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De Summa Rerum: Metaphysical Fragments, 1675-1676

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1. A Philosophical Laboratory

De summa rerum (hereafter: DSR) is the title given by the editors of the *Akademieausgabe* to a rich, but perplexing set of metaphysical fragments written by Leibniz in the period from December 1675 to December 1676, dealing with fundamental topics of philosophy including the first principles of philosophy, the nature of mind and perception, the nature and existence of God, the derivation of particular things from God, and modal philosophy. The title is notoriously, and intentionally ambiguous, the Latin *de summa rerum* meaning both as “On the Highest of Things,” as “On All Things,” or “On the Universe” (Parkinson 1992: xiii-iv). They form a separate section in vol. A VI.iii, published in 1980. A number of the DSR papers had however already appeared, albeit with numerous editorial errors, in a volume entitled *Leibnitiana. Elementa philosophiae arcanae de summa rerum* [“Elements of the Secret philosophy on the Highest Thing/All Things”] published by Ivan Jagodinski in 1913. A few excerpts in English translation based on Jagodinski’s edition are included in Leroy E. Loemker’s *Philosophical Papers and Letters* (PPL 157-64). An English translation by G. H. R. Parkinson of the majority of the texts in DSR appeared in 1992. It should however be noted that Parkinson’s edition includes only 23 of the original 31 papers of the collection, but also adds two untitled texts on metaphysics from March and December 1676, which are clearly relevant, but for some reason included in another section of the Academy edition (A VI.iii.389-398/DSR 42-49 [partial ed.] and A VI.iii.399-400/DSR 114-15). Among the eight papers of the Academy edition that Parkinson does not include, several are translated in R. W. Arthur’s edition of Leibniz texts from 2001, *The Labyrinth of the Continuum*. Among those, we note in particular the *Pacidius philalethi*, a long dialogue on the foundations of physics written by Leibniz end October 1676 while waiting during a storm for passage over the channel from England to Holland (A VI.iii.528-571/LC 127-221). Arthur’s edition also includes translations of numerous philosophical fragments that are not formally included among the DSR fragments, but still contemporary with them, and essential for their understanding.¹

As should be evident already at this point, before beginning any assessment of DSR as a whole, it is important to realize, and constantly keep in mind, that it is an *artificial* whole, created by editors and not circumscribed as such by Leibniz himself. Moreover, the delimitation of the corpus is not as biographically, philologically or thematically justified as one might wish for. The period in question, from December 1675 to December 1676 spans over no evident biographical unit. It corresponds roughly to Leibniz’s last year in Paris and the DSR is habitually placed within this Parisian framework and in the intellectual context of the acquaintances Leibniz made there. However, Leibniz left Paris early October 1676 to take up a new position in Hanover. After a detour though London and the Netherlands, he arrived in Germany in mid-December 1676. A sizable number of the papers included in the DSR were written during this last period after leaving Paris, when he met and discussed with a long list of prominent English and Dutch intellectuals. We should also note that several texts that are not included, written both during and immediately before and after the period in question, are clearly relevant for understanding what is going on in the DSR. Some of those texts are published as part of the philosophical correspondence, including, for example, Leibniz’s first

¹ An Italian translation of all the original 31 fragments of the DSR, including an insightful commentary, can be found in Tommaso 2013.

exchanges with Simon Foucher and Nicolas Malebranche. Others are included in other sections of the philosophical writings from the period, such as *Sur les premières propositions et les premiers termes* [“On the first propositions and first terms”] from the first half of 1676, Leibniz’s comments on Descartes’ *Principles of Philosophy*, his notes from conversations with Tschirnhaus about Spinoza’s philosophy, or annotations on Spinoza’s so-called Letter on the Infinite and correspondence with Oldenburg. Yet other texts have been all-together relegated to other editorial series, such as the mathematical writings.

In short, the DSR papers are difficult to circumscribe and assess as a clear hermeneutic unit. These editorial issues are further complicated by the fact that Leibniz’s metaphysical reflections in the DSR fragments simply cannot be presented as a unified philosophical attempt, but must rather be considered as a kind of philosophical laboratory. Written at a time when Leibniz’s intellectual mindset had been both upset and profoundly stimulated by his encounter with the Parisian intellectual scene and his discovery of mathematics, the DSR reads like a set of philosophical test balloons flying in a great many directions: some texts point backwards to Leibniz’s pre-Parisian philosophy, to the kind of work we encounter in the 1668-69 correspondence with Thomasiaus, the 1671 letter to Arnauld, or the 1671 *Hypothesis physica nova* [“New Hypothesis of Physics”] other papers contain doctrinal elements that we will encounter in different garb in the mature metaphysics; yet others are part of systemic drafts that will never get beyond the embryonic stage before being abandoned again, including atomist, Cartesian, occasionalist, even Averroist and Spinozist elements.

Over the last thirty years of commentary, give and take a few papers focusing on entirely different issues², the debate has been dominated by the question of possible Spinozist influences despite the fact that the only time Leibniz explicitly mentions Spinoza in the DSR, it is to reject one of his views: “I do not accept the view of Spinoza, that the individual mind is extinguished with the body [...]” (A VI.iii.510/DSR 61). Commentators have thus been split between those who read the texts in a forward-looking fashion, mining them for “proto-monadological” elements to use an expression proposed by Stuart Brown (Parkinson 1986, 1992; Rescher 1978; Brown 1999) or as a natural stage on a continuous intellectual development toward the mature philosophy (e.g. Mercer 1999, 2001), and those who see some kind of Spinozist inspiration at work in the DSR (Kulstad 1994, 1999, 2002a, 2002b, 2005; Adams 1994; Wilson 1999; Pasini 2005; Blank 2009: 166-69; Tommaso 2013). If the debates regarding Leibniz’s possible “Spinozist” leanings in the DSR have been so heated, it is because the mature Leibniz is so decisively opposed to Spinozism. Affirming or denying a period with Spinozist tendencies has important consequences for how we understand Leibniz’s intellectual and philosophical evolution more broadly, as a continuous development from his earliest texts to the mature works, or as a complex genesis including discontinuities, dead ends, and a variety of directions, including, for a brief period, Spinozist inclinations. My own previous work on the topic falls squarely in the second category (Lærke 2008: 439-566; Lærke 2009a, 2009b, 2013).

The assumption that Spinozism plays a role in the DSR is biographically well justified: during the period that Leibniz wrote those papers, he was very close to an important member of the Spinozist circles, the young German nobleman Ehrenfried Walther von Tschirnhaus, whom Leibniz met in the autumn of 1675. They discussed Spinoza’s still unpublished philosophy intensively. Tschirnhaus had a manuscript copy of the *Ethics*, which he did not get permission from Spinoza to show Leibniz, but about which he nonetheless spoke a lot, according to Leibniz himself: “Mr Tschirnhaus has told me many things about Spinoza’s book in manuscript” (A VI.iii.384; I translate). Leibniz, directly or indirectly, almost certainly contributed to the last part of Tschirnhaus’ important correspondence with

² E.g. Dascal 1987 focuses on questions of philosophical language; Picon 2009 is concerned with Leibniz’s epistemology and philosophy of mind; Nachtomy 2016 studies the notion of impossibility in the DSR.

