

# MOORE'S NOTES ON RUSSELL'S LEIBNIZ LECTURES

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G. E. Moore attended Russell's lectures on Leibniz in 1899 and kept detailed notes which have been preserved among his papers. The present article prints his notes in their entirety with annotations.

Russell gave his lectures on Leibniz—twenty-six in all—at noon on Mondays, Wednesdays and Fridays between 18 January and 17 March 1899.<sup>1</sup> The audience was probably not large, but included some of Russell's friends in addition to students studying Leibniz for their Moral Science Tripos. Among those friends, G. E. Moore, then in the first year of his Trinity College Prize Fellowship, was a regular attender and kept quite extensive notes in two small notebooks now held among his papers at Cambridge University Library (Add 8875 10/4/1–2).

Moore was quite closely involved with Russell's work on *A Critical Exposition of the Philosophy of Leibniz* (1900): he not only read the proofs but revised all of Russell's Latin translations—a “serious labour”, as Russell said in the Preface (*PL*, p. xv<sup>2</sup>). In 1899 he was also

<sup>1</sup> *Cambridge University Reporter* 29 (14 Jan. 1899): 412. Russell's course was listed as Moral Science, “Philosophy of Leibnitz”. MWF 12. Jan. 18. £1.1 (p [meaning paperwork]).

<sup>2</sup> The page references are those of *PL*'s first edition, published by Cambridge in 1900 and reissued, with a “Preface to the Second Edition”, by Allen and Unwin in 1937. Routledge reissued it in 1992 with an Introduction by John G. Slater. Spokesman Books reprinted it in 2008. In 2013 Cambridge reprinted the first edition without

the person most sympathetic to Russell's overall philosophical position, the philosophical point of view from which the Leibniz lectures were written. During the summer and fall of 1898, at the time Russell was preparing his lectures on Leibniz, both Russell and Moore rebelled against the idealist tradition, heavily influenced by Kant and Hegel, in which they had hitherto worked. Almost certainly as a result of his study of Leibniz,<sup>3</sup> Russell came to realize that the lynchpin of the neo-Hegelian encyclopedia of the sciences on which he had been engaged since 1895 was the doctrine that he subsequently labelled "the axiom of internal relations".<sup>4</sup> Once this axiom was rejected, long-standing difficulties facing his neo-Hegelian analysis of the special sciences were simply eliminated. At the same time Moore, working largely independently, was engaged on a thoroughgoing critique of Kant in his second Fellowship dissertation.<sup>5</sup> This resulted in a *radically* anti-psychologistic account of judgment which Moore published in *Mind* the following year<sup>6</sup>—the first statement of Russell and Moore's new philosophy. Russell's first statement of it came in his book on Leibniz where its impact was apt to be obscured by the fact that it was presented only in so far as it was needed as the basis for a critique of Leibniz. For the next few years Russell and Moore worked along similar lines—their major works in 1903, *The Principles of Mathematics* and *Principia Ethica* share a similar underlying philosophy which originates in the revolutionary changes of 1898. Thereafter their positions began to diverge, though commentators continued for many decades to link them together. While Russell's study of Leibniz had enduring consequences for Russell's philosophy, Moore's engagement with Leibniz, at Russell's lectures and subsequently when he read the proofs of Russell's book and corrected Russell's Latin translations, seems to have had no comparable impact on Moore's subsequent thought.<sup>7</sup>

the 1937 preface. The arabic page references work for any print edition where the Appendix ends on p. 299; the roman, for any print edition with the 1937 preface. They do not, however, coincide for Routledge's reset e-book of 2005.

<sup>3</sup> See GRIFFIN, "What Did Russell Learn from Leibniz?" (2013).

<sup>4</sup> RUSSELL, "On the Nature of Truth" (1907); *Papers* 5: 14.

<sup>5</sup> MOORE, "The Metaphysical Basis of Ethics" (1898).

<sup>6</sup> MOORE, "The Nature of Judgment" (1899).

<sup>7</sup> Though MOORE's single reference to Leibniz in *Principia Ethica* is telling. In lamenting the prevalence of the naturalistic fallacy he complains that, in giving the meaning of ethical or arithmetical propositions, the metaphysical philosophers have found "no

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The present article provides an annotated transcription of the notes Moore took at Russell's lectures. The two notebooks in which he made the notes are the same size (approximately 180 × 230 mm.) but of different styles. The first has a panel on the outside of the front cover in which Moore wrote the title, "Russell on Leibniz". Inside are two unused table-of-contents leaves, printed on the right-hand side only and listing leaves from 1 to 50. Folio numbers to 50 are printed in the top right corner of right-hand pages only. On the verso of the second contents leaf Moore wrote some unrelated notes on ancient Greek social life (here omitted). Three leaves have been torn out of the notebook before the Leibniz notes begin on folio 4. The second notebook has no panel on the front cover for the title, and Moore wrote the title, "Russell on Leibniz, Vol. II", on the inside cover facing the first page of notes. The second notebook has no printed table of contents, and its leaves are unnumbered. After the end of the Leibniz notes, the remaining pages of Volume II were left blank, apart from the last couple of pages, which Moore used for what seems to be a schedule of tutorials.

Moore, for the most part, wrote only on the right-hand pages, using the facing pages for occasional additional comments and doodles. The last page of notes in the first notebook, however, is written on the left-hand page, the verso of the last leaf of the notebook. In the transcription, folio numbers are recorded in the right margin, and the actual page break, where it interrupts a line, is marked by "|". After 50, folio numbers are supplied in the angle brackets "<...>" used for editorially inserted material. Leaves of the second volume have been numbered consecutively from the end of the first notebook for the transcription. In order to save space and improve readability, we have not preserved Moore's line breaks, but we have preserved his frequent paragraph breaks since they give some sense of the flow of the lecture. Each short paragraph, of course, is just a concise summary of what may have been a much longer exposition on Russell's part. Moore's notes, rather surprisingly, do not indicate where one lecture ends and another begins.

better account" than to say "with Leibniz, that God's mind is in a certain state, or, with Kant, that your mind is in a certain state, or, finally, with Mr. Bradley, that something is in a certain state" (*Principia Ethica*, p. 125). Russell would have agreed with the underlying anti-psychologism of this attack, as well as with Moore's choice of the three representative philosophers. Moore's inclusion of Leibniz was quite likely a consequence of his attending Russell's lectures.

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His centred headings, however, do often correspond to chapter titles in Russell's book or sometimes to the headings of Russell's numbered sections given in his table of contents. Accordingly we have listed Moore's headings below alongside the corresponding chapter or section heading in Russell's book.

Fol. No.	Heading in Moore's Notes	Chapter or Section Heading in <i>The Philosophy of Leibniz</i>
4	Leibniz	
7	Two Problems	
8	Five Premisses	§4. His premisses
8	Books	
9	Logic	Ch. II. Necessary Propositions and the Laws of Contradiction
10	Analytic and Synthetic Propositions	§11. Analytic and Synthetic Propositions
11	Text	
13	Sufficient Reason	Ch. III. Contingent Propositions and the Law of Sufficient Reason
17	Relation of Two Principles	§15. Its Relation to the Law of Contradiction
18	Substance	Ch. IV. The Conception of Substance
20	Relation of Substance to Time	§22. Relation of time to Leibniz's notion of substance
22	Identity of Indiscernibles	Ch. v. The Identity of Indiscernibles and the Law of Continuity. Possibility and Compossibility
26	Law of Continuity	§27. The Law of Continuity: three forms of continuity maintained by Leibniz <sup>8</sup>
28	Substance in actual world	Ch. VI. Why Did Leibniz Believe in an External World?
29	Matter in five senses	§35. Various meanings of <i>matter</i> and <i>body</i>
30	Continuum	Ch. VIII. The Philosophy of Matter (continued), (b) as Explaining Continuity and Extension
34	Labyrinth of Continua	Ch. IX. The Labyrinth of the Continuum

<sup>8</sup> Interestingly, at this point in *PL* the chapter running-head changes, even though there is no change of chapter.

36	Two Great Theories of Space and Time	
36	Leibniz's Theory	§61. Space and time, for Leibniz, purely relational
39	Space	Ch. x. The Theory of Space and Time and Its Relation to Monadism
41	Relation of Monads to Space	
44	Common qualities of all Monads	Ch. xi. The Nature of Monads in General
46	Soul and Body	Ch. xii. Soul and Body
50	Second Theory	§91. Second Theory
(52)	Details of Monadism	
(54)	Theory of Knowledge	Ch. xiv. Leibniz's Theory of Knowledge
(58)	Theory of God and Ethics	
(65)	God's goodness	
(65)	Ethics	Ch. xvi. Leibniz's Ethics

The notes are written in both ink and pencil. The way these are interspersed suggests that Moore reviewed the notes afterwards, adding occasional comments and clarifications. The brief remarks written on the facing pages are typically comments on the material opposite. We have recorded them in footnotes. Moore's abbreviations have been silently expanded. Foreign phrases have been italicized, as have book titles. Moore's use of underlining for emphasis has been converted into italics, and his use of underlining for centred headings into bold type. Occasional errors of wording are corrected in the text and noted in a footnote, but more substantial errors, as well as misspellings of proper names, have been preserved in the text and corrected in a footnote. Moore's deletions are selectively reported.

There are a large number of quotations (with and without references) in Moore's notes, as there are in Russell's book. In quoting full sentences, Moore often placed the period after the closing quotation mark or even directly underneath it. In the transcription we have placed any concluding punctuation inside the quotation mark. Moore's opening and closing single quotation marks are doubled; they are supplied in angle brackets where they are missing. It makes little sense to try to correct Moore's quotations: the original text is usually in French or Latin, Russell is reading an English translation, and

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Moore is writing down enough of it to get the gist. However, almost all of them can be identified through Russell's book. Accordingly, we have identified the original source of the quotation, indicated whether the same passage is noted either in Russell's marginalia in his copy of Gerhardt's *Die philosophische Schriften von Gottfried Wilhelm Leibniz* or in his Leibniz Notebook,<sup>9</sup> and noted where the passage is quoted in *The Philosophy of Leibniz*. Typically Russell's discussion in the book will clarify the obscurities in Moore's notes (though we have sometimes felt the need to add explanatory footnotes), and linking the quotations in the notes with those in the book will enable to reader to correlate the notes to the book more exactly than our table of correspondences between the headings.

Doing so reveals that, after the first few pages, the book follows the course of the lectures fairly closely, often down to details. The book does expound Russell's interpretation in more detail than is done in Moore's notes and supplies a great deal more textual evidence, but it is clear that by the time Russell gave the lectures in 1899, he had his interpretation of Leibniz pretty fully worked out. Since he started to study Leibniz seriously only some six months before the lecture course began, and confessed (*PL*, p. xiii) that until he read Leibniz's correspondence with Arnauld and the *Discourse on Metaphysics* he was "completely in the dark" as to the grounds on which Leibniz based his opinions, it is astounding that he was able to arrive at such a powerful interpretation from the fragmentary chaos of Leibniz's *Nachlass* in so short a time—especially when this was by no means his only, or even his main, work at the time. Whatever caused the delay of over a year in publishing the book, it was not a need to revise or extend his interpretation. Because Moore's notes follow the book so closely they form a useful, if somewhat cryptic, summary of the book.<sup>10</sup>

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<sup>9</sup> References are given to our transcriptions of these two sources in this issue: ARTHUR, GALAUGHER AND GRIFFIN (2017); ARTHUR AND GRIFFIN (2017).

<sup>10</sup> We are especially grateful to Consuelo Preti, who supplied us with images of Moore's notes, and to Peregrine Moore and Thomas Baldwin for giving us permission to publish them. Thanks are also due to Hans Loewig for tracking down the Bradley references. As always Ken Blackwell has been an indefatigable source of advice, correction, and encouragement. The transcription has been proofread against the original documents in Cambridge University Library.

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Leibniz. (Russell, Lent '98<sup>II</sup>)

fol. 4

Leibniz, reign of Louis XIV, 1646–1716.<sup>12</sup>

Born at Leipzig, where father was Professor of Philosophy.

He read enormously at a very early age.

At 15 he decided to give up substantial forms. But two years later he wrote scholastic treatise on Principle of Individuation.<sup>13</sup>

He then went to Jena and learnt Mathematics.

Doctor's Degree at Altdorf for law. Offered professorship, but wished to become man of world. At this time (20) wrote *Ars Combinatoria*.<sup>14</sup>

Went to Nürnberg, to get into high society. Found Society of Rosicrucians, and got appointed secretary, by writing an absurdly obscure alchemistic tract.<sup>15</sup> He was thus introduced to Archbishop of Mainz, who engaged him on scheme for uniting churches. He found that no theory of Transubstantiation was consistent with DesCartes's theory that matter was mere extension. Thus he was started on search for different doctrine of substance.

"Specimen of Demonstration in political matters", for archbishop's candidate to throne of Poland.<sup>16</sup>

Leibniz also wrote scheme to induce Louis XIV to invade Egypt rather than Germany.<sup>17</sup>

He was sent to Paris to follow up scheme, and there began | to learn higher mathematics, having hitherto been strong at history and law—met Hyginus?<sup>18</sup> He dedicated "On concrete motion" to Royal Society.<sup>19</sup>

fol. 5

<sup>11</sup> *Sic.* In fact the lectures were given in Lent Term 1899.

<sup>12</sup> Russell's account of Leibniz's life is largely based on Latta, ed., *The Monadology and Other Writings* (1898), pp. 1–17, with some help from W. R. Sorley's article on Leibniz in the *Encyclopaedia Britannica* (1882).

<sup>13</sup> Leibniz's dissertation for his bachelor's degree was *Disputatio metaphysica de principio individui* (defended 9 June 1663).

<sup>14</sup> Leibniz composed his *Dissertatio de ars combinatoria* in 1666 for his habilitation in the faculty of philosophy at Leipzig University, still three months shy of his twentieth birthday. It was later (1690) republished in Frankfurt without his knowledge.

<sup>15</sup> According to Fontenelle he applied for membership with a deliberately unintelligible letter composed of all the most obscure terms he could find in alchemical texts. The society was so impressed it immediately made him its secretary (Latta, p. 4).

<sup>16</sup> This was the first of Leibniz's political writings. In the person of a Polish Catholic nobleman he offered a mathematical demonstration that the interests of Poland would best be served if the Count Palatinate of Neuberg were made King. Alas neither Leibniz's logic nor the archbishop's diplomacy was successful, and the throne went to a Polish prince (Sorley, p. 418).

<sup>17</sup> This scheme, which led to Leibniz's being dispatched to Paris but not to his hoped-for audience with Louis XIV, is described in detail by Sorley, pp. 418–19.

<sup>18</sup> *Sic.* Moore means Huygens, the seventeenth-century Dutch astronomer and physicist.

<sup>19</sup> Leibniz dedicated the first part of *Hypothesis physica nova* (1671) to the Royal Society of London and the second part, on abstract motion, to the French Academy.

In England, too, he met Robert Boyle.

Oct. 29, 1675, he first used Integral sign; Differential calculus a few weeks later.<sup>20</sup>

Newton's Theory of Fluxions, differing only in notation, as early as 1665. Leibniz saw anagrammatic letters written in 1676, and Newton's friends said he had borrowed it. Leibniz published in 1684, Newton in *Principia* in 1687.<sup>21</sup>

They offered to make Leibniz member of Academy. Then became Librarian of Hanover.

Went to Holland and saw Spinoza, who died and whose work was published, just when Leibniz had obtained MS of it.

Electress of Hanover, Sophia, and of Brandenburg, Sophia Charlotte. He was supposed to be engaged on history of House of Brunswick. By the way developed silver mining in Hartz, writing on currency and geology.

About now began to attack DesCartes, beginning with dynamics and mathematics, where he could prove Cartesians to be wrong. 1686–95

Sophia Charlotte, Queen of Prussia, died 1705; Sophia in 1715.

Leibniz stayed in Vienna with emperors longer than a mere elector liked | wrote there "Principles of Nature and Grace", for Prince Eugene. Buried "like a robber, not like an ornament of his country".<sup>22</sup> being reputed a "believe-nothing".<sup>23</sup>

fol. 6

Leibniz wrote all his works with a view to particular person, convincing good men with good, bad with bad arguments.

Wrote to Malebranche, Spinoza, Hobbes, Locke and Newton.

