

LOCKE'S DISGUISED SPINOZISM [PART 1] *

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A torrent of textual evidence is adduced in this article by which it is indisputably demonstrated that Locke was not only much influenced by Spinoza's works, but that he also adopted and processed all the main items of his physics, epistemology, ethics and political theory. He was already fascinated by Spinoza's renewal of Descartes' philosophy when he was still an intimate and collaborator of Boyle in Oxford. Placed next to the source text the great number of his quotations and crypto-quotations from Spinoza's text not only bring about a new and even revolutionary interpretation of his work, but lead also to a better understanding of the physical position of the Dutch philosopher. Like Van den Enden must be considered (since the discovery of his political writings in 1990) as the philosophical master of Spinoza, so we have from now on to consider Spinoza as the real philosophical master of Locke who, fearing for his life, so ably covered and disingenuously denied his roots, that apart from a few clairvoyant contemporaries not one scholar of the three past centuries remarked his bloodline.

Secondary literature sees no influence of Spinoza's revolutionary philosophy on John Locke and does not even discuss the absence of such a relation. Symptomatic is the recent comprehensive and voluminous biography of Roger Woolhouse, in which Spinoza's name does not appear in the text or in the index of names.¹ In its half-a-century-old forerunner, Maurice Cranston's biography, the name 'Spinoza' is only once mentioned, but in a rather accidental way.² Apart from this author's contribution to a conference on *Spinoza around 1700* and abstracting from the customary surveys and superficial comparisons in academic textbooks of the history of philosophy, there doesn't exist any systematical treatment that discusses the philosophical relationship between the two or tries to explain their eventual opposition.³

This fact is rather curious, because it is not unknown among scholars that Locke, Spinoza's exact contemporary,⁴ was already in 1664 fascinated by his unorthodox work *Principia Philosophiae Renati des Cartes more geometrico demonstrata* (1663). He wrote in his notebook: "*Spinoza / Quid ab eo scriptum praeter partem 1 & 2 principiorum Cartesii. 4o.63. Meyer / Ludovicus. Quid ab eo scriptum*".⁵ When Meyer's *Philosophia S. Scripturae Intepres. Exercitatio Paradoxda* appeared three

* Publication authorized by the author.

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¹ Roger Woolhouse, *Locke. A Biography* (Cambridge UP 2007). * I wish to thank Jonathan Israel, Victor Nuovo, Emanuela Scribano, Paul Schuurman, J. R. Milton, Matthew Stewart, Rebecca Goldstein, John Attig and my wife Marianne for their invaluable assistance, advice and moral support on the long way to this article.

² Maurice Cranston, *John Locke. A Biography* (Oxford UP 1957, reprint 1985). "Political refugees were accepted as willingly in Amsterdam as religious nonconformists; and although it is true that Locke's exact contemporary Spinoza was driven from the city, his persecutors were his fellow Jews and not the city burghers" (231-232).

³ Wim Klever, "Slocke, alias Locke in Spinozistic Profile", in Wiep van Bunge and Wim Klever (eds), *Disguised and overt Spinozism around 1700* (Leiden: Brill 1986) 235-261. Jonathan Israel's *Radical Enlightenment. Philosophy and the Making of Modernity 1650-1750* (Oxford 2001) is no exception, since in this work the opposition between Spinoza and Locke (radical enlightenment versus moderate enlightenment) is, though frequently stated, more comparatively touched upon than systematically discussed.

⁴ Both were born in 1632.

⁵ Bodl. MSS Locke f. 27, p. 5: "Spinoza, what else did he write apart from parts I & II of the Principles of Descartes, 4o. 63; Lodewijk Meyer: is there anything written by him?" Meyer, Spinoza's friend and cooperator, wrote the introduction to this work on Spinoza's special request. He explained therein that Spinoza disagreed **(TO BE CONTINUED)**

years later (1666), it was bought by Locke. It is well established that Spinoza's other works, *Tractatus theologico-politicus* (1670) and *Opera Posthuma* (1677), were acquired immediately after their publication. And they were not only obligatory ornaments of his rich library. He thoroughly studied them as is testified by his summary of an important passage in TTP ch.1 and his annotations to a couple of propositions in *Ethica* I.⁶ He defended himself against bishop Stillingfleet's accusation of his 'Spinozism' by the well known phrase: "I am not so well read in Hobbes or Spinoza to be able to say what were their opinions in this matter" [of how to think about Revelation as imagination], but he had reason enough for a disingenuous rejection of any relation whatsoever with this 'decried name'!

The early reception of Locke's work was not so unambiguous about the sincerity of his denial as the later assessments of his position in the history of philosophy up to this day. William Carroll, a competent linguist and philosopher, published in 1706 *A Dissertation upon the Tenth Chapter of the Fourth Book of Mr. Locke's Essay Concerning Humane Understanding*, in which

he charges Locke with teaching 'Spinoza's Doctrine' throughout the *Essay*, but of 'finally and completely establishing Spinoza's 'Hypothesis' in the chapter entitled 'Of our knowledge of the Existence of a God'. The hypothesis in question is "the Eternal Existence of one only Cogitative and Extended Material Substance, differently modified in the whole World, that is, the Eternal Existence of the whole World itself."⁷

Being convinced of the correctness of Carroll's judgment by personal study of his dissertation, I was, on my turn, surprised by Brown's argument *ex auctoritate* for dismissing it, while not being in line with the main stream: "Locke and Spinoza have been so long represented as diametrically opposites that scholars in the twentieth century have found it difficult to take Carroll's charge seriously".⁸ Carroll was in good company. A famous professor at the Frisian university, Ruard Andala, made his students publicly defend the thesis that "*non pauca etiam Lockii [...] Spinozistica fundamenta*" (Locke's philosophy is built on many Spinozistic foundations).⁹ For Leibniz Locke is really just a feeble imitation of Spinoza. "Leibniz's unstated intuition that Locke was something of Spinozist, incidentally, is probably more insightful than is generally allowed in modern interpretations of the great empiricist's work".¹⁰ And did Locke not closely 'collaborate', in the late nineties, with Van Limborch and the Spinozist De Volder in order to fabricate for Spinoza's friend, the Amsterdam burgomaster Johannes Hudde, an adequate formula for the question of God's uniqueness, that is the unity of thinking and extension, mind and matter? On the strict condition that it would be kept secret Locke subscribed to De Volder's paraphrase of Spinoza's theory that God is the infinite thinking

(CONTINUATION OF NOTE 5) with Descartes on many points and also mentioned three of them. I thank the scholars J.R. Milton and P. Schurman for bringing the manuscript under my attention. The passage is also quoted by R. Klibansky and J. Gough in their edition of John Locke, *Epistola de Tolerantia / A Letter on Toleration* (Oxford 1968), p. xxxi. Their remark to this quote is telling: "Considering how profoundly different Locke's approach to philosophical problems was from that of Spinoza, his manifest interest in Spinoza's writings is somewhat surprising. [...] He expressed his intention of finding out what other works there were by this author".

⁶ The following abbreviations are used in this article. TTP for *Tractatus theologico-politicus*, PPC/CM for *Principia Philosophica Renati des Cartes* with its appendix *Cogitata Metaphysica*. TP for *Tractatus Politicus*, TIE for *Tractatus de Intellectus Emendatione*, KV for *Korte Verhandeling*, TTG for *Two Treatises of Government*, RC for *Reasonableness of Christianity as delivered in Scriptures*. Places from Spinoza's work are recognizable by a slash between the numbers. Titles are not unnecessarily repeated.

⁷ Stuart Brown, "Locke as secret 'Spinozist': the Perspective of William Carroll" in Van Bunge / Klever, *Disguised and overt Spinozism around 1700*, o.c. p. 213-225. Quote on p. 230.

⁸ O.c. p. 216.

⁹ Franeker 1748, p. 6. The unique copy of this book is conserved in the Provincial Library of Friesland at Leeuwarden under the signature Pb 18254. Andala joined Locke to the crypto-Spinozists De Volder and Boerhaave, Cf. Wim Klever, "Burchard De Volder (1643-1709). A Crypto-spinozist on a Leiden Cathedra", in *LIAS* 15 (1988) 191-241 and Idem, *Boerhaave sequax Spinozae* (Vrijstad 2006).

¹⁰ Matthew Stewart, *The Courtier and the Heretic. Leibniz. Spinoza, and the Fate of God in the Modern World* (Yale 2005) p. 268.

thing or substance (*rem vel substantiam cogitantem eamque [...] infinitam*), because “it is impossible that thinking is not thinking of matter”.¹¹ After Locke’s death one of his intimate and well informed friends, Pierre Des Maizeaux, testified to his Berlin correspondent Jean Barbeyrac that Locke was convinced of the unity of substance and must for that reason be considered a Spinozist. We know this from the latter’s answering letter (22-12-1706): “Ce que vous dites du Spinozisme de feu Mr Locke, me surprend beaucoup. Puis que vous avez de très bonnes raisons de croire que Mr Locke avoit cette pensée ... » (What you say about the late Mr. Locke’s Spinozism surprises me very much. As you have very good reasons to believe that Mr. Locke held that thought...).¹²

Rebecca Newberger Goldstein, author of *Betraying Spinoza* (2006), was not far of the mark when she wrote, as a lonely prophet calling in the desert, that

Locke had himself been influenced by Spinoza’s ideas on tolerance, freedom and democracy [...] Locke met in Amsterdam men who almost certainly spoke of Spinoza. Locke’s library not only included all of Spinoza’s important works, but also works in which Spinoza had been discussed and condemned. It’s worth noting that Locke emerged from his years in Amsterdam a far more egalitarian thinker, having decisively moved in the direction of Spinoza. He now accepted, as he had not before, the fundamental egalitarian claim that the legitimacy of the state’s power derives from the consent of the governed, a phrase that would prominently find its way into the Declaration.¹³

One wonders what is wrong with the current history of philosophy, that she does not want to pay attention to the substantial evidence of Locke’s own remarks, his well tested correspondence with many sympathizers with Spinoza and the unmistakable praise or critique of contemporaries on account of his sources (Stillingfleet, Carroll, De Volder, Andala, Leibniz).¹⁴ And why were so many eighteenth century French and Italian philosophers under his ban?¹⁵ Are we so prejudiced about this major figure of the European Enlightenment and his great originality that we don’t allow predecessors who are partly responsible for the frame of his mind?