Spinoza. Leibniz also read important parts of Spinoza's correspondence in manuscript, including, around February 1676, the so-called Letter on the infinite (communicated by Hermann Schuller) and, in October 1676, the last three letters to Oldenburg (communicated by Oldenburg during Leibniz's visit to London). Moreover, several of the last papers of the DSR were written during Leibniz travels in Holland in November 1676, including a paper concerned with the demonstration of God's existence, written for Spinoza's perusal during Leibniz's personal visit around mid-November 1676.

The question of Spinozism must, I think, stand centrally in any comprehensive discussion of the DSR. It is however clear that the fragments also testify to a great many other concerns that should not be entirely eclipsed by the Spinozist conundrum. Hence, in the following, while much of the discussion will relate to the Spinozist question, directly or indirectly, I shall also point to a number of other debates that Leibniz was involved in at the time. I shall in particular stress how the papers bear witness to Leibniz's discussions with some of his more immediate interlocutors at the time, including figures such as Edme Mariotte, Simon Foucher, Nicolas Malebranche, and, in particular, Tschirnhaus. Moreover, rather than being on the look-out for premonitory signs of the later Leibniz, I prefer to stress the points where he, sometimes contrary to first appearances, defends views that are rather far removed from the mature philosophy. Readers of the DSR papers must, I think, take particular care not to approach them in an overly teleological fashion. Leibniz does admittedly make a number of statements that will appear familiar to readers of later texts, e.g. that "Descartes should have appealed to the harmony of the works of God, for the wisest being chooses the simplest means to achieve the greatest results" (A VI.iii.466/DSR 11-13); that "consistent sensations are the marks of existence" and "we call a 'body' whatever is perceived in a consistent way" (A VI.iii.474 and 511/DSR 25 and 63-65); or that "every mind is omniscient in a confused way" (A VI.iii.524/DSR 85). These various statements seem, respectively, to announce Leibniz's later theodicy, phenomenalism, and theory of minute perceptions. The very last paper of Parkinson's DSR edition, some notes on metaphysics written in December 1676, even contains what I believe is one of the first formulations—if not the first formulation—of the conception of a complete concept that famously governs Leibniz's understanding of individual substances in the 1686 *Discourse of Metaphysics*: "In my view a substance, or, a complete being, is that which by itself involves all things, or, for the perfect understanding of which the understanding of nothing else is required" (A VI.iii.400/DSR 115). Such statements can and should be seen as precursors of important mature theories, if precursors are indeed what one is looking for. When read in their immediate context, however, they frequently reveal to have unfamiliar meanings, as part of reflections that diverge considerably from the mature views. My principal aim in this paper has been to bring to light a certain number of those unfamiliar reflections, arguing that, together, they form the doctrinal elements of a rudimentary, but coherent systematic draft which is structurally comparable to at least some form of Spinozism.

2. First Principles

During the early months of 1676, Tschirnhaus and Leibniz accompanied each other to Claude Clerselier, translator of Descartes and executor of his intellectual estate, to peruse through the famous Frenchman's manuscripts (A VI.iii.386-87; see also A VI.iii.,213-17). The discussion they had about the Cartesian philosophy doubtless formed the immediate background for the following reflection on the first principles of philosophy, contained in the fragment *De veritatibus, de mente, de Deo, de universo* ["On Truths, the Mind, God, and the Universe"] of 15 April 1676:

In my view, the primary truths are those which cannot be proved, such as “I have such and such appearances”; also “A is A” and definitions. From the perception of appearances it follows both that I exist and that there is a cause of the various appearances, i.e., of the variety of perception, which is different from that whose form I perceive when I perceive thought. But I admit that the proposition “I think” must occur first in the order of philosophizing; that is, if the primary truths are arranged in order, it will be the first. For it is simpler to start from the one subject of a primary proposition of experience than from its various predicates. Descartes did not take his analysis to what is most profound, i.e., to primary forms; that, he did not start from God. (A.IV.iii.508/DSR 56-57)

Here, opposing Descartes who recognizes only one un-demonstrable principle, i.e. the *cogito*, Leibniz recognizes yet another three, one experiential, one logical, and one conventional: the multiplicity of our thoughts, the principle of identity, and nominal definitions. The one that should retain our interest is mostly the experiential one: our perception of appearances. On this, Leibniz also writes to Foucher in 1675 that “there are two general, absolute truths, that is to say, which speak of the actual existence of things; the one is that we think, the other is that there is a great variety in our thoughts” (A II.I.388). At first sight, these passages announce Leibniz’s later position on the Cartesian *cogito*, developed in texts like the 1692 *Animadversiones in partem generalem Principiorum Cartesianorum* [“Critical Comments on the General Part of the Principles of Descartes”] according to which Descartes was right about his first principle, but had neglected that there were others, so that, in fact, “the primary truths of fact can conveniently be reduced to these two: ‘I think’ and ‘Various things are thought by me’” (GP IV.357/PPL.385; cf. NE.II.ii.1; A VI.iv.124, and A VI.iv.1395). And yet, on closer inspection, when resituated in its immediate context, the passage also contains some rather disconcerting elements.

When writing this passage, apart from the discussion concerning Descartes, Leibniz also had in mind other debates in which he was involved in the mid-1670s. Regarding the first principles that are the principle of identity and definitions, they should be understood in the context of Leibniz’s discussions of Mariotte’s still unpublished manuscript of the *Essai de logique* [“Essay on Logic”] (published 1678), the first part of which he obtained a copy sometime in the spring of 1676.³ Another paper of uncertain date which is relevant for Leibniz’s thoughts on first principles at the time, but not included among the DSR fragments, is a brief paper also related to the reading of the *Essai* from spring or summer 1676, the *Sur les premières propositions et les premiers termes* already mentioned above (A VI.iii.435-36). Here, Leibniz rejects the idea that all first truths are absolutely indemonstrable, for only identical propositions are of this kind (A II.i.328 and 420). Moreover, he criticizes Mariotte for not stressing the importance of definitions sufficiently, for “the definition is the most powerful instrument of which man can make use in order to attain knowledge of essences and eternal truths” (A II.i.423; see also A VI.iii.331). And even though Leibniz agrees that “truths are eternal and definitions arbitrary,” and that definitions are therefore not principles of truth

³ The chronology of the texts suggests that, strictly speaking, some of Leibniz’s texts on Mariotte should be read in the light of *De veritatibus, de mente, de Deo, de universo*, rather than other way round. Mariotte communicated a draft of the first part of his *Essai de Logique* to Leibniz at an unknown date in spring 1676. Leibniz commented on the manuscript and responded first with a brief assessment (A VI.iii.327-31 and A II.i.419-21; watermarks place both texts between April and July). Leibniz later added a longer discussion in a letter dated July 1676 (A II.i.421-25). The last text post-dates *De veritatibus*. As for the date when Leibniz first read Mariotte’s text and wrote the remaining commentaries, the Academy editors propose a conjectural date around May-July 1676. If the remarks in *De veritatibus* on the principle of contradiction and definitions are directly related to Mariotte’s work, we must however assume that it was a little earlier, sometime during the first half of April 1676.

as such, this does not prevent definitions from being “principles of knowledge,” “principles for expressing truths” based on “names or characters.” Moreover, since “an equation in fact is nothing but a kind of definition,” definitions can form the basis of a kind of “universal algebra” (A II.i.423-24).

