thus, leads to the thesis that the soul represents aspects of the external world – namely, those that are represented by bodily states. This is how Leibniz, long before formulating the theory of simple substances, came to the view that the human soul represents the universe from the perspective of the organic body that it animates.

III. INTUITION AND LEIBNIZ'S ANALYSIS OF THE PHYSICAL WORLD

Evidently, the intuitions about the structure of mental activities that Leibniz considers do not suffice to argue for the much stronger claims of the theory of simple substances – the claim that a simple substance possesses absolute spontaneity in the sense that it actively produces *all* of its states, the claim that the present state of a simple substance represents *all* of its past and future states, as well as *all* of the past, present and future states of all other simples substances,

and that material objects are nothing but appearances of collections of such simple substances. Even if these considerations provide a conceptual framework that is needed to formulate the theory of simple substances, much further argument is needed. Arguably, it is Leibniz's analysis of everyday concepts concerning material objects that led him to the insight that these concepts have to undergo profound revision. Here, I will focus on two strands of thought, the first starting from the analysis of extension and resistance, the second starting from the analysis of force.

As to the former line of argument, the early Leibniz offers an analysis of the distinction between body and space that is grounded in our immediately accessible thought about these:

> What men call a *body* must be investigated carefully, for a clear and distinct idea of this gives us access to demonstrations. First of all, men agree that only what is thought of as extended can be called a body […] Men call *space* something which they think is extended but nothing else, unless it be immutable […] However, *space and body* are distinct. For we perceive that we think of space as the same when bodies change, and what we perceive ourselves to be thinking or not thinking we perceive truly. The perception of thought is immediate to the thought itself in the same subject, and so there is no cause of error. Therefore, it is true that we think of space remaining the same when bodies change and that we can think of space without a body which is in it. Now two things are diverse if one can be thought of without the other. Therefore, space and body are diverse. (Specimen demonstrationum de natura rerum corprearum ex phaenomenis. second half of 1671?; Leibniz 1923– VI *2*, 304–305; Leibniz 1969. 143.)

As Leibniz explains, this argument "rests on these two propositions: [1] whatever is perceived clearly and distinctly is possible, and [2] whatever is immediately sensed is true, or whatever the mind perceives within itself, it perceives truly." (Specimen demonstrationum; Leibniz 1923– VI, *2*, 306, Leibniz 1969. 144.) The first premise guarantees that, if the concepts that we experience to have are clear and distinct, then "it is possible for space to remain the same when a body changes" (Specimen demonstrationum; Leibniz 1923– VI, *2*, 306, Leibniz 1969. 144). The second premise guarantees that if we perceive that we can think one concept without thinking the other concept, then we have a veridical experience concerning the concepts that we have.

Discussing the criteria by which we distinguish between bodies and non-bodies, Leibniz maintains that these criteria are mass or *antitypia* – the observable tendency of material objects to resist other material objects – together with extension. Again, he takes this to be the implication of commonly shared views:

> Everyone calls body what possesses some sensible quality; yet, most of the sensible qualities can be subtracted from a body, while it still remains a body. For even if a

> body lacks all color, smell and taste, it is still called a body. Everyone concedes that, for instance, air is a body, even if it is perspicuous and often lacks color, smell and taste; likewise, air is a body, even when it lacks sound. Hence, visible, audible, tactile and olfactory qualities are rejected as being in the least constitutive of the nature of body […] [F]irst qualities – heat, humidity, dryness and coldness – can each be absent […] The other sensible qualities – for instance, smoothness, lightness, tenacity, etc. – are even commonly recognized not to be constitutive of the nature of a body, because they […] arise from other qualities that rather are constitutive […] It remains to indicate a sensible quality that can be attributed to all bodies and only to bodies […]. And this is hardness or *antitypia* together with extension. For whatever humans just sense to be extended or what they just see […], they do not immediately call a body, for they think that sometimes it is a mere image and *phantasma*. But what they not only see but touch, that is, in what they find *antitypia*, this is what they call body, while what lacks *antitypia*, they deny that it is a body. In two things both experts and laymen locate the nature of body, in extension and *antitypia* taken together. (*Marii Nizolii de veris principiis et vera ratione philosophandi libri IV*. 1670; Leibniz 1923– VI, 2, 442–43.)