Locke being silent he wrote *Nouveaux Essais*, but Locke died before he

<sup>20</sup> Here Russell seems to have relied on Benjamin Williamson's article on the infinitesimal calculus in the *Britannica*, to which SORLEY (p. 419) refers. The date is important because it shows that Leibniz had the principles of the integral calculus before he received the two letters written by Newton at Oldenburg's request (see n. 12). See WILLIAMSON, "Infinitesimal Calculus" (1881), pp. 8–9.

<sup>21</sup> Moore here alludes to the two letters Newton had prepared in 1676 at Oldenburg's request for Leibniz and Tschirnhaus, summarizing the results he had achieved in mathematics (without giving his methods). In the second of these letters Newton had provided a sentence that was an anagram in Latin of a very cryptic formulation (also in Latin) of what we now regard as the fundamental theorem of the calculus. In the acrimonious priority dispute with Leibniz that blew up in the eighteenth century, Newton and his acolytes accused Leibniz of having discovered Newton's methods from this letter, and then plagiarized them for his publications on the calculus that began in 1684. The two letters are published in vol. 2 of NEWTON's *Correspondence*. For details of the dispute, see HALL, *Philosophers at War* (1980).

<sup>22</sup> This was said by a British government spy, John Ker (1673–1726), who was an eyewitness at Leibniz's funeral (though we are not sure whether he was there in an official capacity). Russell got the story from LATTA, p. 16. It comes originally from *Memoirs of John Ker of Kersland* (1726), by himself, I: 118.

<sup>23</sup> This on account of Leibniz's reputed irreligion. It is actually a pun on his name: "Lövenix" being Low German for "Glaubet nichts". See LATTA, p. 16.



could publish it. So it remained till 1785.<sup>24</sup> He wanted to get answer from Locke.

Leibniz censured Cartesians, because they didn't make inventions, unlike Archimedes. Pascal had made addition and subtraction machine: he was immensely proud of making multiplication one.

Very conservative, supporting scholastics against DesCartes. "It seems to take the best from all sides, and then it goes much further than any have yet gone."<sup>25</sup>

Hegel says "Less like philosophy, than hypothesis concerning nature of world. It is a philosophical romance. We learn to prize it, when we see what it intends to avoid."<sup>26</sup>

Rather, when we see how it was approached—from Dynamics, clear of Metaphysics. "Foundation of system distinction between contingent and necessary judgments."<sup>27</sup>

Leibniz started with materialism. Were it not for this, it is difficult to see why he was not Berkeleian.<sup>28</sup> He began with complete assent to Gassendi up till 1671. Led to abandon it only by difficulties of continuum: "God and Im-mortality depend on point, indivisible, instant and conation."<sup>29</sup> fol. 7

He was not influenced either for or against Spinoza. In 1677 he writes "Spinoza has strange metaphysics full of paradoxes; e.g. he thinks God and world have same substance."<sup>30</sup>

<sup>24</sup> *Sic*. It was actually first published in 1765.

<sup>25</sup> Leibniz's estimate of his own philosophy: LANGLEY, ed., *New Essays* (1896), p. 66.

<sup>26</sup> Hegel wrote: "Seine Behauptungen erscheinen als willkürliche Vorstellungen, ein metaphysischer Roman; man lernt sie erst schätzen, wenn man sieht, was er dadurch hat vermeiden wollen" [His assertions appear as arbitrary conceptions, a metaphysical novel; we learn to appreciate them only when we see what he has wanted to avoid by means of them] (*Vorlesungen über die Geschichte der Philosophie* [1838], 3: 454). Cf. Russell's much quoted claim in the Preface to *PL*: "I felt—as many others have felt—that the *Monadology* was a kind of fantastic fairy tale, coherent, perhaps, but wholly arbitrary" (*PL*, p. xvii).

<sup>27</sup> This presumably is a direct quotation from Russell's lecture. Russell does not make the same claim in *PL*, but he does say that Leibniz made a fundamental distinction between contingent and necessary propositions (*PL*, p. 23) and cites Leibniz as saying that we come to this distinction from dynamics (*PL*, p. 29, citing **G.III.645**). The issue is dealt with in *PL*, Chapter 3. Interestingly, Moore uses "judgment" where Russell in *PL* uses "proposition". In 1898 both had used "judgment", but at some point in 1899 Russell switched to "proposition". In January 1899, however, he was still using "judgment" (cf. "The Classification of Relations", *Papers* 2: 136ff.).

<sup>28</sup> See *PL*, p. 72, for Russell's view of Leibniz's relation to Berkeley and "Marginalia", p. 19n., for commentary.

<sup>29</sup> See the extended quotation given by Russell in *PL*, p. 253, from **G.I.52**.

<sup>30</sup> To Gallois in 1677 Leibniz wrote that Spinoza's metaphysics is "strange and full of paradoxes": "Among other things, he believes that the world and God are but a single substantial thing, that God is the substance of all things, and that creatures are only modes or accidents" (A II 1: 379–80; translation from Nadler, *Spinoza* [1999], p. 341).

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“I began meditating before I was imbued with Cartesian opinions.”<sup>31</sup> Indeed he probably knew little of DesCartes till he went to France, at age 26. He objected as early as this to matter = extension, and to the logical argument, DesCartes holding “God’s idea not possible”.

After ’85 and 6 he did not seriously alter philosophy.

## Two Problems

I. Necessary and Contingent Propositions II. Continuity  
(*Theodicy*. Gerhardt 6.29, “Two famous labyrinths”, freedom and infinite).<sup>32</sup>

I. Laws of motion are necessary, but not analytic. They must depend on something. This is “Principle of Sufficient Reason”.

Subject and predicate only fundamental form of proposition, hence relational propositions about matter and space are unreal. Hence |if matter is real, as he never doubted, the real in it must be psychical. fol. 8

Logical order of system not easy to discover: moreover he changes his premisses *ad hominem*.

## Five Premisses

- I. Every proposition reducible to subject and predicate. Predicates are of two kinds (1) qualities existing in parts of time, which, if it has, is substance and (2) those which don’t exist in time.
- II. Substances are those which have such temporal predicates.
- III. Not referring to parts of time—necessary and analytic.
- IV. Perception gives knowledge of existents, that are neither myself nor my predicates/states<sup>33</sup> (not an explicit premiss).
- v. Substances must be conceived on analogy of Ego.<sup>34</sup>

<sup>31</sup> **G.I.332.** Cf. “Marginalia”, p. 16.

<sup>32</sup> **G.VI.29.** Cf. “Notebook”, p. 39.

<sup>33</sup> Moore wrote “predicates” above “states”; the slash is added editorially.

<sup>34</sup> Unlike the four premisses he identified in “Notebook”, p. 39, these five premisses are essentially the ones Russell identified in *PL* as the basis of the whole of Leibniz’s mature philosophy (although premiss v in the lectures undergoes some refinement to emerge as premiss iv in the book). Russell’s statement of them in *PL*, p. 4, clarifies Moore’s somewhat telegraphic account:

- I. Every proposition has a subject and predicate.
- II. A subject may have predicates which are qualities existing at various times. (Such a subject is called a *substance*.)
- III. True propositions not asserting existence at particular times are necessary and analytic, but such as assert existence at particular times are contingent and synthetic. The latter depend upon final causes.
- IV. The Ego is a substance.
- v. Perception yields knowledge of an external world, i.e. of existents other than myself and my states.

“Relation” in premise IV is inconsistent with I.

### Books

Duncan *Philosophical Works of Leibniz*.

Langley *New Essays*.

Latta *Monadology etc.*

Gerhardt (Berlin) 75–90.<sup>35</sup>

*Monadology*.

Then all on “Substance”, e.g. “Ultimate origin of things”.<sup>36</sup>

Letters to Arnauld<sup>37</sup> (Gerhardt, vol. II).

### Logic

fol. 9

Are all propositions subject and predicate?

Law of contradiction and necessary propositions?

That Leibniz began with logic appears from 1686 (to Arnauld<sup>38</sup>). (These and Gerhardt, vol. II, give everything beyond the ordinary works.)

Substance = what can be a subject, but can never be a predicate, hence = Bradley's Reality.<sup>39</sup>

Leibniz distinguishes two kinds of categorical judgments. Not all, as in Spinoza, are necessary and analytic: some are contingent.

Various states at various parts of time are predicates of subject, but though states are in time, predicates thus formed are not. Every subject persisting through change involves eternally all its predicates: hence independence of substances.

In the book, Russell maintains that the “fundamental objection” to Leibniz's philosophy is the inconsistency of I with IV and V.

<sup>35</sup> Respectively: DUNCAN, ed., *The Philosophical Works of Leibniz* (1890), LANGLEY (1896), LATTA (1898) and GERHARDT (1875–90). See “Notebook” for the notes Russell took on DUNCAN, LANGLEY and the *Theodicy* in vol. 6 of GERHARDT; and see “Marginalia” for Russell's marginalia in his copy of GERHARDT.

<sup>36</sup> **G.VII.302–8**. English translation: LATTA, pp. 337–51; DUNCAN, pp. 100–6. See also “Notebook”, pp. 26–7.

<sup>37</sup> *Sic*. Moore continued to misspell “Arnauld” until almost the end of the course. Leibniz's correspondence with Arnauld is to be found in the second volume of GERHARDT. Russell said that until he read the Arnauld correspondence he was “completely in the dark as to the grounds which led [Leibniz] to many of his opinions” (*PL*, p. xiii).

<sup>38</sup> Here Moore corrected “Arnauld” to “Arnauld”.

<sup>39</sup> This is a considerable leap, though it prefigures Russell's claim later on in the lectures that to be consistent Leibniz should have admitted only one subject (as Bradley did). The immediate basis for Russell's claim is that for Bradley reality is “the ultimate subject”, “its essence is to be substantial and individual” (BRADLEY, *The Principles of Logic* [1922], I: 51, 46).

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Contingent propositions depend on "Sufficient Reason" or "Law of Final Causes". This gives us doctrine of Substance, involving time. *Further*, plurality of such involves space.

Are all propositions reducible to subject and predicate?

Not plurality of substances; and he explains how this does not contradict his categoric basis.

Letters to Clarke (Duncan p. 266). "*L* greater may be subject of accident relation, or *M* lesser may be. But relation *between* two must be out of subjects, and therefore a mere ideal thing, of which consideration is nevertheless useful."<sup>40</sup> fol. 10

Position too is nothing but adjective of thing in position.

Percipient, however, is not mistaken about relations, since he places them in God's mind: (<"in this consists reality of relations between Monads."<sup>41</sup> Yet Leibniz never draws the inference that psychological explanation is futile. He similarly confuses knowledge and truth, making the knower the subject of which all general or eternal truths are predicates.

"Every aggregate is a mere phenomenon."<sup>42</sup> This Leibniz must hold, because "Here are three men" cannot be reduced to subject and predicate.

Bradley censures Leibniz for trying to work qualities without relations: but the same may be said of Bradley himself.<sup>43</sup>

<sup>40</sup> This was a key text for Russell's understanding of Leibniz's treatment of relations. Cf. "Notebook", p. 38 and n., and *PL*, p. 13. Leibniz considers two lines of unequal length, *L* and *M*, in three different ways: "In the first way of considering them, *L* the greater; in the second *M* the lesser, is the subject of that accident philosophers call *relation*." But in the third way, where a relation holds between them without either being considered as the subject, the relation is "*out of* the subjects; but being neither a substance, nor an accident, it must be a mere ideal thing, the consideration of which is nevertheless useful" (DUNCAN, p. 267).

<sup>41</sup> **G.II.438**. Cf. *PL*, p. 14.

<sup>42</sup> See *PL*, pp. 115–17, where Russell cites **G.II.304, 517** and LANGLEY, p. 149, for this doctrine. He explains the relevance of "There are three men" at *PL*, p. 12.

<sup>43</sup> Russell probably has in mind the passage in *Appearance and Reality* where Bradley, without mentioning Leibniz by name, attacks what he calls "the theory of monads" according to which "each self is an independent reality, substantial if not simple". He argues that, to suppose that there is more than one monad, raises the question of what relation they have to each other. It makes no sense to say that they have no relation, for "plurality and separateness without a relation of separation seem really to have no meaning". On the other hand, to suppose they have a relation "is fatal to the monads' independence. The substances clearly become adjectival, and mere elements within an all-comprehending whole" (BRADLEY, *Appearance and Reality* [1897], pp. 101–2). The *locus classicus* for Bradley's treatment of relations and qualities, to which Bradley refers in rejecting the theory of monads, is Chapter 3 of *Appearance and Reality*, where it is argued that qualities are unintelligible without (but also with) relations and also, more famously, that relations are unintelligible either with or without qualities.

### Analytic and Synthetic Propositions

(1) What are analytic propositions? (2) How related to necessity?

Leibniz agrees that all analytic are necessary, and all necessary analytic. He does not talk of analytic, as Kant does, but only of necessary.<sup>44</sup>

(1) All dealing with concepts or general notions are analytic  
All that assert existence are synthetic.

fol. 11

*Analytic* to be found throughout Logic, Arithmetic and Geometry. But Laws of Motion are not analytic.

### Text

31.<sup>45</sup> Our reasonings are founded on two great principles  
—that of contradiction  
—that of sufficient reason.

Those of fact, the opposite of which are possible.

Analytic are either tautologous or they are not analytic: e.g. in Leibniz's list<sup>46</sup> (1)  $A = A$  (2) "I shall be what I shall be", are tautologous (3) Equilateral rectangle is a rectangle, depends on proposition "There is such a concept as equilateral rectangle", which is synthetic and cannot therefore give rise to necessary. "Before idea can be used, it must be shewn to be possible." E.g. 3, defined as  $2+1$ , must be seen to be possible, i.e. there is such a concept.

But this is concealed from him by his definition of "possible idea", i.e. "idea which is not self-contradictory." But he does not ask what this is. fol. 12

It must involve at least two propositions, one true, one false. But for this purpose it must be complex—e.g. "a round square"; has angles and has no angles; because it is square and is circle; but square must therefore be possible.

Hence Leibniz's "possible" can not apply to simple concepts. And hence simple ideas must be able to be incompatible, though not contradictory.<sup>47</sup>

"God = having all simple predicates", and Leibniz proved to Spinoza that this was possible idea.<sup>48</sup> But in fact incompatibility of some simple ideas is necessary, if any complex ones are to be so.

<sup>44</sup> Cf. *PL*, p. 16, where Russell, noting that Leibniz draws a distinction between necessary and contingent propositions but not (as Kant did) between analytic and synthetic ones. As a result, he says, that it is "unavoidable to depart from Leibniz's usage, since we need two pairs of terms, where he required only one pair".

<sup>45</sup> The reference is to §31 of the *Monadology* (LATA, p. 235). In §31 Leibniz introduces the principle of contradiction; in §32 the principle of sufficient reason; and in §33 states that truths of fact (unlike those of reason) are those whose "opposite is possible".

<sup>46</sup> Cf. LANGLEY, p. 405; *PL*, p. 17.

<sup>47</sup> Cf. *PL*, p. 19.

<sup>48</sup> Cf. **G.VII.261** and *PL*, pp. 19–20. Moore's account is a bit misleading. Russell's point is that Leibniz argued to Spinoza that God, so defined, was a possible idea because two simple ideas could not be mutually contradictory, apparently not realizing that any combination of simple ideas would thus be possible in this sense.

Thus, even if it were true that 3 does mean  $2+1$ , arithmetic is yet synthetic, since it depends on this “There is such a concept as 3.”

Three dimensions is necessary, because geometers can prove that three lines can be mutually perpendicular at a point. This he thinks the best of instances of blind or brute necessity, quite independent of God’s Will. Kant points out fallacy of this in his first work,<sup>49</sup> and infers (contrary to his later view) that three dimensions cannot be necessary.

Law of contradiction asserts that proposition must be true or false; it can never tell you which. Even “This proposition is true or false” it cannot tell you to be true, since that presupposes “This is a proposition.” fol. 13

If any synthetic propositions are necessary, why not all? But if one does hold distinction between necessary and contingent, one must distinguish them, as Leibniz does, according to whether they predicate existence or do not.

Thus:

“Whole and part” cannot be propositions of subject and predicate.

### Sufficient Reason

Peculiar to Leibniz.