Leibniz’s criticism of Mariotte allows understanding why he lists definitions among the first truths in *De veritatibus, de mente, de Deo, de universo*. It testifies to his preoccupation with constructing a logical calculus and a universal characteristic after reading George Dalgarno’s *Ars signorum* [“The Art of Signs”] in 1673. He addresses the issue in various fragments from the period and in his correspondences with Jean Gallois and Henry Oldenburg (A VI.iii.102, 169-88, 412-34, 554-60; A II.i.354, 373-81, 393). But it also reflects his exchanges with Tschirnhaus who, as is clear from his later *Medicina mentis* [“The Medicine of the Mind”], also showed strong confidence in the cognitive value of definitions and in the explanatory powers of mathematics, including in physics. I shall return to this point in section 4 below.

The second discussion relevant for understanding *De veritatibus, de mente, de Deo, de universo*, mostly related to the question of appearances, is Leibniz’s exchanges with Simon Foucher, an academic sceptic and critic of Malebranche, with whom he had begun to exchange letters in 1675. In our passage, Leibniz explains that, when some perceptive variety is given in the mind, we can infer from this that something other than thought exists. Hence, from the fact that I *think*, I can infer that thought exists, but from the variety in my thinking, the fact that I have *diverse* thoughts, I can infer that something else than thought exists which will account for that variety. In this way, stressing the variety in our perceptions and thoughts as a primary truth allows countering a sceptical challenge.

But *why* does variety in thinking point to something other than thought itself? We can here turn to a 1675 letter to Foucher, according to which “from the great variety in our thoughts [...] it follows that there is something else that is, that is to say, something else than that which thinks, which is the cause of the variety in our appearances,” since “this variety of thoughts cannot stem from that which thinks since a single thing, alone, cannot be the cause of the changes that occur in it. For everything remains in the state in which it is if nothing changes it” (A II.i.388 and 390). The argument forms a striking contrast to Leibniz’s later views where the mind, as thinking or rather perceiving substances, *are* in fact the cause of their own varied perceptions. Indeed, it is this very same spontaneous and intrinsic perceptive activity that makes minds qualify as *substances*. Leibniz, however, hesitates identifying the nature of this “form other than thought.” May it be, as one would expect, the form of body, or extension? Leibniz pursues his reasoning in the letter to Foucher, noting that “we are moving at great speed toward grasping what we call matter and body,” but he recognizes that “from all this it does not follow, strictly speaking, that there is matter or bodies, but only that there is something that presents well-arranged appearances to us” (A II.i.390). In any case, minds do not themselves cause the variety in their perceptions and, consequently there is no spontaneity of the mind in the sense familiar to readers of the mature Leibniz. The same conclusion follows from *De reminiscencia et de reflexione mentis in se ipsum* [“On Reminiscence and on the Mind’s Self-Reflection”] of April 1676 according to which “God is the perfect mind, and that mind is the cause of its own perceptions, which is not the case with any other mind” (A VI.iii.516). If only God’s mind is the cause of its own perceptions, clearly individual minds like ours do not perceive spontaneously (see Lærke forthcoming A).

The third immediate discussion to which the *De veritatibus, de mente, de Deo, de universo* can be considered a contribution mostly relates to the latter part of the passage. It concerns a point that, for Leibniz, had to do with Spinoza’s philosophy as he knew about it from Tschirnhaus. Hence, while speaking of Spinoza, Tschirnhaus told Leibniz that if “the vulgar begin philosophy with created things, Descartes began with the mind, [Spinoza] begins

with God” (A VI.iii.384/LC 43). Regardless of whether this is an accurate account of Spinoza’s position, it resonates strongly with Leibniz’s assertion that Descartes “did not take his analysis to what is most profound, i.e., to primary forms; that, he did not start from God” (A.IV.iii.508/DSR 56-57). Indeed, Leibniz seems to align himself with Spinoza against Descartes. But what could it possibly mean to “start from God” or, what seems to amount to the same thing, from “primary forms”? In order to answer that question, we must turn to the metaphysical constructions Leibniz plays around with in the most central papers on the DSR, concentrated around April 1676.

3. Simple Forms and Explanatory Parallelism

The central papers include, along with *De veritatibus, de mente, de Deo, de universo* and *De reminiscientia et de reflexione mentis in se ipsum*, already discussed above, also *De formis et seu attributis Dei* [“On Forms, or, the Attributes of God”], *De origine rerum ex formis* [“On the Origin of Things from Forms”], *De formis simplicibus* [“On Simple Forms”], and *De plenitudine mundi* [“On the Plenitude of the World”]. All these texts were written in April 1676.

Among them, *De origine rerum ex formis* is doubtless the one that comes closest to a genuine systemic draft. In that text and in others immediately related to it, Leibniz lays out a metaphysical structure mainly based on the consideration of the features or properties of “simple forms” or “affirmative forms” (A VI.iii.519-20/DSR 79). He also calls them “attributes” (A VI.iii.514/DSR 69). He indicates multiple times that he counts “extension” and “thought” among them.⁴ As for “extension,” it corresponds, it seems, to the form whose existence we can infer from the variety in our perceptions. Leibniz thus at some point throws overboard the caution he expressed in the letter to Foucher the year before about formally identifying the form in question. Leibniz also speaks of extension in terms of “the immeasurable,” “the basis of space,” or “the expanded,” but these various notions all fundamentally designate the same thing, namely the immutable foundation of the existence of all bodies: “[T]here is something in space that remains throughout changes, and this is eternal; it is nothing other than the immeasurability of God, namely an attribute which is at the same time one, indivisible, and eternal” (A VI.iii.391/DSR 43). As for thought, according to the *De veritatibus, de mente, de Deo, de universo*, discussed in the previous section, it is the simple form we have access to through the fact that we think. Leibniz, however, refuses to attribute this thought primarily to the thinking “I”, but rather refers the simple form of thought to God, as a divine attribute: “God is the primary intelligence, in so far as he is omniscient, or, in so far as he contains the absolute affirmative form which is ascribed in a limited way to other things which are said to perceive something” (A VI.iii.520/DSR 79). Within this “primary intelligence,” various ideas are produced as “a differentia of thoughts” (A VI.iii.518/DSR 75). Leibniz also speaks of the simple form of thought in terms of an “active intellect”: “In sum, just as there is something divine in space, namely the immeasurability of God, so there is something divine in the mind, which Aristotle used to call the active intellect, and this is the same as the omniscience of God [...]” (A VI.iii.391/DSR 43; see also A VI.iii.520/DSR 79). Leibniz’s recourse to such conceptions of a universal mind are, of course, not far removed from Spinozism, but also harks back to Averroist conceptions which, as I argue in some detail elsewhere, Leibniz himself accepted as “received philosophy accessible to proof” in much earlier systemic drafts, most importantly in the 1668-1669 correspondence with his teacher

⁴ According to *De formis seu attributis Dei* [“On Forms, or, the Attributes of God”], “extension and thought are more special forms” (A VI.iii.513/DSR 69). In the *Quod ens perfectissimum sit possibile* [“That a Most Perfect Being is Possible”], written in November 1676, Leibniz explicitly mentions “thought and extension” (*cogitatio et extensio*) as examples of “affirmative attributes” (A VI.iii.573/DSR 93).

Christian Thomasius and in a fragment written in 1668 for his planned *Demonstrationes catholicae* ["Catholic Demonstrations"], the *De transsubstantiatione* ["On Transubstantiation"] (for the quoted passage, see A VI.i.501; see also Lærke: forthcoming B).