According to this line of reasoning, essential properties of bodies are only those properties that are always found in bodies. But if we go through the vast majority of the sensible qualities of bodies, it becomes evident that most of them are absent in some bodies and that most of them involve an effect that the qualities of bodies have on sensory organs. This is why we are left with extension together with the property of resistance to touch.

Evidently, claiming that we have immediate insight into clear and distinct concepts raises exactly the question that Della Rocca has asked: How can we be sure that such insight is not restricted to facts about our psychology? Leibniz soon came to the view that the concepts of extension and *antitypia* cannot be sufficient to understand the natural world. Rather, he held that there must be immaterial beings inherent in material objects as well – not only souls inherent in human bodies but immaterial substances in material objects everywhere in nature. Still, his commitment to immaterial beings in nature is motivated by theoretical troubles that arose from the insight that extension and *antitypia* are purely passive qualities.

In a text written around 1680, Leibniz argues that because self-consciousness is part of all normal processes of thinking and perceiving, and as an activity directed toward itself has an active character, the normal processes of thinking and perceiving themselves have an active character that cannot be explained by the passive features of size, figure, and motion (Ars Lulliana Ivonis; Leibniz 1923– VI, 4, 1092–1093). He also contrasts the active character of self-consciousness with the passivity of matter in a fragment written between 1683 and 1686: "Self-consciousness: an object that can act upon itself seems essentially different from one that cannot. […] [F]rom the concept of extension the property of

acting upon itself cannot be derived." (Reflexio; Leibniz 1923– VI, 4, 1471.) In other words, the concept of matter characterized solely by passive features, as given by our intuitions about material objects, cannot explain the active features of the soul, as given by our intuitions about the mind. Likewise, the unity characteristic of thought cannot be explained by the qualities of matter since "*an extended thing* [*extensum*] is a continuum whose parts coexist […]" (Enumeratio terminorum simpliciorum. summer 1680–winter 1684/85?; Leibniz 1923– VI, 4, 391.) As Leibniz explains: "*A continuum* is a whole whose parts can be assumed indefinitely and *have a position* with respect to each other. In this it differs from a unity as well as from an intensive whole, such as potency and heat." (Enumeratio terminorum simpliciorum; Leibniz 1923– VI, 4, 390.) Due to the difference in their position, the parts of a material object can be understood independently of one another and do not depend for their existence on other parts. In other words, due to their extension, material objects do not possess unity. Leibniz contrasts material aggregates that lack a principle of unity with the experience of perceiving and willing that spells out a sense in which human beings possess unity (Notationes Generales. ca. 1683–85; Leibniz 1923– VI, 4, 555–556). According to this line of thought, the self-directed activity and the unity characteristic of the mind, contrasted with the passive essential qualities of bodies, show why the mind cannot be a material entity; hence, human beings have to be understood as composite substances constituted by mind and body.

A theory of composite substances may go beyond widely shared everyday beliefs concerning human nature; but the step that overturns everyday beliefs about the nature of inanimate material objects is the step that leads Leibniz to the view that all material objects that have mind-independent reality must have an analogous structure. Already in texts from the early 1680s Leibniz is formulating the fundamental alternative between two mutually incompatible theoretical options – the alternative between the assumption of the existence of the material world and an extreme phenomenalism, according to which material objects are nothing else than mental images of the imagination (Leibniz 1923– VI, 4, 307. ca. 1681–86. For a detailed study of this alternative, see Robinet 1986). He is clear that there is no possibility of refuting extreme phenomenalism: "it is utterly impossible to give us certainty about the existence of bodies, or ever to prove by philosophical arguments whether bodies are appearances or substances […] In no way can it be proved by natural reason whether there are divisible or corporeal substances." (Distinctio mentis et corporis. ca. 1677–78; Leibniz 1923– VI, 4, 1368–1369.) Leibniz's argument for the existence of immaterial substances everywhere in nature therefore is conditional: "I want to show that all bodies in which there is no soul or substantial form are mere appearances, similar to dreams […]" (Notationes generales [ca. 1683–86]; Leibniz 1923– VI, 4, 555). According to this line of reasoning, *if* we assume that material objects are real, then they have to be individuated by immaterial substances. This shows