Necessary and contingent to be distinguished according as propositions do or do not refer to particular parts of time—a most important division.

Contingent: “God’s eternity different from time, because necessary, whereas time is contingent.”<sup>50</sup>

Necessary do not assert existence of subject, except God.

“Eternal truths are all CONDITIONAL—such a thing posited, another thing is.”<sup>51</sup> (forgets God)

Eternal here means not “always true”, which all truths are, but that their content does not refer to parts of time.

“Notion of species involves only eternal and necessary truths; but notion of individual, *sub ratione possibilitatis*, fact in relation to time.”<sup>52</sup> fol. 14

Sphere in general is only eternal truth; particular sphere on Archimedes’ tomb is contingent, because it involves matter as well as form.<sup>53</sup> Everything is involved in latter except assertion that it does exist, as in Kant’s 30 thalers.<sup>54</sup>

Once individual is posited, all its predicates follow necessarily from notion

<sup>49</sup> KANT, *Gedanken von der wahren Schätzung der lebendigen Kräfte* (1747).

<sup>50</sup> *PL*, p. 30. According to Leibniz, God does not exist in time. Everything existing in time is contingent, and God is the only absolutely necessary being, as Moore notes in the next sentence. So Leibniz conceives the divine attribute of eternity as timelessness, as opposed to Newton’s (heterodox) conception of it as infinite duration.

<sup>51</sup> LANGLEY, p. 515; *PL*, pp. 18, 26.

<sup>52</sup> Cf. **G.II.39**; *PL*, p. 26.

<sup>53</sup> *PL*, p. 26, adds: “as well as the place and time”—which is the important point.

<sup>54</sup> Cf. *Critique of Pure Reason*, A599, B627—but actually 100 thalers. (Maybe Russell was thinking of Judas’s thirty pieces of silver.)

of subject. Connection of predicates, however, which have reference to particular parts of time, are also contingent *in relation to one another*, though necessary in relation to subject.

"I am going to make a journey: there must therefore be relation between me and journey; there would be falsity in notion of me, if I did not."<sup>55</sup> Law of {...}<sup>56</sup> God perceiving individual nature of Alexander, knows *a priori* whether he died naturally or by poison.

*Exceptions.* Laws of Motions are contingent, i.e. Leibniz thinks they only hold in every part of time, though not in every possible world, with same time.

That every moment comes before or after another is necessary, but not that time or any part of time exists. God needn't have made time, but making it must make it as it is.

Any existential propositions hence can be denied without a contradiction.

fol. 15

Hence other principle is wanted, e.g. for causality. *Sufficient Reason* applies also to *necessary propositions*, but is absolutely necessary to contingent, but not as a final principle.<sup>57</sup>

Different statements, not differing in meaning.<sup>58</sup>

*Later:*<sup>59</sup> *Monadology* 31 "Our reasonings are founded on two great principles, law of Contradiction and Sufficient Reason. By virtue of Sufficient Reason no fact real or existent, no statement true, unless there be Sufficient Reason why it is so and not otherwise. There are truths of reasoning, and of fact, latter being contingent, and their opposite possible."<sup>60</sup>

Ultimate origin. "In eternal things, though no cause, there must be reason, which in permanent things is necessity itself. But for changing things the reason consists in inclining not necessitating."<sup>61</sup> (The inclining is true or false perception of good by active substance. God and free creatures always pursue best that appears to them: this is always true but not necessary.)

*Earlier:* There must be always some foundation for connection of terms in proposition, which must be found in their notions, one form of expressing which is *vulgar axiom* that nothing happens without reason, which maybe either inclining or necessitating.<sup>62</sup>

(*"*I have presupposed nothing in Metaphysics except Law of Contradic-

<sup>55</sup> Cf. **G.II.52**; *PL*, pp. 27–8.

<sup>56</sup> Moore left this thought incomplete.

<sup>57</sup> "but not as a final principle" seems to have been added as an afterthought (in pencil).

<sup>58</sup> Cf. "Marginalia", p. 20 (to **G.II.8**), and *PL*, pp. 31–5, where Russell comments on Leibniz's different formulations of the law of sufficient reason.

<sup>59</sup> I.e., "Later statements of the law of sufficient reason". We have italicized this heading to match the italicized "*Earlier*" lower down the page.

<sup>60</sup> **G.VI.612**; DUNCAN, pp. 222–3. Cf. "Notebook", p. 33; *PL*, p. 31.

<sup>61</sup> LEIBNIZ, "On the Ultimate Origin of Things", **G.VII.302**; DUNCAN, pp. 100–1. Cf. "Notebook", p. 26; *PL*, p. 32.

<sup>62</sup> **G.II.56–7**. Cf. "Marginalia", p. 24; *PL*, p. 32.

tion | and that nothing is without a Reason, included in notion of terms *a priori*, even though we can't find it so."<sup>63</sup>

fol. 16

We must in these statements suppose Leibniz to mean that pursuit of best is included in notion of free substance.

Actions of Caesar can be deduced from notion of Caesar, but their happening depends on God's free choice. Yet "they always choose (though freely) what seems best."<sup>64</sup>

Gerhardt VII p. 300 "Every proposition can be proved *a priori* by propositions which are identical, or from notions and definitions. All can be inferred either with necessity, or with certainty, having a reason, deduced by analysis of notions, which inclines without necessitating. All truths, however contingent, have *a priori* proof or reason, which is meant by nothing happens without cause or is without reason. But this reason, however strong, though it gives certainty of foreknowledge, does not destroy contingency."<sup>65</sup>

His principle is more general than causality, but includes this as particular case.

Thus pursuit of good is like laws of motion; but former is not derived empirically, but deduced from goodness of God.

Any inference as to actual existence must have in its premisses notion of the good. "As possibility is the principle of essence, so perfection is principle of existence."<sup>66</sup>

### Relation of two principles

fol. 17

How could Leibniz deduce unnecessary from necessary propositions? Is there any sense in saying that existential propositions are not necessary?

Leibniz doesn't often discuss this.

(1) He says: Gerhardt II. p. 420 "I always maintain that power of determining oneself without any cause implies contradiction like a relation without terms. But metaphysical necessity of all effects does not follow hence, for it suffices that cause or reason be not one that metaphysically necessitates, though it is metaphysically necessary that there be such a cause."<sup>67</sup>

I.e. in particular case, conclusion only follows practically whereas Law of Sufficient Reason itself does not refer to all parts of time, nor only to these, since it refers to God pre-eminently.

Yet, if Sufficient Reason can be deduced from Contradiction, they must be coordinate; and commentators generally say Wolff spoilt system by deducing Sufficient Reason from Contradiction.<sup>68</sup> Leibniz ought certainly to have said

<sup>63</sup> **G.II.62.** Cf. *PL*, p. 33.

<sup>64</sup> **G.IV.438.** Cf. *PL*, p. 34.

<sup>65</sup> Cf. *PL*, p. 33.

<sup>66</sup> **G.VII.304;** DUNCAN, p. 103. Cf. *PL*, pp. 34–5.

<sup>67</sup> **G.II.420;** cf. "Marginalia", p. 42; *PL*, p. 35.

<sup>68</sup> For Wolff's derivation of the principle of sufficient reason from that of contradiction, see LATTÀ's discussion (p. 59). For a discussion of the Hegelian basis of both Latta's



that Sufficient Reason is necessary but synthetic.

*Again*, Sufficient Reason seems to apply as much to the possible as to the actual. E.g. "possibles, when they are notions of contingent, involve possible decrees of God."<sup>69</sup> We need therefore new connection between possible and actual existence, and this Leibniz would probably find in existence of God, which must first be proved.

But still how can applications be contingent?

fol. 18

A successful system cannot avoid necessity, as Leibniz wished to avoid Spinoza.<sup>70</sup>

All events in time require reason, but it is contingent that the reason should produce results it does. Leibniz thus left himself open to attack of Hume.<sup>71</sup>

Leibniz ought to say: Law of Sufficient Reason though necessary is synthetic.

### Substance<sup>72</sup>

Question is: What is meant by word substance? Not What things are substances? which latter question is answered by theory of Monads.

Cartesians: "That which needs for its existence only God's concurrence."<sup>73</sup> There are two: Mind and Matter. And yet God alone is strictly a substance.

Spinoza: "*Causa sui*", "that which is in itself and is conceived through itself."<sup>74</sup>

In neither is substance simple notion, but dependent, in some undefined way, on logical subject and predicate. Subject can exist without predicates, but not *vice versa*.

See Gerhardt VI.579–594; where Malebranche defines as "whatever can be conceived alone, or as existing independently of other things."<sup>75</sup> Leibniz answers that | this is Spinozism. Independence in conception belongs to force and life. Malebranche answers substance must be concrete, independent of other created concretes. Leibniz answers (1) Substance is prior to concrete (2) Extension is abstract from extended: hence Malebranche's 2nd definition

fol. 19

and Russell's interpretations of Leibniz, see ARTHUR, "On the Hegelian Roots of Russell's Interpretation of Leibniz" (unpublished ms.).

<sup>69</sup> **G.II.51**. Cf. *PL*, pp. 26–7.

<sup>70</sup> Cf. *PL*, p. 39: "But if they [God's actions] were necessary, the whole sequence of their consequences would have been also necessary, and his philosophy would have fallen into Spinozism."

<sup>71</sup> Hume is not mentioned by Russell in this connection in *PL*. Moore presumably means that, if it is true for Leibniz that the results of a sufficient reason are contingent, then there is not necessity for the effect to follow the cause, just as Hume had urged.

<sup>72</sup> For the next two pages the notes continue in pencil.

<sup>73</sup> DESCARTES, *Principles of Philosophy*, Part I, §52 (1985 edn., I: 210). Cf. *PL*, p. 40.

<sup>74</sup> SPINOZA, *Ethics*, Pt. I, Def. III. Cf. *PL*, p. 41.

<sup>75</sup> The reference is to the "Dialogue between Philarète and Ariste", where Ariste, Malebranche's protagonist, offers this definition (**G.VI.581**). Cf. *PL*, pp. 41–2.

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will only apply to Monads.

Leibniz definitely discards “independent existence” and refers to subject and predicate. Against Locke: “There is good reason to assume several predicates in one and the same subject and this is all the word means.”<sup>76</sup>

But this is<sup>77</sup> by no means *all*. There is also persistence through change; implication of this distinguishes change from becoming. This *posterior* meaning is also included in Leibniz’s notion. There are terms which can only be subjects, not predicates, and these preserve identity while altering qualities. We must for personal identity have a *priori* reason. “I” is substance, because it cannot be a predicate; so would space be, if it were real.<sup>78</sup>

*Activity* of substances is metaphysically necessary. It must not be imagined but conceived.

Nature of substance consists in internal force of action, or regulated tendency from which phenomena are born in order. Activity is thus element in every state of subject, in virtue of which that state is not permanent. Without activity substance would cease to have new attributes at new moments, and thus would cease to exist. Activity is thus adjective of every preceding state, but *passivity* is not adjective of succeeding one.<sup>79, 80</sup>

fol. 20

Now for *Sufficient Reason*. You cannot infer any action from essence or incomplete notion although every one is necessary to complete or individual notion of me.<sup>81</sup>

Sufficient Reason for one change rather than another is to be found in nature of activity. In substances not free activity is regulated by general laws, which themselves have Sufficient Reason in God’s perception of best<sup>82</sup>: in free Sufficient Reason lies in confused perception of good by subject. Gerhardt II. pp. 263–4.<sup>83</sup>

Yet Leibniz might well substitute Law for Substance.<sup>84</sup>

<sup>76</sup> LANGLEY, p. 225. Cf. *PL*, p. 42.

<sup>77</sup> The word “is” is inserted in ink. Moore put a large question mark on the facing page opposite the first two lines of this paragraph.

<sup>78</sup> Cf. *PL*, pp. 42–3.

<sup>79</sup> Moore wrote the word “activity” in ink on the facing page opposite this paragraph.

<sup>80</sup> Cf. *PL*, pp. 44–6.

<sup>81</sup> **G.II.52**, Cf. *PL*, p. 46: “There is nothing in me ... of all that can be conceived generally, or by essence, or by a specific or incomplete notion, from which my future actions follow necessarily. Nevertheless, if I am going to take a journey, it is certain that I shall take it, and therefore, if I did not take it, there would be falsity, which would destroy the individual or complete notion of me.”

<sup>82</sup> “best” is written in ink over an illegible deleted word.

<sup>83</sup> Cf. *PL*, p. 47: “In substances which are not free ... activity is regulated by general laws, which themselves have a sufficient reason in God’s perception of fitness; in free substances, the sufficient reason lies in the more or less confused perception of the good on the part of the substance itself.” Moore started using ink again with the GERHARDT reference.

<sup>84</sup> Cf. *PL*, p. 47 and “Marginalia”, p. 34 and n. (to **G.II.263**).

### Relation of Substance to Time

Leibniz deduces Substance from Reality of Time as premiss and arrives at unreality of time as conclusion.<sup>85</sup>

Substance essentially persists through time, and yet its predicates belong to it eternally. Although it has changing states, it does not change itself: but how?

We must distinguish what Leibniz confounds (1) State of substance at given moment (2) Fact that substance has that state at that time. Latter is eternally, but (1) is essentially in time. Hence Leibniz's eternal predicate cannot be state of substance. Hence proposition predicating of substance presupposes (2) which is not proposition of subject and predicate.<sup>86</sup> fol. 21

See Leibniz: "What follows from nature of thing may follow perpetually or only for a time. When a body moves in straight line, it follows it will at given moment be at given point, but it does not follow it will stay there for ever."<sup>87</sup> Now here he does not perceive that proposition "body is here now" is logically prior to proposition that "body is such as to be here now."

To escape dilemma, Leibniz insists that to exist now and to exist then are not distinguished in their relations. But this stultifies "activity" and final causes, for both involve reference to future state, which is different from reference of future to present. There is *order*, which Leibniz neglects.

Leibniz reduces moments of time themselves to elements or parts of corresponding states of substance; for activity makes difference of quality between preceding and succeeding state so that succeeding state cannot be precondition but must be result of preceding. Preceding is "uneasiness". But

(1) How can meaning be given to simultaneity between different substances? For temporal position is mere quality in one substance.<sup>88</sup> fol. 22

(2) God has activity, is alone pure activity. Yet this is timeless: for act of creation of time must be so. Hence succession does not follow from activity of such: hence succession cannot be reduced to activity.

Time is hence presupposed in Leibniz's theory, and ultimate denial of time is hence not triumph but failure. So too with space; Leibniz could not eliminate common sense presupposition.

### Identity of Indiscernibles

Connected with Law of Continuity, though latter is not logical. Both are included in "All created substances form one continuous series—one series with order from first to last; and every possible position in series is occupied once and once only. All substances differ *inter se*, yet from every substance

<sup>85</sup> Cf. *PL*, pp. 50–3.

<sup>86</sup> On the facing page opposite this paragraph Moore wrote: "Each predicate becomes proposition as soon as you include in it relation to particular part of time."

<sup>87</sup> **G.II.258.** Cf. *PL*, p. 51.

<sup>88</sup> On the facing page against this point Moore put a large question mark.

there is one differing infinitesimally.”<sup>89</sup>

(1) What does Identity of Indiscernibles mean?

This is not, like Sufficient Reason, stated differently at different times.

“No two substances differ *solo numero*—are completely similar”,<sup>90</sup> i.e. they must have different predicates.

This applies only to substance, which is therefore presupposed. Hence it is not same as Bradley’s “All diversity is diversity of content”,<sup>91</sup> which is more fundamental. Leibniz presupposes material diversity as well as diversity of predicates, and asserts relations between them. fol. 23

(2) Leibniz attempts to prove this principle. How?

He says this plus Sufficient Reason render philosophy demonstrative.

(a) Principle is said to be merely contingent, like Laws of Motion.

(b) Principle is metaphysically necessary.

(a) 5th letter to Clark. (Duncan) “This supposition of two indiscernibles seems indeed to be possible in abstract terms, but it is not consistent with order of things nor with God’s *Wisdom*. I don’t say it is impossible to suppose two drops of water alike, but that it is contrary to God’s *Wisdom*,<sup>92</sup> and therefore don’t exist. If they did exist, they would be two; but supposition is false and contrary to grand principle of Reason.”<sup>93</sup>

And just before he deduces principle Sufficient Reason “God could have no reason for placing *a* here and *b* there, if *a* and *b* were indiscernible substances.”<sup>94</sup>

But even this argument shews principle to be necessary not contingent. For there is metaphysical need for some Sufficient Reason, and hence negative conclusions like this must be necessary though positive conclusion from particular Sufficient Reason is contingent.