The understanding of thought and extension as simple forms or attributes prompts the question of how Leibniz believed those simple forms or attributes relate to each other. Let us consider a rudimentary table that can be found in the margins of *De origine rerum ex formis*:

Common terms: God. Form, absolute, affirmative, perfection. Change. Modification.
Belonging to thought: Mind. Primary intelligence. Soul. Universal Republic. Idea. Thought.
Belonging to extension: The extended. The immeasurable. Place. Universal space. Shape. Motion. (A VI.iii.521/DSR 81)

The elements in each category of the table do not quite line up, but the intent of symmetry is clear. First, thought and extension are absolute attributes or simple forms all pertaining to God, the "common term": "God is the subject of all simple forms—absolute, that is, affirmative. So there are in God already these two: that which is one in all forms, and essence, or, a collection of forms" (A VI.iii.519-20/DSR 79). Second, the fact that all forms belong to God allows to establish parallels between the properties or modifications belonging to each, such as mind, soul, idea and thought in the one, and place, space, shape and motion in the other. Hence, "just as space is to the immeasurable, so is the collection of all minds to the active intellect" (A VI.iii.520/DSR 79) and "our mind differs from God as absolute extension [...] differs from space, or place" (A VI.iii.519/DSR 77). Throughout the April 1676 papers, Leibniz repeatedly appeals to such analogies in order to explain the features of one attribute in terms of the other, mostly explaining thought in terms of structural analogies to extension: Sensations are modifications of the mind *in the same way* as figures are modifications of extension ; God is intelligence *in the same way* as He is absolute extension ; God is not a part of our mind *in the same way* as the *immensum* is not a part of an interval ; the idea of a thing is already in the primary intelligence *in the same way* as a figure is already inscribed in the *immensum* before it exists ; and there is no idea of the universe *in the same way* as it has no figure (see A VI.iii.518-21/DSR 75-81; see also A VI.iii.391-92 /DSR, 42-45). The basic metaphysical structure Leibniz develops here thus amounts to what one might best call "explanatory parallelism," where, as Leibniz puts it nicely himself, "one attribute serves wonderfully to explain another" (A VI.iii.391/DSR 42-43).

Leibniz does, however, worry about the possible consequences of such a conception for the immortality of the soul, since the parallelism could suggest that, when the body dies and dissolves in extension, the individual mind also dissolves into the universal mind or intellect—a heretical conception often ascribed to Averroists and to Spinoza, including by Leibniz, in the DSR as in later texts.⁵ Hence, Leibniz acknowledges that his theory "agrees with that of Aristotle, and with those who speak of a universal intellect. To me, on the other hand, it seems that no soul has ever begun, or can cease" (A VI.iii.512 /DSR 65). He stresses that he does "not accept the view of Spinoza, that the individual mind is extinguished with the body" (A VI.iii.510/DSR 61).⁶ This problem of the immortality of the soul cannot, I think, be entirely resolved within the framework of the philosophical draft tinted by both Averroism and Spinozism that Leibniz lays out in the DSR. It is indeed one of the principal problems that

⁵ For one among several later text that criticize both Averroism and Spinozism on this point, see the *Considérations sur la doctrine d'un esprit universel unique* ["Reflections on the Doctrine of Single Universal Spirit"] of 1702 (GP VI.529/PPL 554-55).

⁶ At the same time, however, Leibniz reads a treatise on the immortality of the soul by Nicolas Oregius, according to whom "for Aristotle, the active intellect is not God" (A VI.iii.5515-16/DSR 71).

will later lead him to abandon it and move in another, quite opposite direction. In the DSR, however, his strategy mostly consists in maintaining the basic metaphysical structure, while trying, in not always convincing ways, to modify it locally in order to mitigate the worry (see notably A VI.iii.521/DSR 81).

4. The Derivation of Things from Forms

It seems, then, that when Leibniz suggests in *De veritatibus, de mente, de Deo, de universo* that philosophy should “begin with the most profound, i.e. [...] from God,” he means that simple forms, understood as attributes or perfections of God, should form the most fundamental point of departure for deducing all particulars, or that things have their origin in forms, as the title of *De origine rerum ex formis* also strongly suggests. How that deduction or derivation of particular things from forms should be understood is probably the most persistent problem Leibniz struggled with in DSR. He came up with a whole series of possible solutions, some compatible, some not. Both Mark Kulstad and myself, building on Kulstad’s suggestions, have put some thought into untangling and comparing the different options (Kulstad 1999a: 69-86; Lærke 2008: 517-41). It is, however, a common feature of them all that particulars come about from relating simple forms to each other in more or less complex ways. Leibniz suggests for example that “the most perfect being arises out of the conjunction in the same subject of all possible absolute forms or perfections; but from the conjunction of simple possible forms there result modifications [...] as properties result from an essence” (A VI.iii.521/DSR 81). According to another, rather intricate, account “the essence of God consists in the fact that he is the subject of all compatible attributes [...] But when all other things are related to one attribute, there result modifications in that attribute; hence it comes about that the same essence of God is expressed in any genus of the world in its totality, and so God manifests himself in infinitely many ways” (A VI.iii.514/DSR 69-71). Leibniz repeatedly compares the relation between God and particular things to the relation between an essence and the properties following from it. He also likes to describe the derivation itself by means of a numerical analogy: “It seems to me that the origin of things from God is of the same kind as the origin of properties from an essence: just as $6 = 1 + 1 + 1 + 1 + 1 + 1$, therefore $6 = 3 + 3$, $= 3 \times 2$, $4 + 2$, etc.” (A VI.iii.518/DSR 77).

We need not get further into the rather complex (and sometimes confused) details of Leibniz’s suggestions. It is however clear that his discussions with Tschirnhaus about Spinoza’s metaphysics played a central role. In his letters to Spinoza from May-June 1676, Tschirnhaus asked repeatedly and insistently about the derivation *a priori* of particular things from the definition of extension alone. Spinoza, famously, only responded obliquely by explaining that such a deduction is impossible if one understands by “extension” what a Cartesian understands by it, namely inert mass, in itself without internal distinctions (Letters 81 and 83, in Spinoza 1985-2015: II.485 and 487). Here, however, we should mainly note the wording of Tschirnhaus’ enquiries, since there is good reason to think that Leibniz was involved, directly or indirectly, in their formulation. We should take particular note of what Tschirnhaus writes in Letter 82, from 23 June 1676:

Since you remind me of Descartes’ opinion—that he can’t deduce the variety of things from Extension except by supposing it was brought about by a motion initiated by God—I’d be glad if you would oblige me by indicating how, according to your meditations, the variety of things can be shown *a priori* from the concept of Extension [...]. For you have not shown how [the variety/existence] must necessarily follow *a priori* from God’s essence, something which Descartes believed surpassed man’s grasp [...] [T]he reasons why I would particularly desire an explanation are these: I have

always observed in Mathematics that from any thing you like, considered in itself, i.e. from the definition of each thing, we can deduce, anyhow, just one property, no more; if we want more properties, it's necessary for us to relate the thing defined to other things. Then, indeed, from the conjunction of the definitions of these things, new properties result. (Spinoza 1985-2015: II.485)

It is not difficult to recognize, in Leibniz's various attempts to explain the "origin of things from forms," or deriving the existence of particular things from the combination of attributes, the kind of derivation of properties from the conjunction of definitions that Tschirnhaus here suggests as the only possible way forward for Spinoza. As readers familiar with Spinoza's philosophy will notice, it is of course a deeply un-Spinozist solution to a Spinozist problem. For Spinoza, attributes are conceived in themselves and have nothing in common, and consequently their respective modes are never explicable, causally or conceptually, in terms of the modes of any other attribute (*Ethics*, II, prop. 5-6, in Spinoza 1985-2015: I.450). The idea of "conjoining" the definitions of the attributes in order to derive more properties is a Spinozist non-starter. It is, however, a point on which Tschirnhaus was susceptible to completely transform Spinoza's position. At some point, in a letter to Spinoza, Tschirnhaus even asked a question about inter-attribute causation which so evidently misconstrued the doctrine of the *Ethics* that it prompted a question from Spinoza whether Tschirnhaus' manuscript might not contain an error by the copyist!⁷ It is one of the places where it becomes clear that, if Leibniz played around with Spinozism in the DSR, it was with a particular transformation of Spinozism, in some respects quite far removed from the original letter of the doctrine, namely the philosophy of Spinoza *as presented to him by Tschirnhaus*.