In this article I will demonstrate that Spinoza was more than an influential predecessor. Locke’s philosophy, so is my claim, is in all its foundational concepts and its headlines a kind of reproduction of Spinoza’s work. Locke was, as Carroll baptized Samuel Clark, a ‘*Spinoza rev’ved*’,¹⁶ Spinoza in a new form and expression, whose original blueprint was, as history has shown, well kept secret and hardly recognizable in the remake. I hope, that my affluence of arguments, mainly crypto-quotations, will convince the reader, that he has to rethink the scheme of the current historiography, in which Locke was only on a loose par with his Dutch compeer without having any relation to or affinity with him.

¹¹ See the letter of Philippus van Limborch to Locke of 2/12 September 1698, no. 2485 (and previous correspondence) in E. S. de Beer, *The Correspondence of John Locke edited in 8 volumes* (Oxford 1981). See also Wim Klever, “Een curieuze kwestie. Hudde in discussie met Spinoza, Van Limborch, Locke en De Volder” (forthcoming).

¹² Barbeyrac’s letter is conserved in the British Library under the signature MS 4281, fo. 20. The letter is here quoted from Ann Thomson, *Bodies of Thought. Science, Religion, and the Soul in the Early Enlightenment* (Oxford UP 2008), p. 143-144.

¹³ Under the title ‘Reasonable Doubt’ published in *The New York Times* 29 July 2006. As will be claimed further on, Goldstein’s chronology is defective. Locke had already appropriated for personal account Spinoza’s political theory before his emigration to Holland. And as regards his epistemological position: this dates from a much earlier period, his time in Oxford. Concerning the presence in his library of the books written by Spinoza’s friends cf. P. Harrison & P. Laslett, *The Library of John Locke* (Oxford 1965).

¹⁴ It is here the right place to mention an other striking exception in the historiography. In an article about “Spinoza et les Lumières radicales” (in C. Secrétan, Tristan Dagron, Laurent Bove, eds, *Qu’est-ce que les Lumières ‘radicales’?* Paris 2007, 299-309) the German Spinozist Manfred Walther writes in a section about “Spinoza: un chaînon manquant de l’histoire britannique des idées”: “que la philosophie de Locke est fécondée par Spinoza bien plus en profondeur que ne pourrait le laisser croire la simple juxtaposition de l’empiriste et du rationaliste”, qui “repose sur une base bien fragile” (p. 306-307).

¹⁵ See the rich documentation of J. Israel, *Radical Enlightenment*, o.c. for ‘Lockean empiricism’ in France and ‘Lochisti’ in Italy. Cf. also J.W. Yolton, “French materialist disciples of Locke” in *Journal for the History of Philosophy* 25 (1987) 83-104, and his *Thinking Matter* (London 1984).

¹⁶ In two works: London 1705 and 1709.

Let us start with Locke's 'virtual' (epistolary) acquaintance with Spinoza in his Oxford time (1661-1665). J. R. Milton surveys Locke's activities in this period.

At some time around 1660 Locke met Robert Boyle [...] Boyle had been working on natural philosophy for more than a decade and was about to start sending the results of his investigations to the press. For the next few years Locke took detailed notes on nearly all his works as they came out [...] He also starts reading the works of the earlier mechanical philosophers, in particular those of Descartes and Gassendi. Whether Gassendi had much influence on Locke is disputed [...] Descartes' influence was by contrast immense [...] An analysis of his notes reveals a marked bias towards Descartes' writings on physics [...] Locke at this stage of his life had little interest in first philosophy.¹⁷

Locke's relationship with Boyle was rather close, if not familiar. He not only met him now and then, as is assumed by many scholars, but is also described by his biographer as 'Boyle's pupil' and 'close friend', who was "admitted to the charmed circle of Boyle's High Street rooms". "Locke showed an early if not a lasting enthusiasm for [Boyle's] experiments" and studied all his writings.¹⁸ Can we imagine that Locke would not have shared the things that pressed on Boyle's heart, that there would have been no discussion between master and privileged friend about principles, discoveries and international correspondence in their new mechanical science? Well, in this period Boyle was, via Heinrich Oldenburg, in frequent epistolary contact with a Dutch fellow scientist, equally interested in mechanical philosophy and likewise busy with chemical experiments. Oldenburg had visited him in Rijnsburg in 1661 and was much attracted by his new ideas, which were critical about Descartes' speculative physics. Already before the foundation of the Royal Society in 1662 he acted as the personal secretary of Robert Boyle for the exchange with Spinoza. The letters written by Spinoza to Oldenburg must have been read in Boyle's '*privatissimum*', in which Locke participated.

In Letter 1 (16/26 August 1661) Oldenburg asked Spinoza further explanation of what were precisely, according to him, Descartes' *errores*, about which they had discussed in Rijnsburg. Traces of Spinoza's answer in Letter 2 appear in Locke's *Essay Concerning Human Understanding* (1690).¹⁹

They [Bacon and Descartes] would easily have seen this for themselves, had they but given consideration to the fact that the will differs from this or that volition in the same way as whiteness differs from this or that white object, or as humanity differs from this or that human being. So to conceive the will to be the cause of this or that volition is as impossible as to conceive humanity to be the cause of Peter and Paul. Since, then, the will is nothing more than a mental construction (*ens rationis*), it can in no way be said to be the cause of this or that volition. Particular volitions (*volitiones*), since they need a cause to exist, cannot be said to be free; rather they are necessarily determined to be such as they are by their own causes (*Letter 2*).²⁰

Yet I suspect, I say, that this way of speaking of *faculties* has mislead many into a confused notion of so many distinct agents in us (*Essay 2.21.6*).

Viz. *whether man's will be free or no*. For if I mistake not, it follows from what I have said that the question itself is altogether improper; and it is insignificant to ask whether man's will be free [...], liberty [...] only belongs to agents (2.21.14).

But the fault has been that faculties have been spoken of and represented as so many distinct agents [...] A man in respect of willing or the act of volition [...] cannot be free (2.21.20).²¹

¹⁷ "Locke, Medicine and Mechanical Philosophy" in *British Journal for the History of Philosophy* 9 (2001) p. 226.

¹⁸ Cranston, *John Locke* o.c. p. 75-76.

¹⁹ Quotes are from John Locke, *An Essay Concerning Human Understanding*. Edited with a foreword by Peter H. Niddich (Oxford 1975).

²⁰ Spinoza, *The Letters*. Translated by Samuel Shirley. Introduction and Notes by St. Barbone, Lee Rice, and J. Adler (Indianapolis 1995) p. 62. Cf. KV 2/16/4: "Because the will is not a thing in Nature but only a fiction, one needs not to ask whether the will is free or not". When Locke was in Amsterdam, the *Korte Verhandeling* circulated as a manuscript among friends of Spinoza.

²¹ Italics in Locke's fragments are always introduced by the author of this article in order to accentuate certain words of phrases in correlation with quotes from Spinoza.

In his second letter to Spinoza (*Letter 3* in the editions of Spinoza's correspondence) Oldenburg had objected against one of his axioms ('things which have nothing in common cannot be each other's cause'), because God, though creator of the world, would have nothing in common with created things.

<p>As for your contention that God has nothing formally in common with created things, etc., I have maintained the exact opposite (<i>prorsus contrarium</i>) in my definition [...] As to your objection to my first proposition, I beg you, my friend, to consider that men are not created, but only <i>generated</i> (<i>hominess non creari, sed tantum generari</i>), and that their bodies already existed, but in a different form. However, the conclusion is this, as I am quite willing to admit, that if one part of matter were to be annihilated, the whole of Extension would also vanish at the same time (<i>Letter 4</i>, October 1661).</p>	<p>When the thing is wholly made new, so that no part thereof did ever exist before, as when a new particle of matter doth begin to exist <i>in rerum natura</i>, which had before no being, [we call this] <i>creation</i> [...] When a thing is made up of particles which did all of them before exist[...] we call <i>generation</i> [...] Thus a man is generated, a picture made (<i>Essay 2.26.2</i>).²² Things in this our mansion would put on quite another face and ceased to be what they are, if some one of the stars or great bodies incomprehensibly remote from us should cease to be or move as it does (<i>Essay 4.6.11</i>).</p>
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The latter parts of this comparison may only be associative; the first parts are literally parallel.

That Locke followed closely the correspondence between Spinoza and Oldenburg / Boyle may also be concluded from his acceptance of Spinoza's critique on the defects in Boyle's mechanicism, explained in the long *Letter 6*, his requested 'expert report' on the Latin version of Boyle's *Certain Physiological Essays* (1661). In *Letter 3* Oldenburg had boasted about Boyle's mechanicism in explaining natural phenomena:

In our Philosophical Society we are engaged in making experiments and observations as energetically as our abilities allow, and we are occupied in composing a History of the Mechanical Arts, being convinced that the forms and qualities of things can best be explained by the principles of mechanics, that all Nature's effects are produced by motion, figure, texture and their various combinations and that there is no need to have recourse to inexplicable forms and occult qualities, the refuge of ignorance.

Spinoza had to put his finger on a couple of painful inconsistencies. So he remarks: "In section 25 the esteemed author seems to intend to prove that the alkaline parts are driven hither and thither by the impact of the salt particles, whereas the salt particles ascend into the air by their own force" (*proprio impulsu seipsas in aerem tollere*). In his own explanation, however, of the motion of the particles of the Spirit of Niter Spinoza stipulated that "they must necessarily be encompassed by some subtle matter, and are thereby driven upwards (*et ab eadem sursum pelli*) as are particles of wood by fire". Likewise Boyle renounced according to him his principles, when he wrote in *De Fluiditate* 19 about animals that "Nature has designed them both for flying and swimming", whereupon Spinoza sneered "He seeks the cause from purpose" (*causam a fine petit*), a mortal sin in the new science. Oldenburg tried to smooth over Boyle's shortcomings by referring in his name to Epicurism, a pseudo-explanation, which Locke later on remembered as reprehensible nonsense.

²² There exists a more extended passage about the couple 'creation – generation' in *Draft A*, § 16. See P. H. Nidditch & G. A. J. Rogers (eds), *Drafts for the Essay Concerning Human Understanding* (Oxford 1990) p. 31-32.

With regard to your comments on section 25 he replies that he has made use of the Epicurean principles, which hold that there is an innate motion in particles; for he needed to make use of some hypothesis to explain the phenomenon (<i>Letter 11</i> , from Oldenburg to Spinoza, 3rd April 1663).	Another great <i>abuse of words</i> is the taking them for things. The <i>Platonists</i> have their <i>soul of the world</i> , and the <i>Epicureans</i> their <i>endeavor towards motion</i> in their atoms when at rest. There is scarce any sect in philosophy has not a distinct set of terms that others understand not (<i>Essay 3.10.14</i>).
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Contrary to Boyle's failures but completely in line with Spinoza's *radical mechanicism* Locke rejects the possibility of the motion of a body by itself.