that the intermediate step about the existence of composite substances is a necessary condition for the justification of the existence of simple substances. In fact, Leibniz regards the assumption of the reality of matter as equivalent to the assumption that there are composite substances:

> Out of several parts no being that is truly one is composed, and every substance is indivisible, and what has parts is not a being but only a phenomenon. Therefore, the ancient philosophers rightly attributed to those things, about which they said that they constitute an *unum per se*, substantial forms, such as minds, souls or first entelechies, and denied that matter is by itself one being. (Definitiones notionum metaphysicarum atque logicarum; Leibniz 1923– VI, 4, 627–628.)

In the *Discours de Métaphysique*, Leibniz takes up the argument that properties that have something in them that relates to the perceptions of a cognizing subject, such as size, shape, motion, or the sensually perceptible properties such as color or heat, cannot alone constitute a substance (*Discours de métaphysique*, § 12; Leibniz 1923– VI, 4, 1545). Leibniz argues that, taken by themselves, material objects are mere aggregates of parts that can be combined in any way to form composites: The individuation of aggregates depends on perception or understanding in such a way that aggregates possess unity only in the mind. (Leibniz to Arnauld, 30. April 1687; Leibniz 1875–1890. II, 97; Leibniz to de Volder, 20. June 1703; Leibniz 1875–1890. II, 250; *Nouveaux essais*, II 24 §1; Leibniz 1923– VI, 6, 226; Entretien de Philarete et d'Ariste; Leibniz 1875–1890.VI, 586.) Leibniz draws the conclusion that if there were no other principle of identity in the body – namely, a soul or an immaterial substantial form – bodies would have no identity lasting beyond the moment. (*Discours de métaphysique*, § 12; Leibniz 1923– VI, 4, 1545.) And this amounts to a significant revision of our everyday world view: If the material world is real at all, then there have to be composite substances constituted by matter and an immaterial principle of individuation.

The line of argument that leads Leibniz from the concept of force to the existence of immaterial substances everywhere in nature has a closely analogous structure. The properties that our common notions ascribe to matter are not only insufficient to explain the active properties of mind, they are also insufficient to explain the active properties of matter. This holds especially for the concept of *vis viva* that Leibniz had developed in *De corporum concursu* (1678). (For detailed analysis, see Fichant 1993.) Leibniz starts from the principle that forces are measured according to the effects they produce (Leibniz 1994. 71; Conspectus libelli elementorum Physicae; Leibniz 1923– VI, 4, 1988). This implies that the concept of force is not only a mathematical quantity, but that forces are at the same time understood as causes of certain effects. This leads Leibniz to the thesis that through the concept of force a *virtus agendi* is attributed to matter: "It follows that bodies are usually moved by themselves after they have once received an impulse

[…]" (Leibniz 1994. 134). One year after he had developed this argument, Leibniz claims to have proven the existence of substantial forms (Leibniz to Duke Johann-Friedrich of Brunswick-Lüneburg. 1679; A I, 2, 225). In a fragment from the time around 1679 Leibniz explicitly establishes a connection between his conception of matter, which had changed due to the concept of force, and the assumption of the existence of substantial forms: "Things occur in the body that cannot be explained by the necessities of matter; these include the laws of motion, which depend on the metaphysical principle of equality of cause and effect. One must therefore write about the soul and show that all things are animate." (Conspectus libelli elementorum Physicae. ca. 1679–80; Leibniz 1923– VI, 4, 1988.) Assuming that matter has only passive features, the active features of natural phenomena cannot be explained by the nature of matter. Therefore, the explanation of the active features of natural phenomena presupposes the existence of immaterial substances whose activities underlie the active features of the material world. The metaphysical implications of the concept of *vis viva* become particularly clear in the explanations of *Brevis Demonstratio* (1686), in which Leibniz had publicly advocated his new concept of force for the first time:

> I would like to add a remark of importance for metaphysics. I have shown that force is not measured by the product of velocity and mass, but by the future effect. Nevertheless, it seems that force or potency is something real from the present, and the future effect is not. From this it follows that one must recognize in bodies something different from mass and velocity, unless one wanted to deny bodies any active power. (Leibniz to Bayle. 1687; Leibniz 1875–1890. III, 48.)

Since physical forces are something changeable, Leibniz argues, they must have come into being through modification of something constant (Leibniz 1875–1890. IV, 397). However, they cannot be modifications of extended mass, because the latter possesses only passive characteristics (Leibniz to Sophie Charlotte. 1702; Leibniz 1875–1890. VI, 506). Active properties cannot be modifications of something purely passive, because modifications entail a limitation rather than an extension (Leibniz to Johann Bernouilli. 1698; Leibniz 1849–1863. III, 552). Forces must therefore be considered as modifications of something immaterial and active, and since forces are everywhere in nature, such immaterial and active beings must be everywhere, as well. (Leibniz 1875–1890. IV, 397; *Système nouveau*, first draft; Leibniz 1875–1890. IV, 472; Leibniz to Sophie Charlotte [1702]; Leibniz 1875–1890. VI, 506; *De ipsa natura*; Leibniz 1875–1890. IV, 511; Leibniz 1875–1890. VII, 330.)

Similar to the consideration that material objects with purely passive qualities do not have a principle of individuation in them, the consideration that the physical forces observable in material objects cannot be explained by passive qualities leads to a theory of composite substances. The theory of composite

substances is only one argumentative step away from the theory of simple substances. This is so because both the argument from the conditions of individuation and the argument from the conditions of physical forces can be applied to any part of the material constituent of a composite substance. The concept of extension implies that, due to the divisibility of extension, these parts can be considered independently from other parts. If so, the questions of the origin of individuation and the origin of physical forces can be asked with respect to each of these parts. And each of these parts can be regarded to be real unities and to be bearers of forces of their own only if they are conjoined with yet another immaterial substance. (Remarques sur les objections de M. Foucher. 1686; Leibniz 1875–1890. IV, 492; Addition à l'explication du système nouveau. 1695; Leibniz 1875–1890. IV, 572.) And so on, *ad infinitum*. This is the core of Leibniz's conception of an infinity of composite substances contained in the bodily constituent of each composite substance (for detailed analysis, see Nachtomy 2007, chapter 9). This is how the arguments from the concept of force and the passivity of matter to the existence of immaterial substances lead to the conclusion that active and immaterial substances occur everywhere in nature.

And this is the central hypothesis of the theory of simple substances. These immaterial substances are not souls (because nothing speaks in favor of ascribing sensation, consciousness and reflection to them; for detailed analysis, see Blank 2000); but their structure is analogous to minds in the sense that they, too, instantiate identity, unity, activity, and representation. Indeed, Leibniz analyses primitive active powers that underlie physical forces as the tendency of immaterial substances to increase in the clarity and distinctness of their perceptions (and analogously, primitive passive powers that explain the passive properties of material objects as the tendency of immaterial substances to decrease clarity and distinctness of their perceptions; for detailed analysis, see Blank 2003, section 3). Spelling out the details of his view concerning the relation between primary and secondary forces, of course, is a fiendishly difficult task. What matters for the present purposes is that with these interpretive questions we are already deep into his metaphysics of simple substances that replaces our everyday worldview. And this means that a short chain of argumentative steps leads Leibniz from analyzing some everyday intuitions concerning the essential properties of matter to an entirely innovative account of the fundamental structure of reality.