5. Necessity and the Foundations of Physics

As we have seen, in his last letters to Spinoza from May-June 1676, Tschirnhaus asked Spinoza about the *a priori* derivation of particular things from the attribute of extension alone. We have already seen how Tschirnhaus' own suggestion to a possible solution to the problem—i.e. conjoining the definitions of attributes—resonates with the many passages in the DSR that are concerned with the derivation of things from simple forms. Tschirnhaus' enquiry about an *a priori* derivation does however betray yet another ambition which shall later stand centrally in his own project of a scientific epistemology—a project he had already begun working on when met Leibniz, but which only came to fruition a decade later with the publication of his *Medicina mentis* (published 1686, indicating 1687 on the cover; second revised edition 1695). This ambition was to conceive of a "true physics" exclusively based on real, genetic definitions, whose principles should be deduced entirely *a priori*, following the model of mathematics (see Tschirnhaus 1695: 67 and 280). Tschirnhaus' strong commitment to deductive *a priori* reasoning in physics reflects his confidence in the epistemic powers of mathematics. It grants experience (and experimentation) only an auxiliary role in confirming and corroborating conclusions previously deduced from first principles and definitions

⁷ In Letter 70, from 14 November 1675, Schuller relates a question from Tschirnhaus premised on the assumption that "in [*Ethics*, II, prop. 5] it is maintained that the Objects [*Ideata*] are the efficient cause of Ideas" (Spinoza 2015: 462). The assumption is very strange, since the proposition in question states the exact opposite: "The formal being of ideas admits God as a cause only insofar as he is considered as a thinking thing, and not insofar as he is explained by any other attribute" (Spinoza 1985-2015: I.450). Spinoza, surprised, responds to Schuller: "To confess the truth, I do not sufficiently follow the meaning of your letter in this matter, and I believe that there is a slip of the pen, due to haste, either in your letter or in his copy [of the *Ethics*]" (Letter 72, to Schuller, 18 November 1675, Spinoza 1985-2015: II.465). Tschirnhaus' manuscript copy has recently been discovered in the Vatican Library (Spinoza 2011). It contains no error at *Ethics*, II, prop. 5.

(Tschirnhaus 1695: 290). Most of these ambitions can be straightforwardly referred to a fundamental Cartesianism. At the same time, however, it is metaphysically correlated with a strong and rather un-Cartesian necessitarianism in his philosophy most potently expressed in a passage in the *Medicina mentis* according to which “there is no other difference between being and non being than between the possible and the impossible, or between what can and what cannot be conceived.”⁸ Indeed, in Tschirnhaus, the *a priori* deducibility of necessary natural laws is presented as predicated on this hardnosed identification of being and conceivability.

Now, as any reader of Leibniz’s mature texts will know, he will, later, disapprove of any such effort at conducting physics *a priori*, because the very idea conflicts with the most basic architectonic assumptions of his metaphysics. Indeed, the indemonstrability *a priori* of the laws of nature and the need to appeal to additional principles of divine wisdom and goodness in the demonstration of basic physical laws figures as “one of the most efficient and tangible proofs of the existence of God” (GP VI.603). Hence, the basic principle of equipollence (between the full cause and the entire effect) is not for the mature Leibniz a logically or geometrically demonstrable truth, but a truth nonetheless. And this very fact demonstrates, as he writes in the 1714 *Principles of Nature and Grace*, that

the supreme wisdom of God has first made him choose those laws of movement that best fit and agree with the abstract and metaphysical reasons [...].I have found that one must take recourse to *final causes*, and that these laws in no way depend on the principle of necessity, like the logical, arithmetical and geometrical truths, but on the principle of suitability, that is to say, the choice of wisdom. And this is one the most efficient and tangible proofs of the existence of God for those who can deepen such matters. (GP VI: 603; I translate)

In mid-1676, however, Leibniz nurtured ambitions strikingly similar to those of his friend Tschirnhaus. Sometime during the first half of 1676, he thus wrote two drafts for a dissertation on the philosophical uses of geometry which testify to Tschirnhaus’ influence (A VI.iii.437-54). One is even entitled *Geometriae utilitas medicina mentis* [“The Usefulness of Geometry for the Medicine of the Mind”], a text in which Leibniz suggests that the “secrets of nature” in principle can be “reduced to pure geometry” (A VI.iii.450-51). Leibniz also projected demonstrations—without however providing them—of how the most basic natural laws such as his new principle of equipollence of the full cause and the entire effect, were mathematically necessary and logically reducible to analytical relations, or identity relations (Leibniz in Hess 1678: 203; see also Garber 2006: 241-47; Lærke 2015: 123-30). For example, in May or June 1676, he wrote to Perrault that he “now thinks [he] can account in a satisfactory way for the laws of movement by means of entirely geometrical demonstrations, without making use of any supposition or principles of experience” and that “we are now in a position to aspire to a true physics, with no hypothesis” (AII.i.418). All this strongly suggests that, at that point, Leibniz was willing to consider the option that physics is geometrically rather than architectonically grounded and governed by mathematical and logical necessity, just like Tschirnhaus did in his conception of “true physics.”⁹

Leibniz gradually began to depart from those conceptions already in late 1676. This is most clear from the *Pacidius philalethi*, written in October 1676 (A VI.iii.528-571/LC 127-221). Here, Leibniz suggests a metaphysical framework for explaining movement and

⁸ Tschirnhaus 1695: II, 36-37.

⁹ Some might argue that Leibniz’s proto-theodicy, the 1672-73 *Confessio philosophi*, precludes the possibility of any necessitarian or Spinozist modal philosophy in the DSR. In Lærke 2007, I argue why this is not the case. For similar points, see Rateau 2014 and Boutros-Jacqueline 2017.

causation based on a notion of “trans-creation.” It basically amounts to a form of occasionalism. Leibniz explains as follows the transition between two different states of a same body:

What moves and transfers the body is not the body itself, but a superior cause which by acting does not change, which we call God. Whence it is clear that a body cannot even continue its motion of its own accord, but stands in continual need of the impulse of God, who, however, acts constantly and by certain laws in keeping with his supreme wisdom. (A VI.iii.567/LC 212-13)

Moreover, in a text written on 12 December 1676, one of the last of the DSR fragments, the *Catena mirabilium demonstrationum de summa rerum* [“A Chain of Wonderful Demonstrations about the Universe”], Leibniz clearly confirms the connection between the principle of equipollence and God’s continuous creation:

There is nothing without a cause, since there is nothing without the requisites for existing. *The entire effect is equipollent to the full cause*, since there must be some equality between cause and effect, passing from one to the other. But that consists in this equipollence, nor can another measure be found [...]. Since the cause is equipollent to the effect not in perfection but in expression, the order of creatures cannot have begun at some time, but there was always something besides God, or, God has always created something. ‘My father has never ceased his work’. (A VI.iii.584/ DSR 107-109; Leibniz’s emphasis)

According to the picture that emerges from the combined consideration of these two passages from late 1676, the coordination of cause and effect explaining the validity of a basic physical law like the principle of equipollence is God’s continued re-creation of the terms of the relation and their changing states. Their coordination rests constantly and immediately upon divine choice. As Leibniz writes a little later, in the *De corporum concursu* [“On the Shock of Bodies”] from January 1678:

The entire effect is equipollent to the full cause, or they have the same power [...]. [I]n metaphysical rigor, the preceding state of the world or some other machine is not the cause of the following [state], but God [is this cause], although the preceding state is a sure indication that the following will occur. (Leibniz 1994: 145-46)

Thus dissolving any necessary and logical connection between cause and effect and appealing to divine choice and continuous re-creation in order to re-connect them represents a powerful philosophical tool for countering Spinozist necessitarianism and the argument was doubtless partly devised for that very purpose. Hence, Daniel Garber has suggested, correctly I think, that Leibniz’s reading of Spinoza’s correspondence played an important role in providing a decisive motivation for Leibniz to finally distance himself from any modal philosophical ambitions with potential Spinozist implications (Garber 2006: 445-47). Hence, around October 1676, while visiting Henry Oldenburg, secretary of the Royal Society in London, Leibniz obtained copies of Spinoza’s last three letters to Oldenburg. He annotated them in detail (A VI.iii.364-71). These annotations reveal a Leibniz sometimes genuinely attempting to, but ultimately failing, at coming up with a morally and theologically acceptable interpretation of Spinoza’s necessitarianism. In the end, however, Leibniz realized the futility of the attempt: “If everything emanates from the divine nature with a kind of necessity and that all the possibles exist, it will be as easy to evil as to be good. Moral philosophy will

therefore be destroyed” (A VI.iii.365; I translate). Only days later, he wrote the *Pacidius philalethi*, demonstrating that the necessity of physical laws relies on divine wisdom.

6. Monism and the Ultimate Reason of Things

Much of the last thirty years of commentary on the DSR has turned on a single passage in a fragment entitled *Quod ens perfectissimum sit possibile* [“That a Most Perfect Being is Possible”], written around November 1676:

It can easily be demonstrated that all things are distinguished, not as substances (i.e. radically) but as modes. This can be demonstrated from the fact that, of those things which are radically different, one can be perfectly understood without another; that is, all the requisites of the one can be understood without the requisites of the other being understood. But in the case of things, this is not so; for since the ultimate reason of things is unique, and contains by itself the aggregate of all requisites of all things, it is evident that the requisites of all things are the same. So also is their essence, given that an essence is the aggregate of all primary requisites. Therefore the essence of all things is the same, and things differ only modally, just as a town seen from a high point differs from the town seen from a plain. If only those things are really different which can be separated, or, of which one can be perfectly understood without the other, it follows that nothing really differs from another, but that all things are one, just as Plato argues in the *Parmenides* (A VI.iii.573/DSR 92-95)

Does Leibniz in this passage endorse something like Spinozist monism? And, if he does, what does that endorsement amount to? When claiming that all things are nothing but modes of a unique substance, does he mean, like Spinoza, that all things are immanent in God? It is hard not to acknowledge at least some kind of Spinozist inspiration. Christia Mercer is, however, also right to note that it does not suffice to point to some passages that “smack of Spinozism” to declare Leibniz a Spinozist (Mercer 2001: 453-54). After all, Leibniz may not be committed to his own argument. Moreover, the dating of the piece is significant: the text, tentatively dated in November 1676, belongs among a series of drafts on the existence of God, one of which, entitled *Quod ens perfectissimum existit* [“That a Most Perfect Being Exists”], Leibniz specifically devised for Spinoza’s perusal during his visit in The Hague in mid-November 1676 (A VI.iii.578/DSR 101-103). Presumably, the whole series must be understood in that setting. This has consequences for the relations that the text entertains with the rest of the DSR, and in particular with the central papers from spring 1676. The immediate context of the specific passage is Leibniz’s direct exchanges with Spinoza rather than his exchanges with Tschirnhaus and the kind of Spinozism he heard about from Spinoza’s friend in Paris. The problem is, of course, that we know precious little about what Leibniz and Spinoza spoke about. The status of this text must, then, to some extent, remain a mystery.

Yet the passage resonates strongly with other, earlier texts of the DSR, and can be seen as compatible with, and complementing, the systemic drafts one finds in the central batch of papers from April 1676, which all point to Spinozist substance monism as an important inspiration. Compare, for example, Leibniz’s account of how the distinctions between modes come about—like a “town seen from a high point differs from the town seen from a plain”—with the account of how particular things derive from simple forms in the *De formis simplicibus*: “Simple forms are infinitely many. But the modifications which result from the all, related to individual forms, constitute the variety in them [...] There is the same variety in any kind of the world, and this is nothing other than the same essence related in various ways, as if you were to look at the same town from various places [...]” (A

VI.iii.523). Moreover, in *De origine rerum ex formis*, Leibniz claims that: “It seems to me that the origin of things from God is of the same kind as the origin of the properties from an essence” (A VI.iii.518/DSR 77). This reflects a position that Leibniz explicitly assimilates to Parmenides and Spinoza in his October 1676 annotations on the Oldenburg letters: “Parmenides and Melissus, to whom Plato and Aristotle refer, have maintained something not so different. I recall having once abridged Plato’s *Parmenides* in the form of demonstration [...]. It can certainly be said that all is one and that everything is in God; in the same way as the effect is contained in its full cause, and that the property of some subject is [contained] in the essence of this very same subject” (A VI.iii.370; I translate). Finally, the doctrine of Parmenides is also the one that Leibniz, in the “all-things-are-one”-passage, explicitly associates with the view that all things are one, and distinguished not as substances but as modes.¹⁰ In all these texts, when considered in conjunction, Spinozist monism never feels far off.

If indeed Leibniz seriously considered the option of some kind of Spinozist monism throughout most of 1676, he did not, however, do so for very long. In December 1676, once again reflecting on the sufficient reason of existence, Leibniz began to see how the consideration of the requisites of existence need not commit him to any Spinozist conclusion, making all things modes of God:

A requisite is that without which a thing cannot exist. The aggregate of all requisites is the full cause of the thing. There is nothing without a reason; for there is nothing without an aggregate of all requisites. The reason for existence is not in bodies, as can easily be demonstrated [...]. The aggregate of all the requisites of any given body is outside bodies. The aggregate of all the requisites of one body, and the aggregate of all the requisites of another, is in one and the same being. That one being, whatever it is, is the ultimate reason of things. (A VI.iii.587/DSR 113)

The key assertion here is that “the aggregate of all the requisites of any given body is *outside* bodies.” Hence, at least when it comes to corporeal things, bodies, it is *not* the case that they are *in* God, or *properties of* God, or mere *modes* of the “one being” that “is the ultimate reason of things.” Without necessarily implying a rejection of the Spinoza’s position (Lærke 2011: 64-65), this passage nonetheless does suggest a way to escape the monist consequences of the argument regarding the requisites of existence outlined in *Quod ens perfectissimum sit possibile*. Indeed, to conclude with a forward-looking statement of the kind I have largely tried to avoid in this paper, the argument in the December 1676 text is, *mutatis mutandis*, not unlike the staunchly non-Spinozist position that Leibniz, much later, adopts in his *De origine rerum radicali* [“On the Radical Origination of Things”] of 1697:

Besides the world or aggregate of finite things, there is a certain One which is dominant, not only as the soul is dominant in me or rather, as the Ego itself is dominant in my body, but also by a much higher reason. For the dominant One of the universe not only rules the world but fabricates or makes it; it is superior to the world and, so to speak, extramundane, and hence is the ultimate reason for things. For a

¹⁰ Another important context for Leibniz’s reasoning here is the correspondence with Malebranche in 1676, where they discuss the conditions under which things can be considered really distinct and separable. Here, Leibniz *objects* to the claim that “if two things are really distinct all the requisites of the one can always be understood without understanding all the requisites of the other” (A II.i.401). I have elsewhere shown in detail why this statement, when replaced in the context of the entire exchange, does not necessarily jeopardize Leibniz’s commitment to the position laid out in the “all-things-are-one”-passage. See Lærke 2009a.

sufficient reason for existence cannot be found merely in anyone individual thing or even in the whole aggregate and series of things. (GP VII.302 /PPL 487)

7. Conclusion: The Hanoverian Aftermath

Many of the metaphysical attempts of the DSR did not have much of a future. As Leibniz wrote in a text from late spring 1676 about the work he had accomplished in Paris: “Many things have been outlined and begun, but carried through and brought to completion, almost nothing.”¹¹ If any Spinozist temptations still lingered, they were definitively eradicated by the careful reading of Spinoza’s *Opera posthuma* he undertook in 1678 (A VI.iv.1764-76/PPL 196-205; Lærke 2008: 557-847; Lærke 2017). Moreover, during the late 1670s, after his arrival in Hanover, Leibniz advanced his own projects at a frenetic pace: In the *De corporum concursu* of January 1678, he took great leaps forward in his thinking about the foundations of physics (Leibniz 1994); he reactivated the project of *Demonstrationes catholicae* (A II.i.751); he multiplied the attempts in logical calculus, culminating with the set of logical papers from around April 1679 where he first formulated the principle *inesse* (A VI.iv.181-236, see e.g. 227). And before the end of 1679, he arrived at his so-called “rehabilitation of substantial forms” (A II.i.754, 775; Fichant 1998). Come 1680, little of the metaphysical framework that can be gleaned from the DSR still held validity: New fundamental discoveries had been made; basic assumptions had changed; philosophical ambitions had taken a more unified form, guiding Leibniz in a straighter line toward his first comprehensive formulation of the so-called “mature” philosophy in the 1686 *Discourse of metaphysics*.

The reflections in the DSR are not, however, to be discarded as mere philosophical debris. They are extremely important for any adequate understanding of Leibniz’s intellectual development. They moved his project ahead in important ways by helping him spell out the unfortunate metaphysical consequences of certain presuppositions he had otherwise adopted (such as the project of an *a priori* physics, with its unintended necessitation consequences) or by highlighting unacceptable features of basic metaphysical constructions he was considering (such as explanatory parallelism; including the trouble it creates for conceiving of the immortality of the soul). In these respects, the metaphysical reflections in the DSR papers advanced Leibniz in his thinking in a way that was more negative than positive, by indicating the roads *not* to take, by way of undesirable consequences. More importantly, however, to the extent that they can be read systematically, the DSR fragments carry a philosophical and systematic weight of their own. To my mind, bringing to light any such internal systematic framework in the DSR, however fragile and rudimentary it may be, can only be done if we do away with the teleological assumption that we are somehow dealing with proto-monadological texts and accept the fact that Spinozism, in one form or another, played a central role. And when read in that fashion, especially given Leibniz’s later staunch anti-Spinozism, the DSR points to important discontinuities in the philosophical evolution of a philosopher whom commentators otherwise routinely—but mistakenly, I believe—characterize as extraordinarily continuous. In reality, Leibniz’s basic metaphysical assumptions and systematic groundwork underwent important transformations, especially throughout the 1670s. Finally, on a more general note, when read in the context of Leibniz’s interlocutors and immediate philosophical preoccupations during his final year in Paris and travels to London and Holland on his way to Hanover, the DSR fragments provide a fascinating window into the scientific culture prevalent in Paris in the 1670s and into the tight networks connecting intellectuals between Germany, France, England and Holland.

¹¹ Text dated 10 May 1676, cit. in Guhrauer 1842: I.145: “Angelegt und angefangen ist vieles worden, ausgeführt aber und zur Vollkommenheit gebracht, freilich nichts.”

Bibliography

- Adams, R. M. (1994), *Leibniz: Determinist, Idealist, Theist* (New Haven: Yale University Press).
- Blank, A. (2009), "The Analysis of Reflection and Leibniz's Early Response to Spinoza," in M. Kulstad, M. Lærke, and D. Snyder (2009) *The Philosophy of the Young Leibniz*, *Studia Leibnitiana Sonderheft* 35 (Stuttgart: Franz Steiner Verlag), 209-30.
- Brown, S. (1999), "The Proto-Monadology of the *De Summa Rerum*," in S. Brown (ed.), *The Young Leibniz and his Philosophy (1646-76)* (Dordrecht: Kluwer), 263-88.
- Boutros-Jacqueline, M. (2017), "Nécessitarisme leibnizien et volonté divine à l'époque du *De Summa Rerum*: un choix du meilleur sans alternatives ?," in *Dialogue: Canadian Philosophical Review* 56: 267-89.
- Dascal, M. (1987), "Signs and Thought in Leibniz's Paris Notes," in M. Dascal, *Leibniz. Language, Signs and Thought* (Amsterdam: John Benjamins Publishing Company), 47-59.
- Fichant, M. (1998), "Mécanisme et métaphysique: le rétablissement des formes substantielles," in M. Fichant, *Science et métaphysique dans Descartes et Leibniz* (Paris: Presses universitaires de France), 163-204.
- Garber, D. (2006), "Uniting Mechanism and Piety," in H. Breger et al. (ed.), *Einheit in der Vielheit. VIII. Internationaler Leibniz- Kongress* (Hanover: Gottfried-Wilhelm-Leibniz-Gesellschaft), 440-47.
- Guhrauer, G. E. (1842) *Gottfried Wilhelm Freiherr von Leibniz. Eine Biographie*, 2 vols. (Breslau: Ferdinand Hirt).
- Hess, H.-J. (1978), "Die unveröffentlichten naturwissenschaftlichen und technischen Arbeiten von G. W. Leibniz aus der Zeit seines Parisaufenthaltes. Eine Kurzcharakteristik," in A. Heinekamp (ed.), *Leibniz à Paris 1672-76. Symposion de la G. W. Leibniz Gesellschaft*, 2 vols., *Studia Leibnitiana Supplementa* 17-18 (Stuttgart: Franz Steiner Verlag), vol. I, 183-217.
- Kulstad, M. (1994), "Did Leibniz Incline towards Monistic Pantheism in 1676?," in *VI. Internationaler Leibniz-Kongress. Leibniz und Europa* (Hanover: Gottfried-Wilhelm-Leibniz-Gesellschaft), 424-28.
- Kulstad, M. (1999) "Leibniz's *De Summa Rerum*. The Origin of the Variety of Things, in Connection with the Spinoza-Tschirnhaus Correspondence," in F. Nef. et D. Berlioz (eds.), *L'Actualité de Leibniz: les deux labyrinthes*, *Studia Leibnitiana Supplementa* 34 (Stuttgart: Franz Steiner Verlag), 69-86.
- Kulstad, M. (2002a), "Leibniz, Spinoza and Tschirnhaus: *Metaphysics à Trois*, 1675-76," in O. Koistinen et J. Biro (eds.), *Spinoza. Metaphysical Themes* (New York: Oxford University Press), 221-40.
- Kulstad, M. (2002b), "Exploring the Middle Ground: Was Leibniz's Conception of God ever Spinozistic?" in *American Catholic Philosophical Quarterly* 76: 671-90.
- Kulstad M. (2005), "The One and the Many, Kinds of Distinctness and Universal Harmony: The Possibility of Monism or Pantheism in the Young Leibniz," in D. Rutherford and J. A. Cover (eds.), *Leibniz. Nature and Freedom* (New York: Oxford University Press), 20-43.
- Lærke, M. (2007), "*Quod non omnia possible ad existentiam perveniant*. Leibniz's ontology of possibility, 1668-1678," in *The Leibniz Review* 17: 1-30.
- Lærke, M. (2008) *Leibniz lecteur de Spinoza. La genèse d'une opposition complexe* (Paris: Champion).
- Lærke, M. (2009a), "Monism, Separability and Real Distinction in the Young Leibniz," in *The Leibniz Review* 19: 1-28.
- Lærke, M. (2009b), "*De Origine Rerum ex Formis* (April 1676). A quasi-Spinozistic parallelism in *De Summa Rerum*," in M. Kulstad, M. Lærke and D. Snyder (eds.), *The*