A body moves only through the impulse of another body (<i>corpus movetur [...] tantum ex alterius impulsu</i>) (PPC 2/8s).	Impulse, the only way which we can conceive bodies operate in (<i>Essay 2.8.11</i>).
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Locke not only subscribed to Spinoza's drastic rejection of the possibility of an Epicurean (and Boylean) connate motion of particles as he also declared in *Essay 2.21.4* ("Neither have we from body any idea of the beginning of motion. A body at rest affords us no idea of any active power to mover [...], [...] only to transfer, not to produce any motion"), he also joined him in his more radical claim that like all types of motion (including that of falling) also the rest of a body is the effect of external material causes.²³

A body in motion or at rest must be determined to motion or rest by some other body, which, likewise, was determined for motion or rest by some other body, and this by a third, and so on to infinity (<i>Ethica 1/13</i> , lemma 3). ²⁴	A tennis ball, whether in motion by the stroke of a racket, or lying still at rest, is not by anyone taken to be a free agent [...] All its both motion and rest come under our idea of <i>necessary</i> (<i>Essay 2.21.9</i>). He is perpetually dancing; he is not at liberty in this action but under as much necessity of moving as a stone that falls or a tennis ball struck with a racket (11).
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One can also signalize another revealing trace that Letter 13 left in Locke's text. It concerns the experiment, which Spinoza designed in order to measure an eventual difference between horizontal and vertical air pressure. It is as if Locke has in his memory Spinoza's drawing and explanation when he writes in *Essay 2.23.24*: "For such a pressure [of surrounding air particles] may hinder the avulsion of two polished superficies one from another in a line perpendicular to them, as in the experiment of two polished marbles, yet it can never in the least hinder the separation by a motion in a line parallel to those surfaces".

It is not at all improbable, then, that Locke was already well informed about Spinoza's anti-Cartesian position when there came finally the opportunity to study the PPC/CM that he must have devoured on account of his manifest interest in Descartes' physics. We know already the effect of his reading experience. He was really fascinated and expressed his deep wish to study more writings of this author and of the friend Lodewijk Meyer who in his introduction to the work uncovered only a part of Spinoza's own philosophy, i.e. his 'reformed Cartesianism'. We can imagine how pleasantly he must have been affected upon the rash fulfilling of his wish, when in his last year in Oxford (1665) the circle around Boyle had succeeded in triggering Spinoza to summarize in a small treatise

²³ Cf. Wim Klever, "Inertia as an effect in Spinoza's physics", forthcoming in the Richard Popkin memorial volumes, to be edited by Luisa Simonutti; Idem, "Spinoza's principle. The history of the 17th century critique of the Cartesian hypothesis about inertia as a property of matter", in Wim Klever, *The Sphinx. Spinoza reconsidered in three essays* (Vrijstad 2000).

²⁴ Translation by G. H. R. Parkinson in Spinoza, *Ethics* (London 1989).

the substance of his worldview. How did this come about? On April 28th 1665 Oldenburg lets Spinoza know that he was much discussed in Oxford: “Mr. Boyle and I often talk about you, your learning and your profound reflections” (*meditationibus*).²⁵ According to the biographers and historians Locke is included in this philosophical club. Half a year later curiosity and impatience have become stronger. There was a good occasion for a further request. Spinoza had written, probably early September, not to be upset by the cruelties of the Dutch-English sea war, “reflecting that men, like all else, are only a part of nature, and that I do not know how each part of nature harmonizes with the whole, and how it coheres with other parts”.²⁶ That looks like a kind of resignation, which according to Oxford does not befit a minute philosopher: “[we] urge you to pursue your philosophizing with energy and rigor. Above all, if you have any light to cast on the difficult question as how each part of Nature accords with its whole and the manner of its coherence with other parts, please do us the favor of letting us know your views” (Letter 31).

Spinoza’s formidable answer (Letter 32) presents the outline of his philosophy. Since he has already confessed his ignorance about *how* things cohere with each other and with the whole, he takes it for granted that the Oxford people ask for the reasons why he is forced to maintain the world’s harmony. He does not ascertain that nature is beautiful or well ordered; these are only confused ideas of our imagination. Nature’s coherence is, then, defined as the mutual accommodation of the laws and nature of its various parts in such wise that there is the least possible opposition between them. One has to realize, Spinoza continues, that the word ‘part’ is hardly correct, while nothing is on itself and independent. So are we, humans, in the universe like the a worm (*vermiculum*) in the blood,²⁷ which perceives other elements of the blood as parts but does not know how its being is constituted by the whole fluid and the parts of that fluid are forced to accommodate itself to each other (*vicissim*). After having used in this example twice ‘*vicissim*’ and once its equivalent ‘*ad invicem*’ in order to explain, as it were, the method by which the whole fluid realizes itself, Spinoza comes finally to what we could name his ‘theory of everything’, in which, again, the word ‘*vicissim*’ has a prominent position. And it is exactly this ‘theory of everything, which had thus a strong impact on Locke’s mind, that it seduced him to his own fully parallel formulation of Spinoza’s theory in *Essay* 4.6.11. But let us first read what Oldenburg told about the reception of Letter 32 in Oxford. The impression was overwhelming. ‘*Perplacent*’ is the very first word of the Letter 33 (3 pages), which was written on 8th December. “The things you have philosophized for us *charm us uttermost*”. The addressees were especially pleased with Spinoza’s acknowledgement that “all bodies are surrounded by others and are reciprocally (*ab invicem*) determined (*determinari*) to exist and act in a definite and regular manner”. They had well understood the hard core of Spinoza’s universal physics. Were all members of the circle equally content with the formidable treatise? Certainly not Oldenburg himself, who was, as it appeared ten years later, a stiff opponent of Spinoza’s determinism and ‘atheism’. In his answering letter he also immediately formulated an objection: how, then, can we defeat the order and symmetry that you seem to adhere to, when the relation between motion and rest remain constant? Nature’s adamant order would, of course, exclude interventions of Gods arbitrary directive superpower? Can we, on the other hand, imagine that the pious or even bigot Boyle with his idiosyncratic theological ideas and his defense of the possibility of miracles against the *virtuosi*, may have been enthusiastic about Spinoza’s radical ideas? Spinoza is greeted ‘*perhumaniter*’, very kindly. Was this not foremost in the name of the young and most progressive John Locke? It is time to show the correlated ‘universal propositions’.²⁸

²⁵ Letter 25.

²⁶ Letter 30.

²⁷ Locke later changed Spinoza’s worm into a woodworm and transposed it in a cabinet: “as a worm shut up in one drawer of a cabinet has of the senses or understanding of a man” (*Essay* 2.2.3). Really, it is the same example for the same purpose!

²⁸ Cf. in *Essay* 4.3.29 Locke’s short reference to the whole thing: “the coherence and continuity of the parts of matter”.

Now all the bodies in Nature can and should be conceived in the same way as we have here conceived the blood; for all bodies are surrounded by others and are reciprocally (*ab invicem*) determined *to exist and to act* in a fixed and determinate way, the same ratio of motion to rest being preserved in them taken all together, that is, in the *universe* as a whole. Hence it follows that every body, in so far as it exists as *modified* in a definite way, must be considered as a part of the whole universe, and as agreeing with the whole and cohering with the other parts. Now since the nature of the universe, unlike the nature of the blood, is not limited, but is absolutely infinite, its *parts* are controlled by the nature of this infinite potency *in infinite ways*, and are compelled to undergo infinite variations (*Letter 32*, November 1665).

We are then quite out of the way when we think that things contain within themselves the qualities that appear to us in them ... For which perhaps to understand them right, we ought to look not only beyond this our earth and atmosphere, but even beyond the sun or remotest star our eyes have yet discovered. For how much the *being and operation* of particular substances in this our globe depend on causes utterly beyond our view is *impossible for us to determine*. We see and perceive some of the motions and grosser operations of things here about us, but whence the streams come that keep all these curious machines in motion and repair, how *conveyed and modified* is beyond our notice and apprehension. And the great *parts* and wheels ... of this stupendous structure of the *universe*, *may, for aught we know, have such a connexion and dependance in their influences and operations one upon another*, that perhaps things in this our mansion would put on quite another face and cease to be what they are, if some one of the stars or great bodies incomprehensibly remote from us should cease to be or move as it does. This is certain: things ... are but retainers to other parts of nature for that which they are most taken notice of by us (*Essay 4.6.11*, Of universal propositions)

“Being’ and ‘operations’ of things as constituted by their connexion and dependance *one upon another*; and this in infinite and indeterminable ways, in the invisible fluids of the *universe*, by which they are so and so ‘*modified*’, well, this is an explosion of pure Spinozism chez Locke. The long passage is undoubtedly a free and richly illustrated paraphrase of Spinoza’s Letter 32.²⁹ It emphasizes also Locke’s radical mechanicism. As the universe must be conceived as a stupendous, but inscrutable, structure, so are all its ‘parts’ likewise ‘admirable machines’ whose causes we know not. But we do know that they are what they are as an effect of infinite causes far away, which are responsible for their being and operations. So is *weight* not a property of bodies, but the effect an ‘invisible fluid’, say the downward air pressure.³⁰ Things always depend ‘wholly on extrinsical causes’, have ‘their source far beyond the confines of [their] body’, ‘beyond the sun or remotest star’; they are ‘but retainers of other parts of nature’, in ‘the universe’. All this can best be understood on the background of the principal proposition of the *Ethica*, namely 1/28: “Every particular thing, or whatever thing that is finite and has a determinate existence, cannot exist nor be determined for action unless it is determined for action and existence by another cause which is also finite and has

²⁹ Spinoza’s explanation of the world order by reciprocal causality of all its so-called parts was not new for Locke when he read it in Letter 32 (1665). He certainly discovered it already 1663-1664 in CM 2/11/2: “all things in nature are in turn determined to action by one another”.

³⁰ Cf. Spinoza’s remark ‘by air pressure’ (*ab aëris pressione*) in Letter 11 and what he writes in Letter 75 on occasion of Oldenburg’s belief in Christ’s Ascension: “that the frame of the human body is restrained within its proper limits only by the weight of the air”. As concerns his radical mechanicism compare Letter 13 to Oldenburg / Boyle, in which he says to subscribe to “the principles of mechanical philosophy, implying that all variations of bodies come about according to the laws of mechanics”. Locke’s taking the side of Spinoza against Boyle’s half-hearted mechanicism is not discussed in recent research papers. Cf. Lisa Downing, “The Status of Mechanism in Locke’s *Essay*” in *The Philosophical Review* 107 (1998) 381-414; Matthew Stuart, “Locke on Superaddition and Mechanism” in *BJHP* 6 (1998) 351-379; J. R. Milton, “Locke, Medicine ..., o.c..”

a determinate existence; and again, this cause also cannot exist nor be determined for action unless it be determined for existence and action by another cause which also is finite and has a determinate existence: and so on to infinity”.