IV. RECONSIDERING THE QUESTION OF THE "TAMING OF PHILOSOPHY"

The interpretation of Leibniz's metaphysics that I have outlined is reconstructive in two senses: (1) It integrates arguments that the historical Leibniz actually formulated into a large-scale argumentative structure that is not found in any of his writings; (2) it uses argumentative similarities between early and

later writings to make the idea plausible that the arguments found in the later writings work independently of their immediate context – the theory of simple substances. This reconstructive approach is meant to show that the analysis of everyday conceptions of mind and body is relevant for the argumentative foundations of Leibniz's later metaphysics *because* it is relevant for the argumentative foundations of his early metaphysics. But even if the starting points of Leibniz's argumentative strategy remain constant, the conclusions that he draws from them change significantly. In this sense, at the end of a long chain of reasoning that starts with the analysis of everyday intuitions concerning the structure of mental activities and the essential qualities of bodies, there emerge metaphysical views that are as untamed as one can hope for. Some of the intuitions from which Leibniz started – those that concern the nature of bodies – get thrown overboard, but the intuitions concerning the nature of the mind are still needed to formulate an alternative view of nature.

Leibniz's use of intuitions suggests illuminating answers to Della Rocca's concerns about the method of intuition. This is so because Leibniz's goal is not to preserve as many of our intuitions as possible and equally does not take all intuitions to be revisable in principle. In his view, some intuitions are non-revisable – which is why his description of the structure of thought remains fairly constant across his philosophical development. The non-revisable nature of intuitions about our minds derives from Leibniz's view that we know our thinking through an inner perception *(sentiment intérieur)*, through which our thinking becomes the object of experience (Leibniz to Arnauld, 9. October 1687; Leibniz 1923– II, 2, 252). From a simple perception *(simplex perceptio sive experientia)*, one judges that of which one is conscious in oneself: For example, that I think various things, that various appearances exist in the mind, that I have a certain sense perception, that I dream, or that I who dream exist (De modo distinguendi phaenomena realia ab imaginariis; Leibniz 1923– VI, 4, 1502). Inner perception is thus modeled along the lines of Cartesian intellectual perception – that is, according to one of the lines of understanding the nature of intuitions still influential today (*Nouveaux essais*, IV 7 §§ 2–4; Leibniz 1923– VI, 6, 408). Accordingly, Leibniz understands first experiences *(premieres experiences)* to be the first factual truths to which the "immediate apperception of our existence and our thoughts" leads (*Nouveaux essais*, IV 9 §§ 2–3; Leibniz 1923– VI, 6, 434). And it is the immediacy between this insight and its object that makes such experiences certain:

> There are only two kinds of propositions which are impossible to prove: the former are those whose opposite implies a contradiction […] The latter are those which consist in an inner experience which cannot be further corrected by circumstantial evidence or testimony, because it is immediately present to me and there is nothing between it and me, as these propositions are: I am, I perceive, I think, I want this or that. (*Conversation du Marquis de Pianese et du Pere Emery Eremite*; Leibniz 1923– VI, 4, 2261.)