- Philosophy of the Young Leibniz*, Studia Leibnitiana Sonderheft 35 (Stuttgart: Franz Steiner Verlag), 203-20.
- Lærke, M. (2011), "Leibniz's Cosmological Argument for the Existence of God," in *Archiv für Geschichte der Philosophie* 93: 58-84.
- Lærke, M. (2015), "Leibniz on the Principle of Equipollence and Spinoza's Causal Axiom," in *The Leibniz Review* 25: 123-30.
- Lærke, M. (2017), "Leibniz's Encounter with Spinoza's Monism, October 1675 to February 1678," in M. Della Rocca (ed.), *Oxford Handbook of Spinoza* (Oxford: Oxford University Press), 434-63.
- Lærke, M. (forthcoming A), "Leibniz sur le *cogito*," in K. S. Ong-Van-Cung (ed.), *Les formes historiques du cogito* (Paris: Classiques Garnier).
- Lærke, M. (forthcoming B), "Form, Figure and Two Types of Extension. Averroism in the Young Leibniz," in *Oxford Studies in Early Modern Philosophy* (Clarendon Press: Oxford).
- Leibniz, G. W. (1994), *La Réforme de la dynamique : De Corporum concursu (1678) et autres textes inédits*, edited by M. Fichant (Paris: Vrin).
- Mercer, C. (1999), "Leibniz and Spinoza on Substance and Mode," in D. Pereboom (ed.), *The Rationalists: Critical Essays on Descartes, Spinoza, and Leibniz* (New York: Rowman and Littlefield), 273-300.
- Mercer, C. (2001), *Leibniz's Metaphysics* (Cambridge: Cambridge University Press).
- Parkinson, G. H. R. (1986), "Leibniz's *De Summa rerum*: A Systematic Approach," in *Studia Leibnitiana* 18: 132-51.
- Nachtomy, O. (2016), "On the Source of Impossibility in Leibniz's Paris Notes and Some Remarks on Time and Space as Packing Constraints," in G. Brown and Y. Shiek (eds.), *Leibniz on Compossibility and Possible Worlds* (Dordrecht: Springer), 21-36.
- Parkinson, G. H. R. (1992), "Introduction," in G. W. Leibniz, *De Summa Rerum. Metaphysical Papers 1675-1676*, transl. G. H. R. Parkinson (New Haven: Yale University Press), xi-lij.
- Pasini, E. (2005), "Leibniz alla caccia di Spinoza," in S. Gensini (ed.), *Linguaggio, mente, conoscenza. Intorno a Leibniz* (Roma: Carroci), 59-86.
- Picon, M. (2009), "On the Constitution of Leibnizian Formalism," in M. Kulstad, M. Lærke, and D. Snyder (2009), *The Philosophy of the Young Leibniz*, Studia Leibnitiana Sonderheft 35 (Stuttgart: Franz Steiner Verlag), 177-88.
- Rateau, P. (2014), "La nécessité de l'*optimum* dans la *Confessio philosophi*: un nécessaire leibnizien ?," in R. Andraut, M. Lærke, P.-F. Moreau and R. Andraut (eds.), *Spinoza/Leibniz. Rencontres, Controverses, Réceptions* (Paris: Presses Universitaires de Paris-Sorbonne), 163-74.
- Rescher, N. (1978), "The Contributions of the Paris Period," in A. Heinekamp (ed.), *Leibniz à Paris 1672-76. Symposion de la G. W. Leibniz Gesellschaft*, 2 vols., Studia Leibnitiana Supplementa 17-18 (Stuttgart: Franz Steiner Verlag), vol. II, 43-53.
- Spinoza, B. (1985-2015), *Collected Works*, 2 vols., ed. E. Curley (Princeton: Princeton University Press).
- Spinoza, B. (2011), *The Vatican Manuscript of Spinoza's Ethica*, ed. L. Spruit and P. Totaro (Leiden: Brill).
- Tommaso, E. M. de (2013), *De summa rerum. Viaggio attraverso le esplorazioni metafisiche del Giovane Leibniz (1675-1676)* (Bologna: Aracne).
- Tschirnhaus, Ehrenfried Walther von, *Medicina mentis et corporis, sive Artis inveniendi praecepta generalia* (Leipzig: Thomas Fritsch).
- Wilson, C. (1999), "Atoms, Minds and Vortices in *De Summa Rerum*," in S. Brown (ed.), *The Young Leibniz and his Philosophy* (Dordrecht: Kluwer), 223-44.

Further reading:

Brown, S. (1999), “The Proto-Monadology of the *De Summa Rerum*,” in S. Brown (ed.), *The Young Leibniz and his Philosophy (1646-76)* (Dordrecht: Kluwer), 263-88.

Kulstad, M. (2002a), “Leibniz, Spinoza and Tschirnhaus: *Metaphysics à Trois*, 1675-76,” in O. Koistinen et J. Biro (eds.), *Spinoza. Metaphysical Themes* (New York: Oxford University Press), 221-40.

Lærke, M. (2017), “Leibniz’s Encounter with Spinoza’s Monism, October 1675 to February 1678,” in M. Della Rocca (ed.), *Oxford Handbook of Spinoza* (Oxford: Oxford University Press), 434-63.

Mercer, C. (1999), “Leibniz and Spinoza on Substance and Mode,” in D. Pereboom (ed.), *The Rationalists: Critical Essays on Descartes, Spinoza, and Leibniz* (New York: Rowman and Littlefield), 273-300.

Parkinson, G. H. R. (1992), “Introduction,” in G. W. Leibniz, *De Summa Rerum. Metaphysical Papers 1675-1676*, transl. G. H. R. Parkinson (New Haven: Yale University Press), xi-lii.

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