That Locke learned already this lesson from the PPC/CM, that is before his dazzling amazement about Letter 32 in 1665, may be shown by the (also linguistic) affinity between the following two places.

<p>Present time has no connection with future time (<i>tempus praesens nullam habet connexionem cum tempore futuro</i>) (CM 2/11/1). The parts of a duration have no interconnection (<i>nullama inter se connectionem</i>) (CM 2.11.2).</p>	<p>I cannot be certain that the same man exists now, since there is no necessary <i>connexion</i> of his existence a minute since with his existence now: by a thousand ways he may cease to be since I had the testimony of my senses for his existence (<i>Essay</i> 4.11.9).</p>
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1666 Locke migrates to London and starts a new period of his life in the service of Anthony Ashley Cooper, earl of Shaftesbury. Apart from his administrative and political duties or activities he manages to continue his medical studies and to cooperate in this field with doctor Sydenham. But the lessons of the Dutch philosopher are deeply entrenched in his mind and keep him on the outlook for his new publications. 1670 is a year of major importance for his development as a philosopher. The anonymously published *Tractatus theologico-politicus* unchained in that year in Holland, France, Germany and England a storm of indignation as well as admiration and was everywhere hotly discussed. Apart from Spinoza's intimate friends nobody, even not in Holland, was so much prepared for a positive reception of this revolutionary work as Locke, who perfectly knew the early correspondence and had intensively studied the PPC/CM. The TTP was a vindication of the *libertas philosophandi* via a rebuttal of the prejudices of the theologians concerning (Christian) religion.³¹ The book realized this target by means of a scientific analysis of the Bible. The upshot of this analysis is that the Prophets, Christ included, admonish us to nothing else but serving God by practicing justice and charity. In the second part (chapter 16 onwards) Spinoza deduced rationally from physical principles that the only way to realize justice and charity is political organization and consequently obedience to the highest authority of the state. That is how we according to the so-called Revelation as well as according to the precepts of reason serve God or practice charity; that is, therefore, what true Christianity or religion in general properly means.

Locke is deeply impressed by the TTP. This can be demonstrated by the many traces, which his lecture left in all his later works, mainly however RC and TTG. We shall quote a couple of them here, each time after a short introduction. First they both emphasize that churches should not be transformed in academies for polemics.

<p>I am consequently lost in wonder at the ingenuity of those whom I have already mentioned, who detect in the Bible mysteries so profound that they cannot be explained in human language, and who have introduced so many philosophic speculations into religion that the <i>church</i> seems like an <i>academy</i>, and religion like a science or rather a dispute (TP 13/4, Elwes p. 175-176).³²</p>	<p>The writers and wranglers in religion fill it with niceties, and dress it up with notions, which they make necessary and fundamental parts of it; as if there were no way into the <i>church</i>, but through the <i>academy</i> or lyceum. The greatest part of mankind have not leisure for learning and logic, and superfine distinctions of the schools (RC p. 175).³³</p>
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³¹ Cf. the announcement to Oldenburg / Boyle / Locke in Letter 30 (autumn 1665): “I am now writing a treatise on my views regarding Scripture. The reasons that move me to do so are ...”.

³² Text according to Spinoza, *A theologico-political Treatise and a political Treatise*. Translated by R.H.M. Elwes (New York 1951).

³³ According to its reprint in *Works*, volume VII (Aalen 1963).

The *theologians who follow Plato and Aristotle* are the target of both philosophers.

I grant that they are never tired of professing their wonder at the profound mysteries of Holy Writ; still I cannot discover that they teach anything but speculations of *Platonists* and *Aristotelians*, to which (in order to save their credit for Christianity) they have made Holy Writ conform (TTP Preface, Elwes p. 7)). If one inquires what these mysteries lurking in Scripture may be, one is confronted with nothing but the *reflections of Plato or Aristotle*, or the like, which it would often be easier for an ignorant man to dream than for the most accomplished scholar to wrest out of the Bible (TTP 13/5, Elwes p. 176).

He that shall attentively read the Christian writers, after the age of the apostles, will easily find how much the philosophy they were tinctured with influenced them in their understanding of the books of the Old and New Testament. In the ages wherein *Platonism* prevailed, the converts to Christianity of that school on all occasions, interpreted holy writ according to the notions they had imbibed from that philosophy. *Aristotle's doctrine* had the same effect in its turn; and when it degenerated into the peripateticism of the schools, that too brought its notions and distinctions into divinity, and affixed them to the terms of the sacred Scripture (*Paraphrase Epistles St. Paul*, in *Works VIII* (Aalen 1963), p. xx-xxi).

According to both, Spinoza and Locke, there are *two kinds of persuading* people or let them perceive the things they ought to know for their moral salvation.

If anyone wishes to persuade his fellows for or against anything which is not self-evident, he must deduce his contention from their admissions, and convince them *either by experience or by ratiocination; either by appealing to the facts of natural experience, or to self-evident intellectual axioms*. Now unless the experience be of such a kind as to be clearly and distinctly understood, though it may convince a man, it will not have the same effect on his mind and disperse the clouds of his doubt so completely as when the doctrine taught is deduced entirely from intellectual axioms – that is, by the mere power of understanding and logical order, and this is especially the case in spiritual matters which have nothing to do with the senses. But the deduction of conclusions from intellectual concepts usually requires *a long chain of arguments*, and, moreover, very great caution, acuteness, and self-restraint – qualities which are not often met with. Therefore people prefer to be taught by experience rather than deduce their conclusion from a few axioms, and set them out in logical order. Whence it follows, that if anyone wishes *to teach a doctrine to a whole nation (not to speak of the whole human race)* and to be understood by all men in every particular, he will seek to support his teaching with experience ... Because all Scripture was written primarily for an entire people and secondarily for the whole human race; therefore its contents had necessarily to be adapted as far as possible to the understanding of the masses ... All this is proved in Scripture entirely through experience – that is, through the narratives there related (*iis quae narrat historiis*) (TTP 5/35, Elwes p. 76-77).

And it is at least a surer and shorter way, to the apprehensions of the vulgar, and *mass of mankind*, that one manifestly sent from God, and coming with visible authority from him, should, as a king and lawmaker, tell them their duties; and require their obedience; than leave it to the long and sometimes *intricate deductions of reason*, to be made out to them. Such *trains of reasoning* the greatest part of mankind have neither leisure to weigh; nor, for want of education and use, skill to judge of (RC p. 139) He, that any one will pretend to set up in this kind, and have his rules pass for authentic directions, must show, that *either* he builds his doctrine upon principles of reason, self-evident in themselves; and that he deduces all the parts of it from hence, by clear and evident demonstration; *or* must show his commission from heaven, that he comes with authority from God, to deliver his will and commands to the world (RC p. 142). I conclude, when well considered, that method of teaching men their duties would be thought proper only for a few, who had much leisure, improved understandings and were used to abstract reasonings. But the *instruction of the people* were best still to be left to the precepts and principles of the gospel. The healing of the sick, the restoring sight to the blind by a word, the raising and being raised from the dead, are *matters of fact*, which they can without difficulty conceive ... These things lie level to the ordinarist apprehension ... And here I appeal, whether this be not the surest, fastest and most effectual way of teaching (RC p 146).

It is clear that Locke follows closely Spinoza's strong disjunction (either – or) and his exposition of the relative advantages, depending on the audience, of the logical concatenation of concepts (only for logically trained scholars) and of telling miraculous and edifying stories (persuasive only for common people). The underlined words (facts of natural experience / matters of fact), indicating the miracles of the gospel, do not imply that Spinoza and Locke accepted the physical possibility of miracles.

<p>Miracles are only intelligible as in relation to human opinions (<i>respective ad hominum opiniones</i>), and merely mean events of which the natural cause cannot be explained by a reference to any ordinary occurrence, either by us, or at any rate by the writer and narrator of the miracle (TTP 6/13, Elwes p. 84)</p>	<p>A miracle then I take to be a sensible operation, which being <i>above the comprehension of the spectator</i>, and <i>in his Opinion</i> contrary to the establish'd Course of Nature, is taken by him to be Divine (<i>A Discourse of Miracles</i>).³⁴</p>
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When common people can only be persuaded of how they ought to behave by telling simple stories and appealing to their experience, one must conclude that a kind of Revelation is necessary for their salvation.

<p>It evidently follows from what has been said, that the knowledge and belief in them [the narratives of Scripture] are particularly <i>necessary to the masses</i> whose intellect is incapable of perceiving things clearly and distinctly ... We do not mean the knowledge of absolutely all the narratives in the Bible, but only of the principal ones (TTP 5/40-41, Elwes p. 78).</p>	<p>It was not without need, that he (Jesus the Messiah) was sent into the world (RC p. 135). Where was there any such code, that mankind might have recourse to, as their unerring rule, before our Saviour's time? It is plain <i>there was need</i> of one to give us such morality, such a law, which might be the sure guide of those who had a desire to go right (RC p. 135-136).</p>
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Another point is the *conformity* of the lessons of Scripture and the teachings of reason.

<p>[Scripture] thus understood, if we regard its precepts or <i>rules of life</i>, will be found in accordance with reason (<i>cum ratione convenire</i>); and if we look to its aim and object, will be seen to be in nowise repugnant thereto (TTP 15/24, Elwes p. 195).</p>	<p>Such a law of morality Jesus Christ has given us in the New Testament [...] We have from him a full and sufficient <i>rule for our direction</i>, and <i>conformable to that of reason</i> (RC p. 143). <i>The same truths</i> may be discovered and conveyed down from revelation, which are discoverable to us by reason (<i>Essay 4.18.4</i>).</p>
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On account of the conformity of the moral lessons of Scripture (if well understood) with the precepts of reason Spinoza and Locke can both confess the truth of the bible. Having underlined in CM 2/8/5 that “Scripture teaches nothing that is opposed to the natural light” Spinoza even sets a further step with his claim “that Scripture can *not* teach the *nonsense (nugas)* that is commonly supposed”. Locke follows: “These holy writers, inspired from above, writ nothing but truth” (RC p. 154); “Scripture speaks *not nonsense*” (TTG 1.4.31); “Though everything said in the text be infallible true, yet the reader may be, nay, cannot choose but be very fallible in the understanding of it” (*Essay 3.9.23*).³⁵ In spite of their identical content reason and faith are different mind sets or incommensurable types of knowledge, ‘two provinces’ according to the title of *Essay 4.18*, a chapter that reminds the reader of the titles of TTP 14 “The definition of faith ... which is once for all *separated* from philosophy” and TTP 15 “Theology is shown not to be subservient to reason, nor

³⁴ Quoted from Locke, *Writings on religion*. Ed. By Victor Nuovo (Oxford 2002) p. 44. I shall touch the subject later on again.