He says too: “To suppose two indiscernibles, is to suppose same thing under different names.”<sup>95</sup> fol. 24

But argument about placing bodies seems to presuppose here and there as source of numerical diversity and then to infer intrinsic predicate. But he means Here and there themselves must be reduced to predicates. Differentiation is not effected by difference of place *per se*. If two bodies cannot coexist in same place and time, they are *ipso facto* possessed of different predicates.

<sup>89</sup> This appears to be a quotation from Russell’s summary of Leibniz rather than from Leibniz himself. For quotations in support of it, see *PL*, pp. 64–6; and in the *New Essays*, A VI 6: 308–11.

<sup>90</sup> **G.IV.433**. Cf. *PL*, p. 54.

<sup>91</sup> This slogan was not actually stated by Bradley, but in Bradley’s system there was only one substance, the Absolute, thus there can be no substantial or material diversity, only diversity of contents. Cf. *PL*, pp. 54–5.

<sup>92</sup> On the facing page Moore put a question mark opposite the line on which the word “Wisdom” occurs.

<sup>93</sup> DUNCAN, p. 259; **G.VII.394**. Cf. “Notebook”, p. 37; *PL*, pp. 55–6.

<sup>94</sup> DUNCAN, p. 247; **G.VII.372**. Cf. “Notebook”, p. 36; *PL*, p. 56.

<sup>95</sup> *Ibid.*

Hence argument against Clarke is only *ad hominem*.

So *Nouveaux Essais* (Langley 238),<sup>96</sup> "Places and times are distinguished by things, not *vice versa*."<sup>97</sup>

He relied on admission that coexistence was impossible, but Identity of Indiscernibles ought really to prove this impossibility.

(b) He has logical ground. For God could not conceive any substance like another.

"Nature of individual substance or complete being, is such as to suffice for deduction of all predicates. Hence follow several paradoxes: e.g. that it is not true that two substances, completely similar, differ only numerically" (Gerhardt IV).<sup>98</sup>

What are steps of argument? He does not say.

All that can validly be said of substance, consists in assigning its predicates. Hence substance is thus completely defined; and hence you can't say of similar | substance that it is similar.<sup>99</sup>

fol. 25

That *A* differs from *B*, means that *A* must have predicate, which *B* has not. Hence *A* can't differ from *B*, unless it has different predicate.<sup>100</sup>

(c) As to validity: This proves, *If* subject and predicate is only form of proposition, there can't be indiscernibles.

But it would also seem to prove that there is only one substance. For numerical difference of substances is logically prior to assertion that they differ in predicates.

Until predicates are assigned, two are indiscernible. But they cannot have predicates removing indiscernibility, unless they are first distinguished as different substances.

Every substance has infinite predicates.

(1) each persists through time, and has different predicate for each moment.

(2) state at every moment is itself infinitely complex. This would follow from "reflection" of all past and future states. But also each must mirror present state of whole universe.

Infinite complexity is mark of contingency.<sup>101</sup> Analysis of necessary, e.g. numbers, from subsequent to prior, reaches simple terms, e.g. 1, in finite

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<sup>96</sup> Cf. "Notebook", p. 11; *PL*, pp. 56–7.

<sup>97</sup> On the facing page Moore placed a question mark opposite this sentence.

<sup>98</sup> **G.IV.433.** Cf. *PL*, pp. 57–8.

<sup>99</sup> On the facing page Moore wrote: "(How then of different?)" against this remark.

<sup>100</sup> Russell intends a *reductio* argument here. If *A* and *B* are two different, but indiscernible, substances then they have between them the relation of difference. But every relation has an intrinsic foundation in a corresponding predicate of the terms. Thus *A*, being different from *B*, will have a corresponding predicate. But *B*, being not different from itself, will not have the same corresponding predicate. Thus *A* and *B* will have different predicates and not be indiscernible, contrary to the initial supposition. Cf. *PL*, p. 58.

<sup>101</sup> On the facing page Moore put a question mark opposite this sentence.

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number of steps. But we cannot determine individuality of anything: only God could. "Contingent truths are like surds."<sup>102</sup> Leibniz seems to regard this as confirmation of his theory that contingent is due to our knowledge. "Only God can know *a priori* whether Alexander died by poison or by natural death."<sup>103</sup> But Leibniz also applies notion to God, to prove his free will.

### Law of Continuity

fol. 26

Not very important, save in Mathematics.

Three things meant, all required by "order of things".

- (1) Spatio-Temporal continuity.
- (2) Continuity of cases.
- (3) Continuity of actual existents or forms.<sup>104</sup>

(1) Continuity of what exists in space and time, of motion and of change. (Change of place is of course on same level with Leibniz as change in any other respect.) Both kinds of discontinuity are metaphysically possible, but are excluded by the "order of things".

(2) This alone is discussed in Letter to Bayle.<sup>105</sup> When the difference between two antecedents diminishes without limit, the difference of two consequents diminishes without limit: or: When data form ordered series, results form ordered series.

Useful in Mathematics, except in cases of instability.

(3) "Just as little a vacuum in forms as there is in space."<sup>106</sup> "Nature makes no leaps" applies to all three. You must be able to fill up any finite difference by existing substances. Whatever Monad you take, there will be another differing from it infinitesimally.

He talks of "deducing" this from "Identity of Indiscernibles". But he seems to mean<sup>107</sup>

Why does Leibniz hold law? No reason but that world without gaps is nicer than world with gaps. fol. 27

But it is connected with spatial continuity. For every monad mirrors from its own point of view, and since point of view is thought by Leibniz as spatial point, one point will differ infinitesimally from other. "God perceives from

<sup>102</sup> By contrast, necessary truths are like rational numbers. **G.VII.309**; cf. *PL*, p. 61.

<sup>103</sup> **G.IV.433**; LANGLEY, p. 469. Cf. *PL*, p. 61.

<sup>104</sup> On the facing page Moore put question marks opposite the second and third items on this list.

<sup>105</sup> **G.III.51-5**. Cf. "Marginalia", p. 49; *PL*, p. 64. The letter in question was not to Bayle but was published in Bayle's journal, *Nouvelles de la républiques des lettres*, July 1687, as a reply to Malebranche.

<sup>106</sup> **G.II.168**. Cf. *PL*, p. 65.

<sup>107</sup> Moore did not complete this thought. On the facing page he placed a question mark opposite this phrase.

each point of view, as if from a point of space, and result of each perception is a particular substance.”<sup>108</sup>

This does not assert that all possible forms are actual. This Leibniz is bound to deny strenuously.

For possible means “not self-contradictory”; but *compossible* means “able to exist in one and same world, to coexist.”)

*New Essays*: “There must be species which never have and never will exist: There is no gap in order of nature, but no one order contains all possible species.”<sup>109</sup>

All possible worlds agree as to eternal truths, e.g. as to space and time. Every notion of possible existent forms part of possible world.

I.e. impossibility means, impossibility that both of two things should exist, though it is possible either should exist.<sup>110</sup>

But Leibniz's doctrine of lack of connection between predicates would seem to make *all* possible existents compossible. This Leibniz disproves by necessity of *some* Sufficient Reason “Each world depends on general laws conceived *sub ratione possibilitatis*” (Gerhardt II).<sup>111</sup> | Hence “Reign of Law” is necessary, though no particular laws are so. It is this necessity which makes some existents impossible.<sup>112</sup> fol. 28

### Substance in actual world

Passage from Logic to Ontology.

Why was Leibniz not solipsist or alone with God? This will not follow from his Logic, but he actually starts with matter. He took to Gassendi and Atomists, as soon as he had given up Scholasticism. He gave them up, because of continuity. But he retained premiss matter exists, only arguing matter which does exist is spirit. Hence he is not so consistent as Berkeley.

Gerhardt I 369–374,<sup>113</sup> Letter in 1676 (9 or 10 yrs. before completion of phenomena<sup>114</sup>)

Langley, 717–720.<sup>115</sup>

Leibniz does not distinguish (1) Why should we admit world other than ourselves?

(2) How, admitting it, shall we distinguish true perceptions of it from hallucinations?

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<sup>108</sup> **G.IV.439.** Cf. *PL*, p. 73.

<sup>109</sup> **LANGLEY**, p. 334. Cf. “Notebook”, p. 14; *PL*, p. 66.

<sup>110</sup> Moore drew a double vertical line in the left-hand margin alongside this sentence.

<sup>111</sup> **G.II.51.** Cf. “Marginalia”, p. 23; *PL*, p. 67.

<sup>112</sup> On the facing page opposite this sentence Moore wrote, “Why shouldn't there be general law for impossibles?”

<sup>113</sup> Cf. “Marginalia”, pp. 18–19; *PL*, p. 72.

<sup>114</sup> Moore clearly wrote “phenomena”, but “philosophy” was the word intended. Cf. *PL*, p. 71.

<sup>115</sup> Cf. *PL*, p. 72.

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(2) presupposes that there is real world of which we may have true perceptions, whether we do have them or not. This Leibniz does by “consistency”.

“I should call this dream real life, if in practice we were never deceived about it.”<sup>116</sup> Hence question of external world | has no interest for Leibniz. fol. 29

Yet it has *moral* certainty (i.e. no certainty; as *moral* victory means defeat). And it postulates metaphysical premiss that God exists, which is analytical.

“All we know for certain is (1) Interconnection of appearances (2) that they must have constant cause outside of us, who however may be God himself.”<sup>117</sup>

Yet “A man in Ireland, who impugns the reality of bodies, seems neither to give sufficient reasons, nor to explain himself sufficiently. He seems to be a paradox-monger.”<sup>118</sup>

Leibniz never disproved this position. Nor does he accept DesCartes’ argument: for God might have reasons to deceive us.

“God makes his own point of view into substance, and our perceptions must be true, because they are thus made out of God’s.”<sup>119</sup> This is Spinozistic.

Leibniz’s general argument is simply: It is not likely, we should exist alone. He was commentator, not critic, of common-sense.<sup>120</sup>

#### Matter in five senses<sup>121</sup>

Quantity of motion in any given direction is constant.

Measure of force controversy now seems mere logomachy.

*Materia prima* is defined by resistance = principle of extension (mere repetition) i.e. quality in virtue of which bodies occupy places = both impenetrability and resistance or inertia. fol. 30

Are both resistances passive force? Only inertia.<sup>122</sup>

This is not metaphysically necessary, though *materia prima* of monad is.

Leibniz discovered conservation of momentum and could therefore disprove DesCartes’s action of mind on matter.<sup>123</sup>

Deduces necessity of force from relativity of motion. It is *less* relative than motion. (?)

Necessary to give meaning to *state* of motion.

Primitive force is law of series and constant in each body. Sum only of derivative force (*vis viva*) is constant.

<sup>116</sup> LANGLEY, pp. 718–19. Cf. *PL*, p. 72.

<sup>117</sup> Russell is paraphrasing **G.I.372–3** very loosely. Cf. “Marginalia”, pp. 19–20; *PL*, p. 72.

<sup>118</sup> **G.II.492**. Cf. “Marginalia”, pp. 43–4; *PL*, p. 72.

<sup>119</sup> **G.IV.439**. Cf. *PL*, p. 73.

<sup>120</sup> The notes continue in pencil from this point.

<sup>121</sup> Cf. *PL*, p. 76 where Russell lists the five different senses in which Leibniz uses “matter” or “body”.

<sup>122</sup> These two words are written in ink.

<sup>123</sup> Cf. “Notebook”, p. 29 and n.; *PL*, p. 77.



Primitive force<sup>124</sup> does not account for interaction.

Leibniz thought it important dynamically.<sup>125</sup>

Primitive force invented for purely metaphysical reason?

"Force to be measured by quantity of effect."<sup>126</sup> But this again can only be measured by "motion".<sup>127</sup>

Each element must have causal action of its own; yet of this you can say nothing except with reference to the whole.

### Continuum

Monadism finds "thread through labyrinth of continuity".<sup>128</sup> Continuity might indeed be taken as Leibniz's starting-point, though posterior in relation to logic.

"There must be compound substance(s), and these must be composed of simple substances."<sup>129</sup> fol. 31

A compound is nothing but<sup>130</sup>

*Monadology*, 1 and 2.

Here are three presuppositions

(1) We know what substance means

(2) We have reason to suppose complex substance, i.e. that matter is such

(3) The complex must consist of simple *substances*.

Extension is "mere repetition". Extension is not space, for like duration, everything carries its extension about from place to place.

Doctrine of extension is prior to monadism and monadism to doctrine of space. Whereas 3 ought to be prior to 1.

Existence of many substances is inferred from extension, since extension means mere repetition.

"Extension (*contra* Malebranche) is not concrete but the abstract of what is extended."<sup>131</sup>

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<sup>124</sup>These two words are written in ink over a deleted "This".

<sup>125</sup>Moore added this sentence in ink between the lines.

<sup>126</sup>See Leibniz's "A Brief Demonstration of a Notable Error of Descartes and Others Concerning a Natural Law" (1686), where he insists that "forces are to be calculated from their effects" where a suitable effect would be "one by whose production the impetus is diminished", such as "the ascent or elevation of any heavy object, the tension of a spring, the impulsion of a body to motion or the retardation of its motion, and other operations of this kind" (LOEMKER [1956], I: 461-2).

<sup>127</sup>The notes continue in ink after this point.

<sup>128</sup>**G.II.262.** Cf. "Marginalia", pp. 33-4; *PL*, p. 108.

<sup>129</sup>Cf. *PL*, p. 100.

<sup>130</sup>Moore abandoned this thought. The reference to the first two paragraphs of the *Monadology* which follows supplies the completion: "a collection or *aggregatum* of simple substances" (DUNCAN, p. 218).

<sup>131</sup>**G.VI.582-4.** Cf. *PL*, p. 102.

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“Besides extension there must be a subject which is extended, i.e. a substance which is repeated or continued.”<sup>132</sup>

There must also be a diffusion of qualities, which however is only apparent. The only quality which belongs even to the smallest parts is—resistance *materia prima*.<sup>133</sup>

“Extension or primary matter is nothing but a certain repetition | of things, in so far as they are similar or indiscernible.”<sup>134</sup> fol. 32

Hence all monads must have primary matter (something similar) since so alone can a collection of them appear as extended.

This involves “abstraction is falsification”.

Primary matter is mere abstraction, being only an element<sup>135</sup> in matter, and nothing without force. Hence substances must also have activity, and differences required to make them many.

Gerhardt II. “Where there are only beings by aggregation, there are not even real beings.... If we admit aggregates, we must either have mathematical points, or atoms of Epicurus, or no reality of bodies, or something with real unity.”<sup>136</sup>

In early doctrine, he is still doubtful whether inorganic<sup>137</sup> matter has any true unity, i.e. is composed of monads.

If we assume what appears as matter to be real, it is obvious it must be a plurality. But then the parts must be real. There is no plurality of states (why?), therefore of substances.

What is not truly *one* being, is not truly a *being*.

These real unities are entelechies or forms, a word Leibniz uses 10 years before the word monad. But entelechy and form mean only *active* part of monad; whereas *materia prima* is also *ψλη*.<sup>138</sup> (1) Primitive entelechy, or soul (2) Primary matter | (3) Monad composed of these two. fol. 33

“Atoms of matter are contrary to reason. Only atoms of substance are first principles. They might be called metaphysical points, and mathematical points are their points of view to express the universe. Physical points are always really extended.”<sup>139</sup>

Space consists of collection (possible and actual) of relations of distance. Terms of these relations, considered merely as such are mathematical points; these are mere modalities.

Physical point is infinitesimal extension, such as Leibniz thought was used

<sup>132</sup> **G.IV.467.** Cf. *PL*, p. 102.

<sup>133</sup> Cf. *PL*, p. 102 (citing LANGLEY, p. 700 and **G.IV.394**): “the only quality which is properly extended is resistance, which is the essence of *materia prima*.”

<sup>134</sup> DUNCAN, p. 176, cf. “Notebook”, p. 31; *PL*, p. 102.