Leibniz argues that *reflexion* or *sens interne* "is not limited to the activities of the mind alone, but penetrates to the mind itself" (Echantillon de Reflexions sur le II. livre; Leibniz 1923– VI, 6, 14). According to Leibniz the method of reflection cannot deceive, because consciousness, which accompanies inner activity, cannot deceive naturally. If these inner experiences were not certain, there would be, according to Leibniz, no truths of fact of which we could be certain (*Nouveaux essais*, II 27 § 13; Leibniz 1923– VI, 6, 238–239). The cognition of our inner states is immediate and requires no further proof: The activities of the mind are cognized from simple perceptions, and their cognition, unlike the cognition of empirical phenomena, requires no proof of their reality (De modo distinguendi phaenomena realia ab imaginariis; Leibniz 1923– VI, 4, 1502). A role in this is played by the view that although memory can always deceive over a certain temporal distance, the memory of what has immediately preceded does not deceive by natural means; and, as we have seen, Leibniz interprets consciousness as such an immediate memory of mental activities (*Nouveaux essais*, II 27 § 13; Leibniz 1923– VI, 6, 238–239). For this reason, he maintains that the knowledge of our own mind coincides with the knowledge of the nature of things (*Nouveaux essais*, I 1 § 21; Leibniz 1923 – VI, 6, 84). Leibniz says that we immediately become aware of substance and mind by becoming aware of ourselves (Remarques sur le Livre de l'origine du mal; Leibniz 1875–1890. VI, 403). Similarly, he says that the truths of metaphysics depend on the "consideration of the nature of our soul," which is a being and a substance possessing unity, identity, activity, passivity, and duration, activity, passivity, and duration (Leibniz to Burnett, 26. May 1706; Leibniz 1875–1890. III, 307). According to Leibniz, without the inner experience of ourselves, we would have no knowledge of the concept of substance (Leibniz 1948. 558). The same holds for other central metaphysical concepts:

> Extension is a state, thinking is an action […] Everything that thinks, thinks something. The simplest thing is that which thinks that it thinks itself […]. We perceive many things in our mind, such as thinking or perceiving, perceiving oneself, perceiving oneself to be the same, perceiving pleasure and pain […]. The idea of existence and of identity does not come from the body, nor does that of unity. (Leibniz 1923– VI, 3, 518, Leibniz 1992. 75–77.)

This offers an answer Della Rocca's charge that the method of intuition is invariably disconnected from insight into reality. Intuitions about our mental lives capture an aspect of reality – the basic properties of our mind. Thereby, we get insight into some basic metaphysical notions such as identity in the sense of a connectedness between the contents of our mental states at different times, activity in the sense of the ability of changing our own mental states voluntarily. Taken together, these intuitions provide Leibniz with a notion of substantiality. In this sense, intuitions are what guarantees the intelligibility of the concept of substance, and

it provides some examples of substances. Saying that minds are substances thus gives an insight into an aspect of reality – not the whole of it, but only once one has an intelligible concept of substance and some entities that plausibly fall under it does it make sense to ask whether there are further substances in the world.

In turn, this answers Della Rocca's concern that the method of intuition cannot guide us in deciding which intuitions should be given up in order to save other intuitions. In Leibniz's view, there is no question whether these concepts rather than the concepts grounded in inner experience should be thrown overboard – while inner experiences convey certainty, nothing corresponding could be said about our everyday concepts concerning the physical world. Rather, he assigns to intuitions about our mental lives a privileged status as insights that possess certainty and that are constitutive of the meaning of basic metaphysical concepts. By contrast, intuitions about material objects soon lead to explanatory gaps concerning individuation and force, which can be filled only by forming the hypothesis that material objects are mere appearances of underlying simple substances that share some structural features with minds.

This certainly is an instance of "untamed" philosophy. If so, then grounding philosophical concepts in inner experience may not be an obstacle to philosophical innovation but rather enables it. Leibniz's hypothesis that all material objects are appearances of collections of simple, immaterial substances could not be formed without having inner experience of our mental operations that allows us to form the basic concepts needed to formulate the theory of simple substances (such as identity, unity, activity and representation). In this sense, internal experience is the foundation of forming hypotheses about the physical world, even if the simple substances that underlie the well-founded phenomena of the physical world themselves cannot be the object of inner experience and do not share the powers of sensation and reflection. This answers Della Rocca's concerns about philosophical conservatism and adds to answering his concerns about engagement with reality. Assigning to intuitions a crucial function in the formation of metaphysical concepts is compatible with a non-conservative attitude toward thinking about extra-mental reality. Relying on intuitions concerning mental operations thus is not a veil that separates us from reality but rather the enabling condition for thinking about the structure of reality.

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