³⁵ This point is also heavily stressed by Spinoza's ‘collaborator’ Lodewijk Meyer in his *Philosophia S. Scripturae Interpres* (Amsterdam 1666), a work that was owned by Locke.

reason to theology". Faith and reason are non- adjacent territories or different 'kinds of knowledge', which do not touch each other, as will be shown later.

Locke and Spinoza also fully agree about the right *method for the interpretation of Scripture*.

The true method of interpreting Scripture does not differ from the method of interpreting nature but is totally the same. For as the interpretation of nature consists in conceiving a general survey of nature, from which we, as if from certain data, derive clear concepts, so it is also for Scriptural interpretation necessary to make first a correct inventory (*historiam*), by which we afterwards may, as if from certain data and principles, derive right conclusions concerning *the mind of its authors*. *All our knowledge of Scripture, then, must be drawn only from Scripture*. [The *historia*] must comprise 1. The nature and properties of the language in which the books of the Bible were written, and in which their authors were accustomed to speak. We shall thus be able to investigate every expression by comparison with common conversational usages [...] Although the New Testament was published in other languages [than Hebrew], yet its characteristics are Hebrew (*hebraizant tamen*). 2. We must collect the sentences of each book and reduce these contents to their headlines [...] Whatever is found obscure or ambiguous in Scripture, has to be explained and determined by means of the universal doctrine of Scripture (TTP 7/6-7 & 15 & 29).³⁶

Of [scriptural] words the *Scripture itself is the best interpreter* (TTG 1.4.25) The Epistles [of the Apostles] are written upon several occasions: and he that will read them as he ought, must observe what it is in them, which is principally aimed at; find what is the argument in hand, and how managed; if he will understand them right, and profit by them. The observing of this will best help us to the *true meaning and mind of the writer*: for that is the truth which is to be received and believed; and not scattered sentences in scripture-language, accommodated to our notions and prejudices. We must look into the drift of the discourse, observe the coherence and connexion of the parts, and *see how it is consistent with itself and other parts of scripture*. We must not cull out, as best suits our system, here and there a period or verse as if they were all distinct and independent aphorisms (RC p. 152). The terms are Greek, but the idiom, or turn of the phrases, may be truly said to be Hebrew or Syriac (*Paraphrase Epistles St. Paul*, p. vi.)

This brings us to the very unique quote from Spinoza's TTP we find in Locke's annotated interleaved James bible.³⁷ The remark is to find already on the first inserted leaf of his impressive folio³⁸ and sounds: "*In more est apud Judaios religionis sive devotionis causa omnia ad deum referre omissa causarum mediarum mentione. Spinosa. p. 3 1670*".³⁹ The corresponding text in the TTP is to find on the third page (as indicated by Locke) of its first chapter: "*Sed hic apprime notandum, quod Judaei numquam causarum mediarum sive particularium faciunt mentionem, nec eas curant, sed religionis ac pietatis, sive (ut vulgo dici solet) devotionis causa ad Deum semper recurrunt* » (But here I must above all premise that the Jews never make any mention or account of secondary, or particular causes, but in a spirit of religion, piety, and what is commonly called godliness, refer all things directly to the Deity)⁴⁰ That this Spinozistic insight was shared by Locke in his interpretation of Scripture is not only demonstrated by his actual procedure, but also by his clear but implicit reference to this very same passage of Spinoza in one of his manuscripts:

³⁶ My own translation, because Elwes is wrong on this place.

³⁷ Bodleian Library, LL 309. According to Dr. J. R. Milton the annotations "were probably made in the early 1670s" (e-mail 11-1-2006). The TTP must have been published in January 1670.

³⁸ As I could persuade myself locally.

³⁹ The source was mentioned by Locke himself, who also changed the 'z' into an 's' in Spinoza's name. I thank Victor Nuovo for communicating to me beforehand his findings in this bible. Locke made a second annotation to 1. *Sam.* 3.21: "Appeared & revealed him self by the word &c. i.e. Shamael deum audivit loquentem. Spinosa c. 1 p. 3, 70".

⁴⁰ Elwes, o.c. p. 15.

But I imagine the originall of this mistake from not rightly considering the language of Scripture. Tis evident that the Jewish nation who as they derive all the originall of all things from the great god they worshipped that made the heavens & the earth soe they attributed all things to him in a more immediate manner & so it became the ordinary idiom of their language to ascribe to the Spirit of God som things that were brought about in the ordinary course of providence. Such a way of speaking is not only not unusuall but very consistent with the notions of a deity in whom we live move & have our being & has noe impropriety in it but when strained to some extraordinary & immediate influences where the effect requires noe such supernatural cause & the end might be obtained without it.⁴¹

The relation of this passage to Spinoza's statement about the language of Scripture is undeniable.

Prophecy is another common subject, to which both our authors dedicate a chapter (Spinoza TTP 2: *De Prophetis*; Locke *Essay* 4.19: *Of Enthousiasm*).

<p>Because <i>imagination</i> on itself and by its nature does not involve certainty, such as is given with every clear and distinct idea, but one needs some reasoning in order to become assured of the thing we imagine, therefore it follows that prophecy does not include on itself certainty, while as already shown, it depends on imagination alone. Accordingly the prophets became not certain about <i>Gods revelation</i> by the revelation itself, but by some sign (<i>signum</i>) [...] <i>Gideon</i> [...] <i>Mozes</i>. God uses the good as instruments of his goodness (<i>Deus utitur piis tamquam suae pietatis instrumentis</i>) (TTP 2/4 & 8)).</p>	<p>Thus the holy men of old, who had <i>revelations from God</i>, had something else besides that internal light of assurance in their own minds to testify to them that it was from God. They were not left to their own <i>persuasions</i> alone that these persuasions were from God, but had outward <i>signs</i> to convince them of the author of those revelations. And when they were to convince others, they had a power given them to justify the truth of their commission from heaven, and by visible signs to assert the divine authority of a message they were sent with. <i>Moses</i> [...] <i>Gideon</i> [...] Where the truth embraced is consonant to the dictates of right reason or holy Writ, we may be assured that we run no risk (<i>Essay</i> 4.19.15 & 8).</p>
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Locke and Spinoza (!) accustom themselves mostly to the normal, popular or 'theological', way of speaking about God *as if* he would be a kind of superhuman person and spell his name with a capital. But they incidentally deviate from this usage and write consciously in *double language*, alternating the words 'God', 'creator', 'maker' etc. with words like 'universe', 'world', 'nature'. Spinoza is well known and was in his time already much decried on account of his blasphemous dictum '*Deus sive Natura*'.⁴² As it is said, he identified God with Nature⁴³ Is Locke's position different, as it is commonly claimed?⁴⁴ That this view has to be given up must be concluded from the following table.⁴⁵

⁴¹ See John Locke, *Writings on religion*. Ed. by Victor Nuovo (Oxford 2002), p. 37-38. The quote is from a manuscript (MS Locke c. 27, fo. 73) titled "Immediate Inspiration". I owe the knowledge of this appropriation of Spinoza's dictum by Locke to Victor Nuovo, who was so kind to inform me about this remarkable fact. The text, which was never published during Locke's life, is a very important testimony of his 'secret philosophy'. It testifies not only to his 'double language' practice, but shows moreover also that Locke is addicted to Spinoza's 'pantheism' as demonstrated in his *Ethica* 1/15 ("*Quicquid est in Deo est ...*"), a proposition that is on its turn a reflection of St. Paul's preaching on the Areopagus (Acts 17/22-29).

⁴² Which in this nominative form is not to find in his text.

⁴³ Not with matter, as he remarked in a footnote, a N.B., to TTP 7: "Remark that I do not understand by *nature* only matter and its affections, but besides matter infinite other attributes".

⁴⁴ See among others Jonathan Israel, *Radical Enlightenment* (Oxford 2001) *passim*.

⁴⁵ In his otherwise fine article "Locke, Law and the Laws of Nature" (reprinted in J. Dunn & J. Harris, eds, *Locke*, vol. I, Cheltenham 1997) G. .A. .J. Rogers does not touch the relation or identity between Gods Laws and the Law(s) of Nature.

<p>That eternal and infinite being we call <i>God or nature</i> (<i>Ethica</i>, preface to part 4). The power with which particular things, and consequently man, preserves his being is the very power of <i>God or nature</i> (<i>Ethica</i> 4/4d). So that to say that everything happens according to natural laws, and to say that everything is ordained by the decree and ordinance of God, is the same thing (<i>idem dicimus</i>) [...] For since no one can do anything save by the predetermined order of nature, that is, by God's eternal ordinance and decree (TTP 3/7, Elwes p. 45). The order of the whole nature, that is (<i>hoc est</i>) God's eternal decree (TTP 16/59, Elwes p. 211)</p>	<p>By the course of nature / by appointment of God himself / as Nature requires they should / nature appoints (TTG 1.9.89). There was a natural or divine right of primogeniture (TTG 1.9.91). <i>God or Nature</i> has not anywhere, that I know placed [...] but we find not anywhere that <i>naturally</i>, or by 'God's institution' (TTG 1.11.111). By the law of <i>God or Nature</i> (TTG 1.11.116). Wisely ordered by nature (<i>Essay</i> 2.10.3). Admiring the wisdom and goodness of our Maker / Which is wisely and favourably so ordered by nature (<i>Essay</i> 2.7.4). All sorts of animals ... provided by nature / the wisdom and goodness of the Maker plainly appear in all the parts of this stupendous fabric (<i>Essay</i> 2.9.12).</p>
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Sometimes Locke's text shows, with only a minor variation, a literal quote from Spinoza, of course without any reference of the source. Today we would call this plagiarism. A good example, which demonstrates, by the way, Spinoza's agreement with his thesis of *Essay I* about man being born as 'a white paper void of all characters',⁴⁶ is the following sentence.