<sup>135</sup> There is a squiggly line in the right margin against the line which ends with this word.

<sup>136</sup> **G.II.96.** Cf. *PL*, p. 103.

<sup>137</sup> There is a squiggly line in the right margin against the line which ends with this word.

<sup>138</sup> Cf. *PL*, p. 79, citing **G.IV.395**. Moore uses the standard Greek philosophical term, *hyle*, for matter.

<sup>139</sup> **G.IV.482**; DUNCAN, p. 76. Cf. “Notebook”, pp. 24–5; *PL*, pp. 104–5.

in Calculus.

Matter as such, i.e. phenomenon, is extended. But extension is essentially repetition or plurality. Hence elements of what is extended cannot themselves be extended. Hence elements of matter cannot be material. Nor can they be mathematical points, since these are merely abstract—not existent.

Souls are unextended.<sup>140</sup>

Bodies are *phenomena bene fundata*, because they are appearance of collections of real monads.

Gerhardt II.267. Defolde (*sic*) objected that mathematical body need not be destitute of reality. “Whatever can be divided into several is an aggregate of several. Aggregate is only one for the mind. Hence there must be indivisible unities, else the aggregate would have no kind of reality at all. Where there is no true unity, there is no true multitude. Mathematical body has only mental existence. Because it is no more of a substance than number, since it has neither activity or passivity. In mental things parts are indefinite (arbitrarily? (*sic*)) whereas in concrete things they must be actual. Strictly, matter is not composed of substantial unities, but *results* from them. They are merely *good* foundation of its appearance.”<sup>141</sup> fol. 34

*Connection of matter with force.* Leibniz thought he had dynamical argument for thinking matter more than mere extension. He found force necessary for laws of motion. It is more real than matter or motion. Activity is therefore implied in world as phenomenal. Hence also are substances.

### Labyrinth of Continua

If what appears as matter is plurality, it must be an infinite plurality.

“Mass” says Leibniz “is discrete—it is an actual multitude composed of an infinity of units.”<sup>142</sup>

This infinity of discretos is regarded by Leibniz as getting you out of Labyrinth of Continuum: hence it is foundation of Monadology.

Duncan p. 65: “I am so much in favour of the actual infinite—The least particle of matter is not only divisible but divided, consisting in an actual infinity of different creatures.”<sup>143</sup>

But on the other hand Leibniz denies infinite number. Gerhardt I.<sup>144</sup> and is familiar with Hegel’s true infinite “consists strictly speaking only in the absolute, which is anterior to all composition”,<sup>145</sup> i.e. God is only true infinite. fol. 35

He admits actual infinity because it does not force him to admit infinite number—being a mere aggregate and not a whole.

<sup>140</sup> “Are they also without duration?” is written on the facing page, opposite this remark.

<sup>141</sup> The quotation is Russell’s paraphrase of Leibniz’s reply to De Volder, **G.II.267–8**. Cf. “Marginalia”, pp. 34–6; *PL*, p. 106.

<sup>142</sup> **G.II.379**. Cf. *PL*, p. 108.

<sup>143</sup> **G.I.416**; DUNCAN, p. 65. Cf. “Notebook”, p. 24; *PL*, p. 109.

<sup>144</sup> **G.I.338**. Cf. “Marginalia”, pp. 17–18; *PL*, p. 109.

<sup>145</sup> LANGLEY, p. 162; Cf. *PL*, p. 109n.

Argument is dialectical (Hegelian), i.e. conclusion inconsistent with two contradictory premisses both false.<sup>146</sup>

Leibniz denies continuity (*New Essays*, p. 700) "Repetition is discrete where aggregate parts are discernible. It is continuous when parts are indeterminate." Nothing actual is continuous; in ideals the whole is prior to the part. "Ideals" here means "number", "space" and "time".

Labyrinth "comes from looking for actual parts in order of possibles, and for indeterminate parts in aggregate of actuals."<sup>147</sup> I.e. points and instants are not actual parts of space and time; and on other hand actual aggregates cannot be extended, a limit of extension being always indeterminate.

As regards "ideals" whole is not logically subsequent to parts composing it; whereas in "substances" parts are logically prior.

Two sorts of indivisibles: (1) ideas, e.g. one, which is logically prior to fractions, which are not real parts of it. "People do not distinguish resolution into notions from division|into parts."<sup>148</sup> E.g. abstract line (relation of distance, B.R.) is not compounded of parts: i.e. masses are composed, but the distances in which their relations to one another consist, are simple.<sup>149</sup> fol. 36

Priority of whole in space and time, which is obvious in unity, is obtained by relational theory. There may be smaller distances than any given distance, these are not parts of it. The distance is a possible relation, and must be distinguished from the extension corresponding.

### Two Great Theories of Space and Time

(1) Newton's, represented by Clarke: Length.

(2) Leibniz's: distance Duncan, 265-7.<sup>150</sup>

Take two points *A* and *B*, there is (1) relation of distance between them, which is mere relation (2) actual length between them.<sup>151</sup> The two theories arise according as you say that (1) is (2), or that (2) is (1). Really neither is the other.

That (2) is (1) leads to Leibniz and Lotze's<sup>152</sup> Monadism, with non-spatial terms. (Inconsistent with the facts.)

That (1) is (2) leads to space consisting of infinite collection of actual points. (Self-contradictory)

<sup>146</sup> See *PL*, p. 110 and n., for an explanation.

<sup>147</sup> **G.II.282.** Cf. *PL*, p. 111.

<sup>148</sup> **G.III.583.** Cf. "Marginalia", p. 59; *PL*, p. 112.

<sup>149</sup> Moore added a curious little row of interlocking diamonds to this line.

<sup>150</sup> Cf. "Notebook", pp. 37-8.

<sup>151</sup> (1) is Leibniz's relational theory of space; (2) is Newton's substantial theory, in which length is an actual quantity of space "stretching" between the two points. Cf. *PL*, pp. 112-13, and RUSSELL's account of "stretches" in *Principles of Mathematics*, p. 181.

<sup>152</sup> For LOTZE's theory of space, cf. his *Metaphysic* (1887), §§108-13, I: 246-58.

Leibniz's Theory

Space is assemblage of possible relations, which are actual only when points *A* and *B* are occupied by real substances.

fol. 37

(N.B. Leibniz must mean by "part" in space and time, a quantity of the same kind, differing in magnitude.)

Relations, when actual, ought to be analysed into predicates of substances related. And accordingly Leibniz says it is part of manner in which *A* mirrors *B*. Hence mathematical point is point of view of monad—mere modality; a possible point of view of monad. Thus parts of relation of distance are mere smaller distances. This is distinction between intensive and extensive quantities. Intensive does not presuppose existence of smaller intensive quantities.

Smaller distance is not to be got by analysing notion of larger distance.<sup>153</sup>

Abstract space is a mere possibility, collection of all possible distances.

(1) Nothing is absolutely real but indivisible substances and their various states. (This is presupposed in argument from extension to monads).

(2) What appears to us as matter is real, although its appearance is not real. (This is prejudice of Leibniz.)<sup>154</sup>

(3) Matter, *quâ* phenomenon, is aggregate with infinite number of parts.

(4) Aggregate can have no reality except what it derives from parts composing it.

(5) If there is reality in matter, it must be of substances.

But can there be infinite number of monads?

fol. 38

Being and unity are convertible terms. Aggregates are only one for mind; all but the components in an aggregate (Gerhardt II.517)<sup>155</sup> is due to being perceived at one times (*sic*).

Notion of whole can only be applied to one substance. This constituent is real, that is real: but the two together are phenomenal, semi-mental.

Hence 1 is only number applicable to what is real. (This argument is used against infinite number; he would probably apply it to finite, too.)

"The world is only verbally a whole."<sup>156</sup>

This is legitimate deduction from subject-predicate presupposition. For assertion of many substances is not of this nature. Leibniz takes refuge in "synthetic unity of apperception", not, however, as giving truth.

Judgment of plurality is thus reduced to judgment as to state of perceiving monad. "Perception is the expression of multitude in unity."<sup>157</sup>

<sup>153</sup> The words "notion" and "existence" (on the previous line) are underlined and joined by a line in a different ink.

<sup>154</sup> Opposite these two points on the facing page Moore wrote in pencil:

Premise I. Extended has parts which are extended.

Premise II: Extended has parts which are unextended.

Conclusion: Real is not extended.

<sup>155</sup> Cf. *PL*, p. 115.

<sup>156</sup> G.II.305. Cf. *PL*, p. 116.

<sup>157</sup> G.III.69. Cf. *PL*, p. 116.

*Dilemma.* If plurality lies only in percipient, there can be no plurality of percipients: hence no monads.

If there is a plurality of percipients, this must be so independently of what each perceives: hence there is infinite number.

This results from two premisses: (1) Subject-predicate (2) Perception is in general trustworthy.<sup>158</sup>

### Space

fol. 39

“I have many demonstrations to confute the fancy of those who take space to be a substance or absolute being.”<sup>159</sup>

These demonstrations are on basis of subject-predicate Logic.

If Space is substance, then there must be relation between things and places, and this relation cannot be reduced to subject-predicate. Existence of thing and place is independent.

Duncan, pp. 265–7. “If there were no creatures, space and time would exist only in the mind of God.”<sup>160</sup> Against this view is Kant’s second argument.<sup>161</sup> Says Leibniz “If space were an absolute reality, it would be more fundamental than what is in it”<sup>162</sup>—as it is for Kant.

Subject-predicate argument is not urged explicitly. Space is not attribute, because essence of matter is not extension. Space is not substance, because of Identity of Indiscernibles and Sufficient Reason. (This applies equally to time.) This is developed in answer to Clarke. One part of space is indiscernible from another: if you rotate whole universe through an angle, resulting state would not differ from former. So with time, if it were absolute, God could have had no reason for creating it at one time rather than another.<sup>163</sup>

Continuum argument. If space and time are real, they must be composed of mathematical points. But this is impossible since mathematical points are mere extremities: two mathematical points are not bigger than one, any more than two perfect darknesses are darker than one.

Well then, what are space and time?

We have found that two absolute positions are one and the same position, and this can only be the case if position is a vicious abstraction from relations. This holds of temporal position too: but there pre-existence, coexistence, and post-existence have some validity.

fol. 40

(Duncan) p. 265–7, close reasoning. “When relation of situation of body *A*

<sup>158</sup> “Perception is in general trustworthy” is written in pencil.

<sup>159</sup> **G.VII.263**; DUNCAN, p. 243. Cf. *PL*, p. 118.

<sup>160</sup> DUNCAN, p. 252; **G.VII.376–7**. Cf. “Notebook”, p. 36; *PL*, p. 119.

<sup>161</sup> At *PL*, p. 119, Russell cites KANT: “We can never imagine that there should be no space, though we can quite well think that there should be no objects in it” (*Sämmtliche Werke*, 3: 59). Cf. *Critique of Pure Reason*, A24, B38.

<sup>162</sup> **G.VII.373**; DUNCAN, p. 248. Cf. “Notebook”, p. 36; *PL*, p. 119.

<sup>163</sup> On the facing page, opposite the middle of this paragraph, there is a large question mark.

to *C, D, E*, changes, while mutual relations of *C, D, E* do not change, we infer that cause of change lies in *A*, not in *C, D, E*. *A* has moved, they have not. If now *B* comes to have precisely similar relations, as *A* had before, we say *B* has come into same place. But there is not really anything *individually the same* in two cases. For the relation was an affection of *A*, whereas now it is an affection of *B*: and same individual accident cannot belong to two substances; the relation is thus precisely similar but numerically different.”<sup>164</sup>

This account is rendered unnecessarily self-contradictory by introduction of absolute motion, implied in fact that *A* is cause of its change. From absolute motion, absolute position must be inferred, as by Newton. Leibniz wished to give unambiguous meaning to statement that *A* and *B* are in same place. But this is impossible on relational view: you must mention bodies to which relation is.

This upsets Leibniz's Dynamics, but not his theory of space. “Place is that which is the same in different moments to different things when their relations to different existents agree entirely together.”<sup>165</sup> | But when Leibniz goes on to suppose that these existents are supposed to remain absolutely fixed, that supposition is totally unmeaning. Relationists cannot make up their minds to logical denial that two bodies may successively occupy same place.<sup>166</sup> fol. 41

### Relation of Monads to Space

Two theories perpetually confused.

Space is succession of abstract possible relations. But, since these must be attributes of something, and therefore we must take account of related monads. Hence difficulty for any philosophy admitting subjectivity of space together with existence of external world.

Space is relation only between perceptions of each monad, not between monads themselves.<sup>167</sup>

But also: Perceptions of different monads differ among themselves owing to difference of points of view: and these, unfortunately, are mathematical points.

Difficulty is: If (2) consists merely in difference between qualities in one monad, then (1) must be purely subjective, but if so reason for different points of view disappears.

Leibniz began with presupposing 2, and then continually tried to eliminate this presupposition.

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<sup>164</sup>DUNCAN, pp. 265–7; **G.VII.400–2**. Cf. “Notebook”, p. 38; *PL*, pp. 120–1. There is a very large question mark on the facing page opposite this paragraph.

<sup>165</sup>DUNCAN, p. 266; **G.VII.400**. Cf. *PL*, p. 121.

<sup>166</sup>On the facing page is a question mark opposite this paragraph with an angle directing it to the last clause.

<sup>167</sup>There is a question mark on the facing page opposite this sentence.

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“Many years ago I located souls in points.”<sup>168</sup> This furnishes many premisses for Monadology. In 1671–2, before Paris, he had had something like Monads: he was then diverted by DesCartes.

“Mind is a little world comprised in a point consisting of ideas, just as centre of circle consists of angles.”<sup>169</sup> If mind has larger place than a point it is already a body, and is not always present to itself. Kernel of body consists in physical point.<sup>170</sup> This at 25, but he soon saw it was crude. fol. 42

Hence we find also, in early publications, metaphysical point added: these are explanation of mathematical point.

After 1698, this explanation of points of view as reality of mathematical points; and he always insist (*sic*) that when he compares the two, this comparison is only *an analogy*.

But he never explains what is meant by soul’s ubiety.<sup>171</sup> They have with relation to body “definitive ubiety”, i.e. they are in volume, without our being able to assign them any particular point in it.

“God is present by essence, not by situation. Presence of soul is of another nature. It is not diffused over body, for this is to make it extended. It is not whole or part of body, for that is to divide it against itself. Nor is whole at one point or many points.”<sup>172</sup>

“Question whether simple substance is somewhere or nowhere, is one of words. It is only related to extension.”<sup>173</sup>

Leibniz does not face fact that all monads mirror same world, and that this has *some analogy* to space.

“We must not derive plurality from points, but from primitive | force of operation.”<sup>174</sup> But really former is logically prior to latter. fol. 43

You can’t *designate* position of soul, although it has position by relation to body.

Souls are in whole body which they animate. But, body consisting of monads, where is body?

In fact there is “one space”: Leibniz ought not to have taken space as logically prior.

The counterpart of space between monads is always abused by Leibniz as a mere being of reason: but this abuse will only apply to subjective space.

Body is extended, *consequently* there must be plurality of substances.

There must be entelechies dispersed throughout matter, because centres of force are so dispersed.

Moreover, space and time are orders of the *possible* as well as of the actual, and must therefore have a meaning independent of things.

<sup>168</sup> **G.II.372.** Cf. “Marginalia”, p. 40; *PL*, p. 122.

<sup>169</sup> **G.I.61.** Cf. *PL*, p. 123.

<sup>170</sup> **G.I.52–4.** Cf. *PL*, p. 123.

<sup>171</sup> Moore, like Russell at *PL*, p. 124, spells it “ubiety”.

<sup>172</sup> DUNCAN, pp. 245–6; **G.VII.365–6.** Cf. “Notebook”, pp. 35–6; *PL*, p. 124.

<sup>173</sup> **G.III.357.** Cf. *PL*, p. 125.

<sup>174</sup> **G.II.372.** Cf. *PL*, p. 125.



Similarly, space and time existed in some other way after than before creation.

Thus, there are (1) Space and time in mind of God's, independent of creation (2) Space and time in mind of each monad (3) Objective space and time, as created.