<p>All men are born ignorant of everything (<i>omnes ignari omnium rerum nascuntur</i>) (TTP 16/7).</p>	<p>We are borne ignorant of every thing (<i>On the Conduct of Understanding</i>, no. 71).⁴⁷</p>
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Another striking example is the description of the relation between the infinite (God) and the finite creatures of God or Nature:

<p>This I do know, that between the finite and the infinite there is no relation (<i>inter finitum et infinitum nullam esse proportionem</i>), so that the difference between God and the greatest and most excellent creature is no other than that between God and the least creature (<i>minimam creaturam</i>) (<i>Letter</i> 54).</p>	<p>What I say of man, I say of all finite beings, who, though they may far exceed man in knowledge and power, yet are no more than the <i>meanest creature</i> in comparison with God himself. <i>Finite of any magnitude holds not any proportion to infinite</i> (<i>Essay</i> 2.15.12).</p>
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We might now continue our comparison of Spinoza and Locke by analyzing and developing the deep and undeniable affinity between Locke's political theory in TTG and Spinoza's in the TTP, but since this subject has to be discussed also in relation to *Ethica* 4 and the *Tractatus Politicus*, both published in the 1677-*Opera Posthuma*, it seems advisable to postpone it and to treat first the epistemological and anthropological position of both our philosophers, which logically, though not chronologically, antecedes the political theory. I shall now defend the claim that the *Essay Concerning*

⁴⁶ *Essay* 2.1.2. A current objection to this view is that Spinoza writes in TIE 32 about the intellect's 'native power' to make for itself intellectual instruments in order to acquire higher knowledge. But in a marginal note to this passage he emphasizes that he understands by '*vim nativam*' "*quod in nobis a causis externis causatur*" (what is produced in us by external causes). Text editors and translators have spoiled this remark by introducing a negation (*non*) in the sentence. See e.g. Edwin Curley in *The Collected Works of Spinoza* (Princeton 1985) p. 17: "By inborn power I understand what is *not* [...] caused in us by external causes. I shall explain this afterwards in my Philosophy". This, I claim, is totally against everything of Spinoza's philosophy. – Of all persons also Locke himself, albeit a fervent opponent of Descartes' innatism, does not hesitate to use the word '*native*' for the same natural equipment: "The mind has a *native* faculty to perceive the coherence or incoherence of its ideas" (*Essay* 4.17.4).

⁴⁷ Quoted from John Locke, *Of the Conduct of the Understanding*. Edited by P. Schuurman (Keele dissertation 2000) p. 224.

Human Understanding is a kind of 'duplicate' of *Ethics 2* (*De natura et origine mentis* / On nature and origin of the mind), as regards all its main affirmations, among which, of course, empiricism and the capital theory of knowledge.

J. R. Milton asserts that Locke in his Oxford time in Boyle's company (1661-1665) "apparently ignored the metaphysical and epistemological material [of Descartes' *Principia Philosophiae*] which has been the subject of so much recent discussion".⁴⁸ Further is it the current view upon his life that after his 'bookish and academic' period he took a completely different course and sojourned gentlemanlike in the harsh world: as a medical assistant to Sydenham, who was 'markedly non-academic', and for twenty years as a confidential agent to Shaftesbury, who "was a brilliant exponent of practical politics, not a political theorist".⁴⁹ Between the years 1667 and 1689 there were, of course, written some minor papers and drafts on various more or less philosophical subjects,⁵⁰ but all by all no important work and not judged good enough for publication. And then, unexpected as a thunderclap in a clear sky, appeared in 1689 brand-new from the press *An Essay Concerning Human Understanding*, a work so original and illuminating, sometimes also too loosely ordered and even contradictory, that it would occupy hundreds and hundreds of scholars in the three following centuries to determine its meaning and solve its problems. It seemed to have no essential connection with all he and other people had done before. Milton's sees the *Essay* as a rather 'isolated work'.⁵¹

Apart from the fact that an extremely rich work as the *Essay* must necessarily have had a long period of gestation, the reader of this article will by now be convinced that the 'lack of philosophical interests' (as Milton calls it) in Locke's life up till 1689, was only apparent and that he must have *continuously* meditated the stuff offered him by Spinoza's letters (1661-1665), the PPC/CM (1663) and his fascinating and revolutionary *Tractatus theologico-politicus* (1670), as is broadly demonstrated by the manifest traces in the later works we have discussed. That the *Ethica* (1677), devastating for the traditional ways of theological and philosophical thinking, opened new ways for his reproductive creativity, will now be shown.⁵² The fresh start did not cover the general physics of the *Ethica's* first part, which was already processed. It were the second and third parts that drained and renewed his mind for the resetting of his theory of knowledge.

Ethica 2 opened a new and bright horizon to Locke from its very beginning. Spinoza's theory of the mind was clearly constructed on an anti-cartesian foundation. Having defined an *idea* as "the concept formed by the mind as thinking" he immediately takes a step in order to avoid any misunderstanding. "Man thinks" (axiom 2). That is other cake than what Descartes dished up, who always asserted that it is the soul which thinks because she is the thinking substance in the human complex. Our modes of thinking like loving and desiring, says axiom 3, always presuppose an idea of the loved or desired thing whereas the reversed is not true. But how does Spinoza conceive this kind of ideas, i.e. our sensations? Do we have an immediate contact with things around us? No, says axiom 4: "We notice that a certain body [our body, wk] is in many ways affected". This implies

⁴⁸ See J. R. Milton, "Locke at Oxford" in G. A. J. Rogers (ed. *Locke's Philosophy, Content and Context* (Oxford 1994) p. 38.

⁴⁹ Milton, o.c., p. 45.

⁵⁰ Among which the well known *drafts* (A, B and C) we mentioned already.

⁵¹ O.c. p. 45.

⁵² A small historical *intermezzo*: I wish to underline here that occupying oneself with Spinoza was at the time a must for the whole scene of intellectuals, sympathizer or opponent, as is marvelously shown in Jonathan Israel's *Radical Enlightenment* o.c. See also Paul Vernière, *Spinoza et la pensée française avant la Révolution* (Paris 1982). Discussing the heated debate (*la querelle de Spinoza*) in France he writes: "Spinoza concentre toutes les haines" (p. 126). Everybody was perplexed about the extraordinary novelty of Spinoza's theses and tried to straighten them out. In his French period (1675-1679) Locke was certainly well informed about the hot news of the pro's and contra's in the polemic by his contacts with Malebranche, "qui a souffert toute sa vie, dans sa conscience de chrétien et de prêtre, de l'existence meme du Spinozisme" (p.269). In Paris (1675) he probably had contacts with Huygens, Leibniz and Tschirnhaus, the temporary club of *virtuosi*, who discussed about Spinoza's physics. See Wim Klever, "Spinoza en Huygens. Een geschakeerde relatie tussen twee fysici" in *GEWINA 20* (1997) 14-32.

that we do not directly perceive things around us but only changes of our own body. When I perceive the bird flying in the air before my eyes, I do nothing else than thinking an affection, i.e. a mutation, of my own body, the body being the exclusive object of my ideas. The fifth and last axiom of *Ethica 2* is even more exciting: “We do not sense or perceive other singular things besides bodies and modes of thinking” (*Nullas res singulares praeter corpora et cogitandi modos sentimus nec percipimus*). The plural ‘bodies’ must refer to the parts of my body, otherwise the axiom is in conflict with axiom 4. Taste is the idea of my so and so affected tongue, pain the idea of my hurt toe. Spinoza, then, asserts that all our thoughts are *either* sensations *or* perceptions of these sensations. This must necessarily imply that our primitive ideas, which are essentially ideas of parts of our body (see axiom 4), are also themselves objects of thought or a reflective idea, so that we know them, and are, accordingly, at one and the same time sensing an object and conscious of our sensing this object. This far-reaching principle, printed on Dutch paper, made a deep impression on the body of the reading Locke. Here lies the origin of Locke’s world-famous distinction between and combination of *sensation* and *reflection*.

The very first sentence of his book *Of ideas* and of its first chapter *Of ideas in general and their original* unites narrowly to the second page of *Ethica 2*: “Every man being conscious to himself that he thinks, and that which his mind is applied about *whilst thinking* being the *ideas* that are there such as are those expressed by the words whiteness, hardness, sweetness ...”. Man thinks, yes. And his ‘mind’, the ‘mens’ of the title of *Ethica 2*, is composed of two kinds of thought, or better: of two aspects or components. The point of Locke’s take off is our mind in its double orientation: outwards on things whatever and inwards on itself as thinking those things in its sensitive ideas. Each idea is essentially object to itself or transparent to itself as being an idea of x. To say it in a simpler way: we cannot perceive something without perceiving our perceiving, i.e. without being conscious that and what we perceive.⁵³

For in truth the idea of the mind, that is the idea of an idea (*idea ideae*), is nothing else than the form of an idea in so far as it is considered as a mode of thinking without relation to its object. *For if a man knows anything, by that very fact he knows that he knows it* (*Ethica 2/21* scholium). The human mind perceives not only the modification of the body, but also the ideas of these modifications (*Ethica 2/22*)

[...] *it being hard to conceive that anything should think and not be conscious of it* (*Essay 2.1.11*).[...] that consciousness which is inseparable from thinking and, as it seems to me, essential to it: it being impossible for anyone to perceive without perceiving that he does perceive. When we see, hear, smell, taste, feel, meditate, or will anything we know that we do so (*Essay 2.27.9*).

As concerns the origin of our ideas (Locke: ‘*their original*’; Spinoza: ‘*de origine mentis*’) both our two philosophers stay firm on the common ground of *radical empiricism*, in spite of the frontal opposition between their ‘rationalism’ and ‘empiricism’ respectively as suggested by superficial historians of philosophy and writers of schoolbooks.

The human mind does only know the human body and its existence through the ideas of the affections, by which the body is affected (*Ethica 2/19*). The mind has no knowledge of itself save in so far as it perceives the ideas of the modifications of the body (*Ethica 2/23*) The human mind does not actually perceive any external body in another way than by the ideas of the affections of its own body (*Ethica 2/26*).

Whence has (the mind) all the materials of reason and knowledge? To this I answer, in one word, from *experience*; in that all our knowledge is founded, and from that it ultimately derives itself. Our observation, employed either about external sensible objects, or about the internal operation of our minds perceived and reflected on by ourselves, is that which supplies our understandings with all the materials of thinking (*Essay 2.1.2*)

⁵³ La Mettrie, an eighteenth century follower of both, Spinoza and ‘le sage Anglois’, sharply remarked Locke’s joining Spinoza in this point, when he writes in his *Abrégé des systèmes* (1751): “En un mot, M. Locke nie que l’ame puisse penser & pense réellement, sans avoir conscience d’elle meme, c’est-à-dire, sans sçavoir qu’elle pense”. Quoted from La Mettrie, *Le Traité de l’Ame*. Edited by Theo Verbeek (Utrecht 1988), p. 233.

There is, after all, only one source of all our knowledge and that is the *experience* of ourselves in the broadest sense. As explained above there are, as it were, two layers in this experience of ourselves, marking its duplicity. Spinoza (cf. his 4th and 5th axiom) considers them as primary and secondary perceptions, i.e. the *sensations*⁵⁴ and the *ideas of* (these primary) *ideas*, for which latter type he does not have a special term. The latter are, indeed, *reflections* of the former, given the fact that they are ideas of ideas. In the TIE §26 the expression *idea ideae* was accordingly characterized as a *cognitio reflexiva*. It is certainly a great merit of John Locke to have discovered this duplicity in Spinoza's explanation of our experience and to have minted it to his classical couple 'sensation – reflection'. The 'sensation' provides us with the 'sensible qualities' (2.1.3) as yellow, white, heat, soft etc.⁵⁵ In the 'reflection', or as he calls it with Spinoza 'the internal sense' (2.1.4), "the mind furnishes the understanding with ideas of its own operations", like thinking, doubting, believing etc.

The perfect correlation between the reflected sensations of our body and its being affected and agitated by other bodies ought to have brought Locke to endorsing the famous proposition *Ethica* 2/7 ("The order and connection of ideas is the same as the order and connection of things"). Had he not, in fact, already subscribed to an equivalent of *Ethica* 2/13 ("The object of the idea constituting the human mind is the body, or a certain mode of extension actually existing and nothing else") and its corollary ("Hence it follows that man consists of mind and body, and that the human body exists according as we sense it")? *Anyhow he did follow the clear anti-cartesian, while anti-dualistic, position of Spinoza*. Man is one thing, a unity, not a combine of two substances, a thinking thing and an extended thing somehow related with and working upon each other. A thinking soul independent of specific variations of the body is for Locke an impossibility. Descartes was condemned to conceive the soul as an always thinking thing, because otherwise it would not permanently exist. Whereupon Locke reacts: "I confess myself to have one of those dull souls, that does not perceive itself always to contemplate ideas; nor can conceive it any more necessary for the soul always to think, than for the body always to move: the perception of ideas being (as I conceive) to the soul what motion is to the body; not its essence, but one of its operations" (2.1.10). Locke cynically chastises the Cartesians, "who so liberally allow life without a thinking soul to all other animals": "they make the soul and the man two persons, who make the soul think apart what the man is not conscious of" (2.1.12). "Can the soul think and not the man? Or a man think and not be conscious of it?" (2.1.19). This is the *reductio ad absurdum* of Descartes' dualism in favor of Spinoza's anthropological monism (*Ethica* 2, axiom 2 and 2/1/3c).⁵⁶

The conclusion is unavoidable: Locke did endorse the typical Spinozistic coordination of the series of ideas with the series of corporeal affections in man.

The order and connection of the ideas is the <i>same</i> as the order and connection of the things (<i>Ethica</i> 2/7).	As the bodies that surround us do diversely affect our organs, the mind is <i>forced</i> to receive the impressions (<i>Essay</i> 2.1.25)
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The metaphor of the mind as a *mirror*, therefore, is not considered inappropriate by Spinoza as well as by Locke and they both subsequently underline the passivity of our knowledge.⁵⁷

⁵⁴ The word *sensatio* was already part of Spinoza's vocabulary in a passage that Locke's attention cannot have missed when he still lived in Oxford. See CM 1/1/5: "By what *modes of thinking* we imagine things [...] But because to imagine is nothing other than to sense those traces found in the brain from the motion of the spirits, which is excited in the senses by objects, such a sensing (*talais sensatio*) can only be a confused affirmation".

⁵⁵ Locke had read this term in PPC 2/1: "Quamvis durities, pondus et reliquae *sensibiles qualitates* ...".

⁵⁶ The text of the Dutch translation of the *Ethica* by Spinoza's friends, the *Nagelate Schriften*, gives a more complete form of the discussed axiom 2 than the *Opera Posthuma*: "De mensch denkt; of anders, wy weten dat wy denken" ("Man thinks, or, we know that we think"). This formula comes even closer to Locke's interpretation in 2.1.12: "Can a man think without being conscious of it?"

⁵⁷ Cf. KV 2/15/5: "the understanding is a pure passion".

[criticizing Bacon:] Human intellect is in relation to the rays of the universe like an uneven <i>mirror</i> , which mixes its own nature with the nature of things (Letter 2). We cannot attribute to god our thinking, which is passive and is determined by the nature of things (CM 2.10.8).	The understanding can no more refuse to have, nor alter when they are imprinted, not blot them out and make new ones itself, than a <i>mirror</i> can refuse, alter, obliterate the images of ideas which the objects set before it do therein produce (<i>Essay</i> 2.1.25).
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The holy empirical principle, which both, Spinoza and Locke, never renounced, seems to exclude the possibility of any adequate knowledge of the essence of things. We only do know them in a confused way by means of our sensorial apparatus, which only permits to know their nature in so far it is present in or working on our senses. In order to escape the boundaries of our subjective impressions and find a cognitive access to the world on itself without disavowing the empirical principle, our twins both refuge to a short introduction to mechanical physics proper, in which they emphasize the laws of motion, rest and change of bodies by each other. As we demonstrated earlier they did not disagree on this field of hard science.

I must premise a <i>few statements concerning the nature of bodies (paua de natura corporum)</i> (<i>Ethica</i> 2/13s).	I shall be pardoned this <i>little excursion into natural philosophy</i> (<i>Essay</i> 2.8.22).
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It is precisely the shared natural science, which enabled them to find the access to adequate knowledge in the properties that are common to all bodies as we sense them:

All bodies agree in certain respects (<i>Omnia corpora in quibusdam conveniunt</i>) (Lemma 2). Those things, which are common to all (<i>omnibus communita</i>), and which are equally in a part and in the whole, can only be conceived adequately (<i>Ethica</i> 2/38). Hence it follows that there are certain ideas or notions common to all men. For (Lemma 2) all bodies agree in certain things, which (prev. Prop.) must adequately or clearly and distinctly be perceived by all (Corollary).	Qualities ... such as are utterly inseparable from the body, in what state soever it be; such as in all the alterations and changes it suffers, all the force can be used upon it, it constantly keeps; and such as sense <i>constantly</i> finds in every particle of matter which has bulk enough to be perceived; and the mind finds inseparable from every particle of matter, though less than to make itself singly be perceived by our senses (<i>Essay</i> 2.8.9). Those ideas which are constantly joined to all others must therefore be concluded to be the <i>essence</i> of those things which have constantly those ideas joined to them and are inseparable from them (<i>Essay</i> 2.13.26).
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The 'common properties' of bodies, which according to Spinoza are necessarily perceived in the 'common notions',⁵⁸ are baptized by Locke as "*real, original or primary qualities*" (2.8.9).

Locke makes only use of the expression 'common notions' for indicating the principles of moral life, the principles known and to be practiced by everybody.⁵⁹

Locke is rather sloppy and sometimes incomplete in his always slightly different inventories of the constantly present qualities that reveal the essence of things. *Solidity or impenetrability* or *extension* or *exclusive repletion of space* is the first candidate coming on the scene in 2.4. In 2.4.8 *figure* and *mobility* are added. In 2.10.6 the latter quality is called *motion and rest*. The way bodies operate

⁵⁸ In Letter 6 he called the 'notions which explain nature as it is on itself' *notiones castae* (pure notions).

⁵⁹ See *Essay* 1.3.17 ("Do as thou wouldst be done unto" and 1.3.18 ("virtue is the best worship of God"). - The well known Locke scholar Michael Ayers supports my thesis that Locke with his 'constant' elements of our experience builds forth on Spinoza's 'common notions'. See his "Spinoza, Platonism and Naturalism" in Ayers, M. (ed.) *Rationalism, Platonism and God* (Oxford, forthcoming).

can only be *by impulse* (2.8.11). And of course the *causality* principle: “everything that has a beginning, must be caused”.⁶⁰ Spinoza was certainly more systematic in his physical diagram, which he also developed in a geometrical manner. All parts of extension “are either moving or at rest” (ax. 1) and “move now slower now faster” (ax. 2), only distinguished from each other by their ‘*degree of motion*’ (lemma 1), which is, in whatever state they are, always caused by other bodies (lemma 3). After this lemma Spinoza gives another physical axiom (again ‘axiom 1), which explains the origin of our confused or impure ideas of external bodies, called ‘secondary qualities’ by Locke, who, in fact, rephrases this axiom.

<p>All ways in which any body is affected by another follow alike from the nature of the body affected and the body affecting: so that one and the same body may be moved in various ways according to the variety of the natures of the moving bodies, and on the other hand, various bodies may be moved in various manners by one and the same body (axiom 1). Hence it follows ... that the human mind <i>perceives</i> the nature of many bodies at the same time as the nature of its own body (c. 1) [and] that the ideas which we have of external bodies indicate <i>rather the constitution of our body</i> than the nature of the external bodies (c. 2). [...] the modifications of the human body, the ideas of which represent to us external bodies as if they were present we call the images of things, although they <i>do not represent the shapes of things</i>; and when the mind regards bodies in this manner we say it <i>imagines</i> them (2/17s)</p>	<p>If it were the design of my present undertaking to inquire into the natural causes and manner of <i>perception</i>, I should offer this as a reason ... viz. <i>that all sensation being produced in us only by different degrees and modes of motion in our animal spirits, variously agitated by external objects</i>, the abatement of any former motion must as necessarily produce a new sensation as the variation or increase of it, and so introduce a new idea, which depends only on a different motion of the animal spirits in that organ (<i>Essay</i> 2.8.4). [...] secondary and <i>imputed</i> qualities (2.8.22). But our senses not being able to discover any unlikeness between the idea produced in us and the quality of the object producing it, we are apt to <i>imagine</i> that our ideas are resemblances of something in the objects (2.8.25)</p>
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One could quote many other parallel sentences from *Essay* 2.8 to prove that Locke follows exactly Spinoza’s physical (physiological) explanation of our perception in *Ethica* 2, but the above selection will be sufficient for persuading the attentive reader. One point may perhaps be added. Our perception of the ‘secondary qualities’ like *hot, sweet, dark* etc. is produced by the entrance (via our senses) of ‘imperceptible bodies’ into the fluid and soft parts of our body (‘our nerves or animal spirits’), which ‘convey to the brain some motion’ (2.8.12). This theory reverberates Spinoza’s argument in 2/17c about hallucination (“When external bodies so determine the fluid parts of the human body that they often impinge on the soft parts, they change the surface of them ...”), and reflects the six postulates he enumerated at the end of his ‘small physics’ and to which he remarked in 2/17s: “there is nothing in it, that is not borne out by experience”. Our world, we must say with our philosophers, is necessarily full with phantastical illusions about its population, an essentially ‘undisenchanted’ world. Efforts from the side of rationalists for its disenchantment are utopian and can hardly be considered a contribution of radical enlightenment.