(3) is still relational: "There are simple substances, actually separated from one another by activities of their own."<sup>175</sup>

### Common qualities of all Monads

fol. 44

(1) Perception (2) Appetition

"Monads cannot have shape, since they have no parts. Therefore they must be distinguished by the difference of their internal states."<sup>176</sup>

"Since world is a *plenum*, all things are connected together. Hence everything must have representation of other things, as real counterpart of this connection."<sup>177</sup> (This only holds on premiss that there is a world external to Leibniz himself.)

"What is miraculous is that each monad mirrors world from its own point of view."<sup>178</sup> That this is so is act of God.

"Perception is the expression of a multitude in a unity",<sup>179</sup> i.e. simultaneous representation in one substance of many substances.

*New Essays*, 716–17. "One thing *expresses* another, when there is a constant and regular relation between what can be said about the one and what about the other."<sup>180</sup>

"It suffices that what is divisible and material be expressed in one indivisible being."

"It is not necessary that what expresses be similar to what is expressed, provided a certain analogy of conditions be observed."

Perception might seem indistinguishable from Pre-established Harmony: One state of monad corresponds to simultaneous state of others. But what distinguishes perception is the sort of synthesis perception implies.<sup>181</sup>

(2) *Appetition*. Force is nature of substantial forms, and force is similar to volition or desire. fol. 45

Perceptions spring from one another according to law of good and evil, i.e. law of appetites.

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<sup>175</sup> DUNCAN, p. 209; **G.VI.598**. Cf. *PL*, p. 130.

<sup>176</sup> DUNCAN, p. 209; **G.VI.598**. Cf. *PL*, p. 131.

<sup>177</sup> DUNCAN, p. 210; **G.VI.599**. Cf. "Notebook", p. 33; *PL*, p. 131.

<sup>178</sup> **G.III.464**. Cf. *PL*, p. 132.

<sup>179</sup> **G.III.69**. Cf. *PL*, p. 132.

<sup>180</sup> **G.II.112**. Cf. "Marginalia", pp. 27–8; *PL*, p. 132. The first two of Moore's three quotations come from this source. His reference to *New Essays* is to a different text on the same topic (from **G.VII.263–4**) which LANGLEY includes in his long Appendix to the book. The third of Moore's quotations is found there.

<sup>181</sup> "In one substance" is written on the facing page opposite the last two sentences.

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Leibniz's theory of perception is antithesis of Kant's: That things act on mind, but are unknowable.

"I do not believe any system is possible in which monads interact. Besides what would be the use, since they could only give one another, what they have already."<sup>182</sup>

"The idea of each single substance always expresses all the universe."<sup>183</sup>

"I don't assent to the vulgar notion that the images of things are conveyed by the organs of sense to the soul.—It is only necessary to state such doctrines, to see how very vulgar they are."<sup>184</sup>

To explain how perceptions correspond to that to which they are not due, he invented crown of system Preestablished Harmony. This was suggested by course of Cartesian philosophy: his relation between two monads is same as that between body and mind.

His superiority to Malebranche was that in Malebranche matter was purely passive. God acts on matter on occasion of each of our volitions.

But Geulincx and Spinoza have many of the advantages of Leibniz: e.g. Spinoza *Ethics* Bk. II. prop. 12.<sup>185</sup>

God needs only to make a simple substance once, at beginning, mirror of universe: at all future times it will do so of itself. fol. 46

Lotze says one monad might gain on another.<sup>186</sup> But Leibniz answers him against Clarke: "Quantity of happening is proportional to quantity of time: no compression is possible."<sup>187</sup>

Again says Lotze (§§)63–7, on independence of monads.

"I cannot admire 'monads have no windows' because I find it curtly excludes what was still in question."<sup>188</sup> But there is no curtness in Letters to

<sup>182</sup> **G.II.503.** Cf. *PL*, p. 134.

<sup>183</sup> This seems to be Russell's paraphrase of Leibniz's position. The text which comes closest to it is the heading to §9 of the *Discourse on Metaphysics*: "That each singular substance expresses the whole universe in its own way, and that in its concept are included all of the experiences belonging to it together with all of the circumstances and the entire sequence of exterior events." But it is unlikely that Russell knew this text. His source for the *Discourse* was **G.IV.427–63**. Gerhardt, however, printed a version of the text which did not include the section headings.

At this point in Moore's notes there is a charming doodle of two birds.

<sup>184</sup> **DUNCAN**, p. 275; **G.VII.410.** Cf. *PL*, p. 135. The second sentence, however, is Russell, not Leibniz.

<sup>185</sup> Russell quotes the proposition and explains its relevance at *PL*, p. 137. On the facing page, opposite the last two lines, Moore asked: "How about passivity of matter in Spinoza?"

<sup>186</sup> **LOTZE**, *Metaphysic*, §66, I: 156–7.

<sup>187</sup> **DUNCAN**, p. 281; **G.VII.415.** Cf. "Notebook", p. 39; *PL*, p. 138.

<sup>188</sup> **LOTZE**, §63, I: 150. Cf. *PL*, p. 135 where Russell replies by citing "the array of logical arguments set forth in Chapters II–IV above, proving that, if there be substances at all, each must be the source of all its predicates". Leibniz presented his arguments at length in his long letter of 14 July 1686 to Arnauld (**G.II.47–59**).

Arnault (*sic*). Lotze himself alternately asserts thesis and antithesis of causal antinomy.<sup>189</sup>

### Soul and Body

DesCartes thought soul could act directly on body by altering direction of motion of animal spirits.

But, say followers, *if* they are distinct substances, they can't interact.

Hence (1) Occasionalism (2) Spinoza.<sup>190</sup>

Spinoza held mind and matter to be each an attribute of one substance, and that soul was idea of body.

Leibniz's discovery that one substance could not be extended prevents him from holding these views.

Since nothing is real but monads, body is appearance of infinite number of monads.

Monads differ in clearness of perceptions, and those with clearer are |are *fol. 47*  
(*sic*) more active. I.e. when change in one monad *explains* change in other, the former is more active. This is how my soul stands in relation to monads of my body. In this sense is it dominant.

There are three classes of monads: (1) Bare monads (2) Souls (3) Spirits.

(1) = forms or entelechies, have a bare minimum of desire and perception  
(2) have memory and "feeling" (i.e. perceptions accompanied with pleasure and pain). These belong to animals.

(3) = rational souls, which man and his superiors have. These have self-consciousness or apperception, and also know eternal truths i.e. mirror God. As able to do this, they compose the city of God, in relation to which alone God is good.

Domination in monads, considered in themselves, is simply greater clearness of perception.

Changes in one monad are *ideal* causes of those in other, when changes in that other were provided by God only for sake of that one. In so far as soul is perfect or has clear perceptions, body is subject to it; in so far as imperfect it is subject to body. Creature *acts*, in so far as perfect; *suffers*, in so far as imperfect. Action is therefore attributed where perceptions are distinct, passion where they are indistinct. *Action* accounts *a priori* for what happens in other monads.

<sup>189</sup> Russell states "the antinomy of causation" thus: "that every element of the present must have its effect, while yet no effect can be affirmed without taking account of the *whole* present" (*PL*, p. 136). He claims that Lotze asserts the thesis in dealing with plurality, in particular, in making his claim that the unity of a thing is the law that connects its changeable states together (LOTZE, §32; cf. "Marginalia", p. 34), and its antithesis when he considers the unity of things (Bk. I, Ch. VI). Russell's general conclusion is that there is "as good ground for Monadism as for Monism, and a Monadist must, with Leibniz, maintain the mutual independence of substances" (*PL*, p. 136).

<sup>190</sup> Cf. *PL*, p. 140.

This theory is where Leibniz comes nearest Spinoza.

Among monads only spirits are ends-in-themselves. *Actual* sufficient reasons are always volitions either of God or free spirits, | and this reason is always a perception of good. Hence we should always act rightly, if we judged rightly. Evil is a *possible* sufficient reason for actions. fol. 48

In sensation we do not perceive causation to be internal, and hence in this our perception is unclear and passive. Leibniz undoubtedly wants his distinction between active and passive to cover cases ordinarily so distinguished.

Changes in subordinate monads are mere means; they have no sufficient reason except goodness of correlated change in superior monad. But when free monad chooses evil, through confusion, the final cause must lie elsewhere.

What is *materia prima*? It must correspond in physics and mind.

- (1) Primitive entelechy, active principle.
- (2) Primary matter or passive principle.
- (3) Soul composed of these two.
- (4) Mass or organic machine, which is aggregate or secondary matter.
- (5) Corporeal substance, which is soul and body.

*Materia prima* is that which, together with repetition, makes *materia prima* in dynamics. It is passivity and finitude. God could deprive monad of secondary matter, but *materia prima* is metaphysically necessary, since without it monad would be *actus purus* or | God. fol. 49

Letter to Arnault (*sic*), Leibniz first uses *materia prima* "in sense of scholastics".<sup>191</sup>

Monads, as passive, are foundations not only of actions, but also of resistances and possibilities. Resistance is always internal.

Spinoza says "That is finite which can be limited by another thing of same kind"<sup>192</sup>; hence his finite is not independent.

But Leibniz's implies no relation. Each monad is limited only by itself. And God is not the sum of finite things, as in Spinoza. This is necessary for plurality of substances.

World can be conceived clearly, only as God perceives it. But it may be conceived confusedly in infinite number of ways. Hence, by Identity of Indiscernibles, there can't be more than one God.

- (1) Impenetrability corresponds to point of view.
- (2) Inertia corresponds to resistance offered by matter to new perception.
- (1) Point(s) of views are nothing to God: they are parts of confused perception.

(2) Confused perception does not produce same result as if it were clearer.

But repetition of internal *materia prima* cannot produce extension.

Angels can't be disembodied, because then they would be outside order of space and time.

Organic body is not mere mass of secondary body, since it has dominant fol. 50

<sup>191</sup> **G.II.120.** Cf. "Marginalia", p. 29; *PL*, pp. 144–5.

<sup>192</sup> *Ethics*, Pt. I, Def. II. Cf. *PL*, p. 145.

monad, by relation to which it acquires a kind of unity.

Natural machine is machine into smallest parts; whence we see superiority of divine over human workman.

Dominant monad perceives everything within given volume more clearly than any one of them does.

Bodies are in perpetual flux. There may be no same monad in us now, as at birth.

Bodies act as if there were no souls, souls as if there were no bodies, and each as if they influenced each other.

They don't interact but only agree, the one freely according to final, the other according to efficient causes.

## Second Theory

There are passages contradictory both to this simple theory and to his general philosophy. (Dillmann)<sup>193</sup>

Mind and body on this view are *one substance*. Body by itself is mere aggregate, but soul makes it more.

Against this, Duncan 177. "Same substance thinks and has extended mass joined to it, but it does not consist of this, since body can be taken away, and yet substance remain the same."<sup>194</sup>

*For*: Entelechy always naturally actuates some organic body, which, apart from soul, is mere aggregate.

Every created monad is endowed with organic body.

"Bodies, which are *unum per se*, like man, are substances and have substantial forms."<sup>195</sup> fol. (51)

"Body is actually divided, i.e. consists of number of invisible animals or plants, each of which is composed of other aggregates, except for that which gives it also real unity."<sup>196</sup>

So with *vinculum substantiale*, against Desbosse's (*sic*) charges of heterodoxy.<sup>197</sup> Christ's *body* must be in some sense one substance; and Leibniz suggests *vinculum substantiale*, as possible, though not accepted by him.

"If corporeal substance is something real beside monads, as line is beside points, we shall have to suppose it something which really unites and is added by God to monads. That from union of passive powers, *materia prima* arises; but from union of entelechies substantial form arises, which form however

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<sup>193</sup> DILLMANN, *Eine neue Darstellung der Leibnizischen Monadenlehre auf Grund der Quellen* (1891). Cf. "Marginalia", pp. 38–9; *PL*, pp. 147–51.

<sup>194</sup> DUNCAN, p. 177. Cf. "Notebook", p. 31; *PL*, p. 150.

<sup>195</sup> **G.IV.459.** Cf. *PL*, p. 150.

<sup>196</sup> **G.IV.492.** Cf. *PL*, pp. 150–1.

<sup>197</sup> Cf. "Marginalia", p. 41n. Des Bosses, with whom Leibniz discussed this idea, persuaded him it was not acceptable to Catholic orthodoxy. Leibniz himself, a Lutheran, never advocated it.

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would not be a soul.”<sup>198</sup>

This is only useful, *if* faith leads to corporeal substance. It would serve to unite Catholicism with Monadism.

Leibniz’s other assertions of corporeal substance may also be due to theology.

Arnauld says “Soul joined to matter does not make soul.”<sup>199</sup>

Leibniz replies: “Those who will not admit souls in beasts, can yet explain truth of my theory of soul and body. But it remains for them to explain real unity there is in body.”<sup>200</sup>

He has, in short, no reason to suppose that what appears as matter is really monads.

This doctrine should be connected with doctrine that soul is present in volume, not in point. For other souls are similarly present in parts of body. *fol. (52)*

Moreover every monad occupies at least a physical point, since space is plenum. And volume occupying this may be an organic body.

All this is substantially Erdmann’s views.<sup>201</sup>

### Details of Monadism

*Preformation.* Every monad is eternal, and therefore *I* must have existed from all time. *I* must therefore have formed part of body of one parent—he doesn’t say which. Here it exists either as sensitive monad, or with elementary, i.e. infinitesimal, reason. In former case, miracle is necessary to give monad reason at time of generation. He is anxious we should *continue* rational.

He cannot explain equal influence of both parents, any more than could Weismann’s continuity of germ plasm.<sup>202</sup>

*Points of view.* When one monad changes its point, that is absolute motion: when other monad perceives change that is relative.

God has no points of view, and no point of view is clearer than another.

We change *also* in degree of clearness of perception, e.g. in sleep and death.

<sup>198</sup> **G.II.458.** Cf. *PL*, p. 151.

<sup>199</sup> Arnauld does not say this. He objects to Leibniz that an indivisible form or soul added to a divisible body will not make it any the less divisible. “But divisibility is contrary to unity; it therefore does not have true unity” (to Leibniz, 4 March 1687; WOOLHOUSE AND FRANCKS, *Leibniz, Philosophical Texts* [1998], p. 122). So in effect he is saying “Soul joined to matter does not make matter a unity.”

<sup>200</sup> **G.II.127.** Cf. *PL*, pp. 152–3.

<sup>201</sup> J. E. ERDMANN, *Philosophie der Neuzeit* (1878). Cf. *PL*, p. 154.

<sup>202</sup> Cf. *PL*, p. 154. August Weismann (1834–1914), German biologist and one of the early pioneers of genetics. Before genes, chromosomes and DNA were known, he proposed that the germ cells of animals contained something (germ plasm) essential for the species that was passed on from generation to generation. Since both parents passed on germ plasm, the embryo would be apt to end up with an over-supply. Weismann, accordingly, postulated that each parent contributed only half of its germ plasm to the embryo. Russell’s library contains a copy of WEISMANN, *The Germ-Plasm* (1893), inscribed August 1895.

*Apperceptions.* We are never without perceptions, but often without apperception or self-consciousness.

Locke supposed nothing could be in mind of which mind was not conscious. Leibniz points out absolute necessity of unconscious mental states.

They prevent an "indifference of equilibrium".

Locke's argument would prove we know nothing we are not actually thinking of.

Besides "It is impossible for mind to reflect on all its thoughts, for that would go to infinity."<sup>203</sup>

Leibniz identifies (1) unconscious perception (2) confused perception (3) minute perception (4) psychical disposition.

(1) is proved by endless regress. And it is required by mirroring universe.

(2) is required for theory of sense perception, and also for differences between monads.

(3) is required for theory that perception has as many parts as that which is perceived.

(4) explains sense in which truths are innate (very like Kant's form of activity).<sup>204</sup>

Three last follow from (1).

(2) is such that "we are not separately conscious of all its parts."<sup>205</sup> "I cannot enumerate separately the marks required to distinguish thing known from other things."<sup>206</sup> This is because parts at least are unconscious.

(3) From this it follows that everything of which we are conscious is composed of elements of which we are not conscious.

(4) Locke denied any truth could be innate, because all we know is learnt by experience. Leibniz replies that innates are always in mind, always perceived but not apperceived, except on occasion of sensations.

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### Theory of Knowledge

*fol.* (54)

Psychological question, and, as Leibniz says, not "preliminary". Yet we are dealing with knowledge only, hence not with all belief, but with some only.

Innate ideas. Leibniz only holds necessary truths to be so, in a special sense against Locke. Like a Copernican talking of sunrise, he will talk as if some ideas were derived from sense.<sup>207</sup>

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<sup>203</sup> LANGLEY, pp. 118–19; **G.V.108**. Cf. "Notebook", p. 6; *PL*, p. 156.

<sup>204</sup> Cf. *PL*, p. 157, where Russell says that Leibniz holds that truths are innate in a sense "very much like that in which Kant's *à priori* is in the mind".

<sup>205</sup> LANGLEY, p. 120; **G.V.109**. Cf. *PL*, p. 157.

<sup>206</sup> DUNCAN, p. 27; **G.IV.422**. Cf. "Notebook", p. 20; *PL*, p. 157.

<sup>207</sup> Cf. *PL*, p. 161.

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An innate eternal<sup>208</sup> truth is one in which *all* the ideas are not derived from sense. E.g. sweet is not bitter is not for him an eternal truth.

How can Leibniz distinguish sense-knowledge?

(1) They can't be given.

(2) They ought not to be what *corresponds* to an external world, since God has none.

(3) Gerhardt IV.452. They are ideas in which we are passive, i.e. which represent their object less clearly than does something else.<sup>209</sup>

"Distinct ideas are representation of God, confused ideas are representation of universe."<sup>210</sup>

Sense-ideas are therefore those extended in space.

But space itself is not such. It is idea derived from reflection denoting something that is actual in our mind, and denoting it in this case perfectly clearly, not confusedly.

"*Nisi ipse intellectus.*" The soul is innate to itself and contains essentially certain ideas—a long list.<sup>211</sup> fol. (55)

You can't suppose in case of necessary truths that our knowledge is caused by them, since they are not causes.

This theory that Space, Time and Categories are innate, whereas qualities which appear in Space are not innate; is not of a piece with Leibniz's doctrine of monads.

When knowledge is of something now, there is temporal relation between knowledge and object, hence perhaps causal one; but this can't be so in necessary truths: *hence* they are innate.

But this involves vicious disjunction: Either knowledge is caused by its object; or it is uncaused.

Moreover our knowledge of innate ideas is usually only virtual; i.e. it can only be said that the mind is *disposed* to know it, which is equally true of sense-perception.

Sense-perception is really a knowledge of proposition and hence can't be caused by object. As cognition of existential proposition alone does it differ from imagination.

*Idea* is in mind, but is not a thought. It is something permanent in the mind, which the mind may think of at any moment.

Leibniz's reason here seems to be simply that an idea does not cease to be, when it ceases to be thought of; since therefore | it must exist, it must exist in mind, since there is no other place for it. fol. (56)

2 can be perceived<sup>212</sup> by several people at same time, and hence cannot be

<sup>208</sup>"Innate" is written above "eternal". It may well have been Moore's (later?) gloss on "eternal".

<sup>209</sup>*Cf. PL*, pp. 161–2.

<sup>210</sup>LANGLEY, p. 109. *Cf. PL*, p. 162.

<sup>211</sup>See LANGLEY, p. 111; "Notebook", p. 6; and *PL*, p. 163.

<sup>212</sup>The number two, of course, cannot be perceived. Russell's point (*PL*, p. 165) is that it could not be *thought of* by several people if it were an idea in the mind.



anything in their minds.

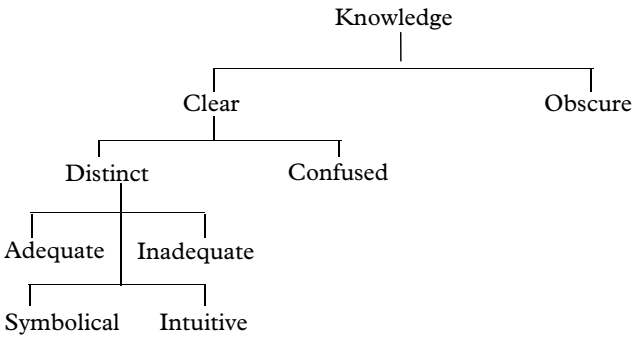
"Truths are not thoughts but habits or aptitudes, natural or acquired."<sup>213</sup>

Green, though it seems simple, is really to be analyzed into blue and yellow.

"Nothing should be taken for principles except experiences and law of identity."<sup>214</sup>

By experiences he always means psychological experiences, thus agreeing with DesCartes; he advances on DesCartes in making necessary truths prior to existence of myself, which is only one among contingent truths, others being statements about my states or thoughts. He does not observe that existence of external objects is equally immediate and certain.

Duncan. 27-32. "Quality of ideas".<sup>215</sup> DesCartes said "Everything clearly perceived is true."<sup>216</sup>



*Obscure* when I can't recognise thing represented or distinguish it from other things. fol. (57)

*Confused* when I can't distinguish separate marks of thing represented. E.g. colours.

*Distinct* when marks are distinguished, or when what is known is ultimate simple notion.

*Symbolical* when we forget parts of object dealt with, and see other parts for whole.<sup>217</sup>

*Real* Definition shews possibility of object defined; *nominal* definition enumerates marks.

<sup>213</sup> LANGLEY, p. 105. Cf. *PL*, p. 166.

<sup>214</sup> DUNCAN, p. 94. Cf. "Notebook", p. 25; *PL*, p. 166.

<sup>215</sup> This phrase is not Duncan's. Russell uses it (*PL*, p. 167) as an established label for the doctrine Leibniz puts forth in "Thoughts on Knowledge, Truth and Ideas" (1684; DUNCAN, pp. 27-32). Cf. "Notebook", pp. 39-40; *PL*, pp. 167-8.

<sup>216</sup> Descartes, *Principles of Philosophy*, xxx: "everything that we clearly perceive is true" (1985 edn., I: 203).

<sup>217</sup> Moore wrote "hold", but even with this mistake corrected, his account is wrong. In symbolical ideas a symbol, not one of its parts, is substituted for the whole. Cf. "Notebook", p. 20 and n. In the diagram above, "Simbolical" is silently corrected.

*Real* either (1) points to existence of object (2) where knowledge is adequate, can deduce this *a priori*, by absence of contradiction.

Nature has determined whether baby is human, i.e. it is either rational or not, although we may be in doubt; but nature has not determined notion of baldness.

Connected with analytic propositions is *Characteristica Universalis*.

Euclid's axioms ought to be reduced to Analytic propositions.

This is very like Symbolic Logic, which was actually developed by Boole, *fol.* (58) as if it dealt with laws of thought.<sup>218</sup>

### Theory of God and Ethics

Weakest part of system.

Even avoidable difficulties he leaves in order that Creator may have something to do.

Four arguments for God's existence

(1) Ontological (2) Cosmological (3) from eternal truths (4) from Preestablished Harmony (his own invention)

(1) Invented by Anselm, adapted by DesCartes.

This and 3 are only arguments *formally* capable of proving God's existence necessary. For necessary existence cannot be deduced from a contingent truth.

Anselm's form: God has all perfections, and existence is among perfections. That most perfect being does not exist is self-contradictory proposition.

Same results follow from definition of God either (1) as *ens realissimum* or (2) as *omnitudo realitatis*.

Leibniz objects to Cartesian form that it does not prove that God is possible. For "most real" may involve contradiction, just as "greatest space" does. (DesCartes had actually tried to prove this.<sup>219</sup>)

He agrees that *if* God is possible, he exists.

He proves possibility (1) by argument that contingent being could not be possible, if necessary were not.

(2) by *a priori* argument that he contains no negations, but only positive predicates. See "That the most perfect being exists" (Gerhardt VII.)<sup>220</sup>

(2) Every quality, which is absolute, positive and indefinable, is a perfection, and all such can without<sup>221</sup> contradiction be predicated of one and the same subject. *fol.* (59)

<sup>218</sup> See BOOLE, *An Investigation of the Laws of Thought* (1854). Russell would also have been thinking of WHITEHEAD's presentation of Boole's theory, *sans* the psychologism which Russell derides here, as the algebra of symbolic logic in his *Universal Algebra* (1898).

<sup>219</sup> Cf. his reply to the Second Set of Objections, *Writings*, 2: 107–8.

<sup>220</sup> G.VII.261–2. Cf. *PL*, pp. 173–4.

<sup>221</sup> Moore wrote "with", but clearly intended "without".

This is evident on doctrine of analytic judgments. For two predicates cannot be shewn to be incompatible, unless they can be resolved. Hence simples can't be incompatible.

This argument is valid: God, thus defined, is possible.

But ontological argument depends on taking existence as a predicate. Whereas with finite things Leibniz always holds existential propositions to be synthetic, i.e. in these cases existence is not contained in the subject.

Two subjects one of which has given predicate and other hasn't cannot be exactly alike, as possible world is to actual world. Hence existence can't be regarded as predicate.

(2) *Cosmological*, more plausible, because it conceals its implication of ontological. It is *a posteriori*.

Starts with premiss "Something exists", which, being contingent, cannot give necessary conclusion. A necessary truth may of course be *involved* in contingent truth; but to shew this is not proof, for it is not deductive. It can at best be argument *ad hominem*, to one who will admit existence of something; for you cannot prove existence of something except by ontological argument.

fol. (60)

Causality can only give reason for one contingent state; we must therefore find reason for sum of contingent states, which can itself not be contingent.

But reason for what exists must itself exist.

Hence we have non-contingent existent.

Criticism. But it is only reason of contingent existent, which must itself be existent. But reason of contingent is only one which inclines, not necessitates. Hence God's volitions are contingent; and their sufficient reason is his goodness, which again inclines, but not necessitates.

To say that whole world of contingents is itself contingent, is to attempt exclusion of pantheism. For it is just as good an argument that since only finite is conditioned, sum of conditions can have no condition; and this is pantheism.

Something must be true; but truth means only "Something exists"; but it is self-contradictory that every proposition should be false; therefore it is self-contradictory to suppose nothing exists. (This is Bradley's mixture of ontological and cosmological.<sup>222</sup>)

Leibniz does not obviously use existential theory of judgment.<sup>223</sup> He holds that there are necessary propositions about merely possible worlds. But this he will only hold, on condition that they exist in mind of God. Thus of relations *esse* is *percipi*.

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<sup>222</sup>See BRADLEY, *Appearance and Reality*, p. 350. Bradley's argument is an argument for the existence of the Absolute, not of God. It was this argument that played a key role in Russell's conversion to neo-Hegelianism in 1894. See GRIFFIN, *Russell's Idealist Apprenticeship* (1991), pp. 70-8.

<sup>223</sup>The existential theory of judgment holds that every true proposition implies the existence of something. Thus, since some proposition must be true, something must exist.

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(3) “Confused ideas represent universe, clear ideas represent God.”<sup>224</sup> I.e. eternal truths, which rational spirits mirror|are part of God. “Without him, there would be nothing real in possibilities” (*Monadology* 43).<sup>225</sup> fol. (61)

But this argument confuses God’s knowledge, with the truths that he knows. Whereas against Spinoza he says

“It can no more be said that God and things known by God are the same, than that mind and things it perceives are the same.”<sup>226</sup>

Moreover “God cannot be conceived without essences, and essences can be conceived independently of God.”<sup>227</sup>

Moreover God’s existence is proved, and there must therefore be some ground for truth of that, which is other than God’s knowledge.

Moreover Good must be independent of God’s will; for it is sufficient reason of his will. Says Leibniz: “Who would dare to say that God’s existence depends on his will?”<sup>228</sup> to which retort “Who would dare to say that God’s existence depends upon his understanding?”

Moreover God’s existence is deduced from Law of Contradiction, and must therefore be logically subsequent to it.

Finally “Propositions exist in mind of God”,<sup>229</sup> i.e. God is not subjected to them. But on other hand, he talks of eternal truths as “objects” of God’s knowledge. If truths are God’s|state of mind, then God is incapable of knowledge since it is only we who know the truths, i.e. know God, whereas God is merely that which can be known. fol. (62)

If God were collection of truths, there would be no room for God’s will, i.e. Leibniz’s view would be<sup>230</sup> Spinozism; but if God were knowledge of such collection, then they would be independent of him.

Eternal truths would not subsist, if there were no understanding.

Encouraged by Kant, exalted by Hegelianism into first principle.<sup>231</sup>

It becomes self-contradictory to deny knowledge; hence there must be Mind.

<sup>224</sup> LANGLEY, p. 109.

<sup>225</sup> DUNCAN, p. 224. Cf. “Notebook”, p. 34.

<sup>226</sup> DUNCAN, p. 177. Cf. “Notebook”, p. 31; *PL*, p. 179.

<sup>227</sup> DUNCAN, p. 175. Cf. “Notebook”, p. 31; *PL*, p. 178.

<sup>228</sup> **G.VII.310–11.** Cf. *PL*, p. 179.

<sup>229</sup> DUNCAN, p. 103. Cf. “Notebook”, pp. 26–7 and n.; *PL*, p. 180.

<sup>230</sup> “Leibniz’s view would be” is inserted above the line in a different ink. The notes continue in the new ink, starting with the next sentence.

<sup>231</sup> I.e., the view that eternal truths are the work of the mind was encouraged by Kant and turned by Hegelianism into a first principle. Cf. *PL*, p. 181. Russell is arguing that if truths subsist because God knows them then it would be as contradictory to deny knowledge, and thus the mind that has it, as to deny truth. Beyond the minds of ordinary mortals, which exist only contingently, there must therefore necessarily exist Mind, i.e. God or, for the Hegelians by a parallel argument, the Absolute. Cf. *PL*, pp. 181–2.

Leibniz's argument to God is only a theological form of Hegelian (argument) to Mind. Same objections apply to latter. But empiricists are worse,<sup>232</sup> since they refuse to draw this conclusion from the premiss they accept that truth does depend on knowledge.

This argument, like Cosmological, rests on existential theory of judgment. It involves "What does not exist, is nothing" or "What does not exist is meaningless."

Truth is something, therefore exists. But, as such, it doesn't exist. Therefore it exists as knowledge, which can exist.

Leibniz thinks actual not coextensive with possible, and this view is essential to contingency and freedom. But these two proofs of God are contradictory to this view. For "non-existent is possible" can only mean "God believes them actual", i.e. God's belief is false.<sup>233</sup> Hence comes Spinoza's "Only the existent is possible" and contingency disappears. fol. (63)

(4) Proof from Preestablished Harmony, a particular form of Physico-theological argument.<sup>234</sup> Most inadequate, and therefore most popular.

Christian God has to be Providence and Creator. Leibniz merges first in second, though he denies it, and says God, as immediate external object of soul, may, though he seldom does, influence it directly. But consistently Leibniz can only say that God's Providence was shewn in making best possible world.

God's wisdom consists in knowledge of all truths both necessary and contingent. But only necessary are prior to God's will. Knowledge that so and so is good is necessary.

*Power* is required to create world, and power is an attribute we don't possess. God can't alter notion of substance, without infringing law of identity. What he can do is make it exist. He chose to create such monads as would harmonise.

If cosmological argument is true, this proof is unnecessary.

But, moreover, creation of substance is inconsistent with ontological argument. For, by this, existence must be predicate of God. Hence existence is predicate, and must be predicate of anything which exists (*New Essays*, 431<sup>235</sup>). But he also has theory, that substance eternally possesses all its predicates. Therefore it follows that no substance can be created: to add existence is as metaphysically impossible as to add any other predicate. Either, therefore, creation or a creator is impossible. If we take ontological argument, God must be Pantheistic—Monism; if we reject it, Monads must be independent, fol. (64)

<sup>232</sup>Moore wrote "are worse" after "have both this and the denial of universal truth against these", which he deleted.

<sup>233</sup>The argument is differently formulated at *PL*, p. 183. The existential theory of judgment, on which, according to Russell, Leibniz's arguments for God depend, is the crucial premiss here. On that theory "the non-existent is possible" cannot be an ultimate truth.

<sup>234</sup>I.e., the argument from design.

<sup>235</sup>The correct reference is p. 401 (*cf. PL*, p. 185, and "Notebook", p. 15).

hence Atheism.

Gerhardt IV.439 “God produces created substances continually by a sort of emanation as we produce our thoughts. He sees universe from every point of view, and this perception is substance from that point of view, if God also makes his thought effective.”<sup>236</sup>

Erdmann says Leibniz says “Everything is product of God and nothing.”<sup>237</sup> World on this view is indiscernible from God.

“It is possible to maintain that only primitive substance is substance. But to use it in wider sense is legitimate, and, if it succeeds useful.”<sup>238</sup>

Twice, by a slip God is spoken of as monad: primitive or primary monad, deprived of passions or affections.<sup>239</sup>

*Monas monadum* was used by Bruno,<sup>240</sup> and Hegel supposed that Leibniz used it too.

*Inconsistencies are therefore* (1) Only ontological can prove God’s|existence as necessary truth. But this is inconsistent with Leibniz’s doctrine of nature of existence involved in his view of the finite. fol. (65)

(2) Cosmological depends on existential theory of judgment, and this is inconsistent with separation of possible and actual.

(3) “Truth of propositions results from being believed” is false, and renders it meaningless to say that God has any knowledge of the truth.

(4) If creation is possible, ontological argument is unsound. God’s own existence is contingent, itself requiring a reason which inclines without necessitating.

### God’s goodness

Most philosophers suppose that this follows from God’s existence. Leibniz tries to prove metaphysical perfection, but not goodness.

“Perfection” denotes any simple predicate. *Monadology* 40, 41 “God is absolute perfection, perfection being nothing but magnitude of positive reality,

<sup>236</sup> Cf. *PL*, p. 186.

<sup>237</sup> Cf. ERDMANN, *Geschichte der neuern Philosophie* (1842), 4: 64. Erdmann cites “On the True *Theologica Mystica*” in G. E. GUHRAUER, ed., *Leibniz’s Deutsche Schriften* (1838–40), 2: 410–13, citing in particular p. 411 where Leibniz writes: “All creatures derive from God and from nothingness [*Nichts*]” (LOEMKER, p. 609). Russell added this remark and citations to both Erdmann and Guhrauer to the manuscript of his lectures (folio 281, and the following folio, misnumbered as 257 [originally fos. 7 and 7a, respectively]); cf. BLACKWELL AND GRIFFIN, this issue, p. 220, textual notes for 186: 26), and they all appear with slightly different wording in the proofs (*ibid.*, p. 239, textual note for 186: 26), but for unknown reasons the entire passage was omitted from the book.

<sup>238</sup> **G.II.232.** Cf. *PL*, p. 187.

<sup>239</sup> **G.III.636; G.VII.502.** Cf. “Marginalia”, p. 60 and n.

<sup>240</sup> As a description of God. The phrase means “monad of monads”. Cf. “Marginalia”, p. 60 and n.

strictly understood.”<sup>241</sup> But this must involve God’s infinite badness, unless evil is privative. “The devil” says Leibniz “is limited.”<sup>242</sup>

Badness is finite.

### Ethics

God’s goodness metaphysically necessary sufficient reason for God’s good actions.<sup>243</sup> These are contingent and ground of all other|contingents.

fol. (66)

Leibniz has thought very little about Ethics, although clear notions more essential to proper use of “final causes”.

(1) Freedom and Determination (2) Psychology of volition (3) Nature of Good.

“Freedom is ambiguous” (*New Essays*) “Freedom of *will* is understood in two senses. In (a) it is opposed to slavery of spirit, which is internal like that arising from passion. God is thus free, but we only in so far as we are superior to passions. This depends on understanding. But (b) depends on naked will, so far as distinguished from understanding. The strongest reasons understanding can present do not carry metaphysical necessity (i.e. it is not self-contradictory to will otherwise).”<sup>244</sup>

(a) is sense in which we are “active”.

(b) alone is relevant to free will.

Leibniz recognizes that all psychical events have their causes, and that prediction is theoretically as possible here as in physical world. “Future must be determined in sense, that some statement of what will happen must be true or false.”<sup>245</sup>

But although volitions have always same cause, they are not necessary effects of this.

Liberty of indifference is rejected, both as contrary to morality, and on ground of imperceptible motives. Latter ground is also|urged against introspective evidence for freedom.

fol. (67)

Beasts have “spontaneity” not “freedom”; but even from this it would seem that sufficient reason of their changes lies in themselves. But in that case they only fail of freedom, in that they are not moved by knowledge of good, i.e. by understanding.

(2) “Uneasiness is essential to created being’s happiness, which consists in complete possession.”<sup>246</sup>

Action is passage to greater perfection, and pleasure consists in this.

What is good is cause of joy.

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<sup>241</sup> **G.VI.613.** Cf. *PL*, p. 189.

<sup>242</sup> **G.VI.378;** DUNCAN, p. 196. Cf. “Notebook”, p. 32; *PL*, p. 189.

<sup>243</sup> Moore wrote “good actions” after deleted “goodness”.

<sup>244</sup> LANGLEY, pp. 179–80. Cf. “Notebook”, p. 9; *PL*, pp. 191–2.

<sup>245</sup> **G.VI.123.** Cf. “Notebook”, p. 40; *PL*, p. 192.

<sup>246</sup> LANGLEY, p. 194. Cf. “Notebook”, p. 10; *PL*, pp. 194–5.

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Naturalistic<sup>247</sup> Psychological Hedonism, too, he may avoid. Instinct only tends to present joy, not to felicity; whereas reason prompts us to latter.

He probably means not that instinct *justifies* pursuit of joy, but that our pursuit of joy is based on unconscious perception of what is good.

“We shall always act rightly, if we always judge rightly.”<sup>248</sup>

Our thoughts are mostly mere “surd” thoughts, purely symbolical, and incapable of moving us;<sup>249</sup> but<sup>250</sup>

“We must make a rule to follow reason, even though it be only known through surd thought.”<sup>251</sup>

But all sin is really for Leibniz original sin—confusedness | of original perceptions. fol. (68)

(3) Three kinds of good and evil (a) metaphysical (b) moral (c) physical.

(a) has no ethical meaning, and yet (b) is deduced from it.

(a) evil consists in “simple imperfection”, (c) “in suffering”, (b) “in sin”.

(b) and (c) are not necessary but in virtue of eternal truths are possible. World is best possible, in sense that though there is evil in it, there is also more good.

If God is, whence evil? if not, whence good?—We, who derive all things from God, “whence shall we find source of evil? It must be sought in ideal nature of creature. For we must consider there is original imperfection in creature, anterior to sin, because creature is originally limited. Hence he can be mistaken and commit other faults.”<sup>252</sup>

Hence (a) is source of sin and pain.

Spinoza does sometimes distinguish metaphysical perfection from good, but on other hand he often uses first as sufficient reason.<sup>253</sup>

Moreover moral perfection is only *species* of metaphysics. “World is not only perfect in that it contains greatest quantity of reality, but also in that minds have perfection which is appropriate to them.”<sup>254</sup>

Leibniz asserts against Spinoza that though a thing have not more predicates, it may be more perfect, if it have them in a higher degree.<sup>255</sup> fol. (69)

“Monads differ from God, as less from more”, hence lowest monad should be worst, which is unorthodox.<sup>256</sup>

<sup>247</sup>“Naturalistic” is inserted between the lines above “Psychological”.

<sup>248</sup>**G.VII.92.** Cf. “Marginalia”, p. 72; *PL*, p. 196.

<sup>249</sup>LANGLEY, p. 191. Cf. “Notebook”, p. 10; *PL*, p. 196.

<sup>250</sup>Moore deleted “to be moved by them is (illegible word)” at the conclusion of this sentence. The thought is taken up by the quotation which follows.

<sup>251</sup>LANGLEY, p. 193. Cf. “Notebook”, p. 10; *PL*, p. 196.

<sup>252</sup>**G.VI.114–15.** Cf. *PL*, p. 198.

<sup>253</sup>In his *Ethics* Spinoza identifies perfection with “power of acting” (see *Ethics*, Pt. III, prop. XI, and Pt. IV, pref.), which would seem to make it more metaphysical than moral; nevertheless, joy or pleasure (*laetitia*) is defined as “that passion by which the mind passes to a greater perfection”, and sadness or sorrow (*tristitia*) as “that passion by which it passes to a lesser perfection” (*Ethics*, Pt. III, prop. XI, scholium).

<sup>254</sup>DUNCAN, p. 104. Cf. “Notebook”, p. 27; *PL*, p. 199.

<sup>255</sup>**G.I.144.** Cf. *PL*, p. 200.

<sup>256</sup>**G.II.125.** Cf. *PL*, p. 200. The view is unorthodox because it would imply that the



Yet again: "Being is better than not-being."<sup>257</sup>

So Spinoza. "By reality and perfection, I mean the same thing."<sup>258</sup>

Evil must be a positive predicate. It was thought not to be so, largely owing to doctrine of "analytic propositions", since it was seen that good and evil were exclusive<sup>259</sup> predicates.

Only spirits of monads are ends-in-themselves; but there are other ends that are not monads. As architect God seeks order in nature; as monarch he seeks happiness for spirits in nature of grace.

Everything from Sufficient Reason onwards depends, through Ethics, on orthodox theology.

WORKS CITED

- G GERHARDT, C. I., ed. *Die philosophischen Schriften von Gottfried Wilhelm Leibniz*. Berlin: Weidmannsche Buchhandlung, 1875–90; reprint edn., Hildesheim and New York: Olms, 1978. 7 vols. (Russell's Library.)
- ARTHUR, RICHARD T. W. "On the Hegelian Roots of Russell's Interpretation of Leibniz". Unpublished. To be included in a volume of papers on Russell on Leibniz with GALAUGHER and GRIFFIN.
- , AND NICHOLAS GRIFFIN. "Russell's Leibniz Notebook". *Russell* 37 (2017): 5–56.
- , JOLEN GALAUGHER AND NICHOLAS GRIFFIN. "Marginalia in Russell's Copy of Gerhardt's Edition of Leibniz's *Philosophischen Schriften*". *Russell* 37 (2017): 57–142.
- Blackwell, Kenneth, and Nicholas Griffin. "The Texts of *A Critical Exposition of the Philosophy of Leibniz*". *Russell* 37 (2017): 193–244.
- BOOLE, GEORGE. *An Investigation of the Laws of Thought*. London: Walton and Maberley, 1854. (Russell's Library.)
- BRADLEY, F. H. *The Principles of Logic*. London: Kegan Paul, Trench, 1883; 2nd edn., Oxford: Clarendon P., 1922 (repr. 1967). (1st edn., ex-Russell's Library.)
- , *Appearance and Reality*. Oxford: Clarendon P., 1893; 2nd edn., 1897 (repr. 1968). (1st edn., Russell's Library.)
- DESCARTES, RENÉ. *Principles of Philosophy*. In John Cottingham, Robert Stoothoff and Dugald Murdoch, transls. *The Philosophical Writings of Descartes*. Cambridge: Cambridge U. P., 1985. 2 vols.
- DILLMANN, EDUARD. *Eine neue Darstellung der Leibnizischen Monadenlehre auf Grund der Quellen*. Leipzig: O. R. Reissland, 1891.
- DUNCAN, G. M., ed. *The Philosophical Works of Leibnitz*. New Haven: Tuttle, Morehouse and Taylor, 1890.
- ERDMANN, JOHANN EDUARD. *Grundriss der Geschichte der Philosophie*, Zweiter Band, *Philosophie der Neuzeit*. Berlin: Hertz, 1878. (Russell's Library.)
- , *Versuch einer wissenschaftlichen Darstellung der Geschichte der neuern Philosophie*, Vol. 4, Pt. 2: *Leibnitz und die Entwicklung des Idealismus vor Kant dargestellt*. Leipzig: Vogel, 1842.
- GRIFFIN, NICHOLAS. *Russell's Idealist Apprenticeship*. Oxford: Clarendon P., 1991.
- , "What Did Russell Learn from Leibniz?". *Journal for the History of Analytic*

Devil is the least of the monads.

<sup>257</sup> DUNCAN, p. 102. Cf. "Notebook", p. 26; *PL*, p. 200.

<sup>258</sup> SPINOZA, *Ethics*, Pt. II, Def. VI; *PL*, p. 201.

<sup>259</sup> Moore wrote "exclusively", but plainly meant "exclusive".

- Philosophy* 2, no. 1 (2013): 1–11.
- GUHRAUER, G. E., ed. *Leibnitz's Deutsche Schriften*. Berlin: Verlag von Veit und Comp., 1838–40. 2 vols.
- HALL, RUPERT. *Philosophers at War*. Cambridge: Cambridge U. P., 1980.
- HEGEL, G. W. F. *Vorlesungen über die Geschichte der Philosophie*. Vol. 3. Berlin: Duncker and Humblot, 1838.
- KANT, I. *Gedanken von der wahren Schätzung der lebendigen Kräfte*. 1747.
- . *The Critique of Pure Reason*. 1781; 2nd edn., 1787.
- . *Sämmtliche Werke*. G. Martenstein, ed. Leipzig: Leopold Voss, 1867. (Russell's Library.)
- KER, JOHN. *Memoirs of John Ker of Kersland*. 1726. 2 vols.
- LATTA, R., ed. G. W. Leibniz, *The Monadology and Other Philosophical Writings*. Oxford: Oxford U. P., 1898.
- LEIBNIZ, G. W. "A Brief Demonstration of a Notable Error of Descartes and Others Concerning a Natural Law". *Acta Eruditorum*, March 1686.
- . *Disputatis metaphysica de principio individui*. 1663.
- . *Dissertatio de ars combinatoria*. 1666.
- . *Monadology*.
- . "Dialogue between Philarète and Aristote".
- . "On the True *Theologica Mystica*".
- . "On the Ultimate Origin of Things".
- . *New Essays Concerning Human Understanding*. Transl. A. G. LANGLEY. London: Macmillan, 1896.
- . "Thoughts on Knowledge, Truth and Ideas". 1684.
- LOEMKER, L. E., ed. Leibniz. *Philosophical Papers and Letters*. 2 vols. Chicago: U. of Chicago P., 1956.
- LOTZE, HERMANN. *Metaphysic*. Transl. Bernard Bosanquet *et al.* Oxford: Clarendon P., 1878; 2nd edn., 1887. 2 vols. (Russell's Library: German 2nd edn., 1884.)
- MOORE, G. E. "The Metaphysical Basis of Ethics" (1898). In Moore, *Early Philosophical Writings*. Thomas Baldwin and Consuelo Preti, eds. Cambridge: Cambridge U. P., 2011.
- . "The Nature of Judgment". *Mind* n.s. 5 (1899): 176–93. Reprinted in Moore, *Selected Writings*. Thomas Baldwin, ed. London: Routledge, 1993.
- . *Principia Ethica*. Cambridge: Cambridge U. P., 1903 (repr. 1966).
- NADLER, STEVEN. *Spinoza, a Life*. Cambridge: Cambridge U. P., 1999.
- NEWTON, ISAAC. *The Correspondence of Sir Isaac Newton*. H. W. Turnbull *et al.*, eds. Cambridge: Cambridge U. P., 1959–77. 7 vols.
- RUSSELL, BERTRAND. "The Classification of Relations" (1899). In *Papers* 2: 16.
- . *PoM*.
- . *PL*.
- . "On the Nature of Truth" (1907). In *Papers* 5: 14.
- SORLEY, W. R. "Leibnitz, or Leibniz, Gottfried Wilhelm". In *Encyclopaedia Britannica*. 9th edn., vol. 14. London: Adam and Charles Black, 1882. Pp. 417–23. <http://archive.org/details/encyclopediabritt14newyrich>.
- SPINOZA, B. *Ethics*. 1677. Trans. as *Ethic* by W. Hale White; rev. by Amelia Hutchinson Sterling. 4th edn. London: Oxford U. P., 1910. (Russell's Library.)
- WEISMANN, AUGUST. *The Germ-Plasm: a Theory of Heredity*. London: Walter Scott, 1893. (Russell's Library.)
- WHITEHEAD, A. N. *A Treatise on Universal Algebra with Applications*. Cambridge: Cambridge U. P., 1898.
- WILLIAMSON, BENJAMIN. "Infinitesimal Calculus". In *Encyclopaedia Britannica*. 9th edn., vol. 13. London: Adam and Charles Black, 1881. Pp. 5–72.
- WOOLHOUSE, R. S., AND RICHARD FRANCKS, eds. Leibniz, *Philosophical Texts*. Oxford: Oxford U. P., 1998.