Spinoza and Locke draw a whole *series of conclusions* from their shared theory of perception: about adequacy and inadequacy of ideas, about their truth or falsity, about memory and retention of ideas, about universality and variety of perception among animals, about association of ideas, about custom and education. The textual evidence is as follows.

⁶⁰ See *A Letter to the right reverend Edward Stillingfleet*, in *Works* IV, p. 61.

<p>Inadequate and confused ideas follow with the same necessity as adequate or clear and distinct ideas (<i>Ethica</i> 2/36).[...] inadequate or partial (<i>inadequata seu partialis</i>) (<i>Ethica</i> 3, def. 1).</p>	<p>OF ADEQUATE AND INADEQUATE IDEAS. Of our real ideas, some are adequate, and some are inadequate. Those I call adequate which perfectly represent those archetypes, which the mind supposes them taken from, which it intends them to stand for, and to which it refers them. <i>Inadequate</i> ideas are such which are but a <i>partial or incomplete</i> representation of those archetypes to which they are referred (<i>Essay</i> 2.31.1)</p>
<p>And here, so that I may begin to point out where lies error, I would have you note that the <i>imaginings of the mind, regarded in themselves, contain no error</i>, or that the mind does not err from the fact that it imagines, but only in so far as it is considered as wanting the idea which cuts off the essence of the things she imagines (<i>Ethica</i> 2/17s)⁶¹</p>	<p>And so I say that the ideas in our minds, being only so many perceptions or appearances there, none of them are false [...] <i>Our ideas are not capable</i>, any of them, <i>of being false</i>, till the mind passes some judgment on them, that it affirms or denies something of them (<i>Essay</i> 2.32.3).</p>
<p>If the human body has once been affected at the same time by two or more bodies, when the mind afterwards remembers any one of them it will straightway remember the others (<i>Ethica</i> 2/18) until the body is affected by a modification which cuts off the existence or presence of that body (2/17).Hence we clearly understand what is <i>memory</i>. For it is nothing else than a certain concatenation of ideas ... according to the order and concatenation of the affections of the human body (2/18s).The more an image is joined with many other things, the more often it flourishes (<i>viget</i>) (5/13).For it comes about <i>sometimes</i> that a man suffers such changes that it is difficult to say he is the same, as I have heard related of a certain Spanish poet, who had been seized with a certain <i>sickness</i>, and although he recovered from it, remained so <i>oblivious of his past life</i> that he did not think the tales and tragedies he had written were his own (<i>Ethica</i> 4/39s).The more any image has reference to many things, <i>the more frequent</i> it is, i.e., the more often it flourishes, and the more it occupies the mind (<i>Ethica</i> 5/11). For there is another point which I wish to be noted specially here, namely, that we can do nothing by a decision of the mind unless we recollect (<i>nisi recordemur</i>). For instance, we can not speak a word unless we recollect it (<i>Ethica</i> 3/2s).</p>	<p>Concerning the several <i>degrees of lasting</i>, wherewith ideas are imprinted on the <i>memory</i>, we may observe that some of them have been produced in the understanding by an object affecting the senses once only, and no more than once; others that have more than once offered themselves to the senses have yet been little taken notice of (2.10.4).How much the constitution of our bodies and the make of our animal spirits are concerned in this, and whether the temper of the brain make this difference that in some it retains the characters drawn on it like marble, in others like freestone, and in others little better than sand, I shall not here inquire, though it may seem probable that the constitution of the body does sometimes influence the memory, since we <i>oftentimes</i> find a <i>disease</i> quite strip the mind of all its ideas and the flames of a <i>fever</i>, in a few days, <i>calcine all those images to dust and confusion</i> which seemed to be as lasting as if graved in marble (2.10.5).Those (ideas) that are oftenest refreshed (amongst which are those that are conveyed in the mind by more ways than one) be a <i>frequent return</i> of the objects or actions that produce them, fix themselves best in the <i>memory</i> (2.10.6).[...] <i>repetition</i> helps much to the fixing any ideas in the memory (2.10.3). Memory ... is of so great moment that, where it is wanting, all the rest of our faculties are in a great measure useless; and we in our thoughts, reasonings, and knowledge could not proceed beyond present objects ..." (2.10.8)</p>

⁶¹ Cf. Wim Klever, "The Truth of Error: A Spinozistic Paradox", in Y. Yovel (ed.), *Spinoza on Knowledge and the Human Mind* (Leiden: Brill 1994) 111-128. "Simple ideas are not fictions of our fancies, but the natural and regular productions of things without us, really operating upon us" (*Essay* 4.4.4). This is Locke's perfect explanation of Spinoza's example, that the sun *has to appear* as a bright disc on a short distance in the sky (*Ethica* 2/35s).

<p><i>All things are, though in various degrees, animate (omnia [individua], quamvis diversis gradibus, animata sunt)... This, however, I will say in general, that according as a body is more apt than others for performing or for receiving many actions at the same time, so is its mind more apt than others for perceiving many things at the same time. And according as fewer other bodies concur with its action, so its mind is more apt for distinct understanding (2/13s)</i></p>	<p><i>Perception, I believe, is, in some degree, in all sorts of animals; though in some possibly the avenues provided by nature for the reception of sensations are so few, and the perception they are received with so obscure and dull, that it comes extremely short of the quickness and variety of sensation, which is in other animals (Essay 2.9.12). Children, by the exercise of their senses about objects that affect them in the womb, receive some few ideas (2.9.5)...small dull perception ...in decrepit old age (2.9.14).</i></p>
<p><i>Concatenation of ideas according to the order and concatenation of the modifications of the human body ... And hence we can clearly understand why the mind from thinking (cogitatio) one thing should immediately fall upon thinking another which has no likeness to the first, e.g. how from the thinking the word <i>apple</i> (pomum) a Roman immediately began thinking a fruit, which has <i>no likeness</i> to that articulate sound nor anything in common, save that the body of that man was <i>often affected</i> by these two, that is, the man frequently heard the word <i>apple</i> (pomum) while looking at the fruit and thus passes from the thought of one thing to the thought of another according as <i>custom</i> (consuetudo) has arranged the images of things in his body (Ethica 2/18s). For <i>custom</i> and <i>religion</i> are not the same to all, but on the contrary, what is sacred to some is profane to others, and what is honorable to some is disgraceful to others. Therefore, according as each has been <i>educated</i>, so he repents or glories in his actions (Ethica 4, df xxvii). Anything can <i>accidentally</i> (per accidens) be the cause of pleasure, pain, or desire ... Hence we understand how it comes about that we love or hate certain things without having any known cause for it, but only out of what people call <i>sympathy</i> and <i>antipathy</i> (Ethica 3/15 & scholium).</i></p>	<p>On the association of ideas (2.33) [This strong combination of ideas] comes in different men to be very different, according to their different inclinations, <i>educations</i>, interests, etc. <i>Custom</i> settles habits of thinking in the understanding, as well as of determining in the will, and of motions in the body: <i>all which seems to be but trains of motion in the animal spirits</i>, which, once set a-going, continue in the same steps they have been used to, which, by often treading, are worn into a smooth path, and the motion in it becomes easy and, as it were, natural (Essay 2.33.6).For a child quickly assents to this proposition, that an <i>apple</i> is not fire, when by <i>familiar acquaintance</i> he has got the ideas of those two <i>different things</i> distinctly imprinted on his mind and that the names <i>apple</i> and fire stand for them (1.2..23). How children learn languages [...] gold or <i>apple</i> to distinguish the one from the other (1.3.9 & 15). Let <i>custom</i> from the very childhood have joined figure and shape to the idea of God and what absurdities will that mind be liable to about the Deity? (2.23.17).To this [associations made by custom] perhaps might be justly attributed most of the <i>sympathies and antipathies</i> observable in men, which work as strongly and produce as regular effects as if they were natural; and are therefore called so, though they at first had no other original but the <i>accidental</i> connexion of two ideas (2.33.7)</p>

After having demonstrated that all our ideas are originally and essentially ideas of our thus or so affected body and that they are without exception confused, because we cannot distinguish between what in our body is the effect of its own nature and what is due to the affecting external bodies, Spinoza comes to a summary of his long discourse, which may also be considered its summit. The fragment must have made a deep impression on Locke and have turned his mind definitely in a completely new direction. Here, on this point of *Ethica* 2, he was struck by the light that made him see and understand, for the first time in his life, how we humans raise from the bottom of confused and inadequate knowledge towards the level of adequate and crystal clear knowledge, how we escape from the imaginative sphere into the realm of pure reason and irresistible concepts.

I say expressly that the *mind* has no adequate but only confused knowledge of itself, of its body, and of external bodies, when it perceives things according to the common order of nature, that is, whenever it is determined externally, that is, by fortuitous circumstances, to *contemplate* this or that, and not when it is determined internally, that is, by the fact that it *contemplates* many things at once, to understand their agreements, differences, and repugnances one to another (*eo quod res plures simul contemplatur, determinatur ad earundem convenientias, differentias et oppugnantias intelligendum*). For whenever it is disposed in this or any other way from within, then it *contemplates* things clearly and distinctly, as I shall show further on (*Ethica* 2/29s).

On knowledge in general. 1. Since *the mind*, in all its thoughts and reasonings, hath no other immediate object but its own *ideas*, which it alone does or can *contemplate*, it is evident that our knowledge is only conversant about them. 2. *Knowledge* then seems to me to be nothing but *the perception of the connexion and agreement, or disagreement and repugnancy, of any of our ideas*. In this it consists (4.1.1&2).⁶² He (God) has given mankind a mind that can reason without being instructed in methods of syllogizing; the understanding is not taught to reason by these rules, it has a native faculty to perceive the coherence or incoherence of its *ideas* (4.17.4).⁶³

To have sensations implies knowing it and mentally seeing them. The mind, being the (complex) idea of its ideas, contemplates (reflects) its own ideas (sensations). Is it a wonder, then, that it *must* perceive at once their being identical, different or opposite, because they cover each other yes or no? It needs thereto no process of reasoning and concluding. The mind cannot avoid the clear and distinct perception as described in the threefold terminology (agreement / *convenientia*, disagreement *differentia*, repugnancy / *oppugnantia*), just like the mathematician cannot avoid seeing equality, partial equality or opposition between his figures. Locke's use of the word 'contemplate', which is so prominent in Spinoza's scholium, is even more significant than his taking-over of the just mentioned trio, because up till now it did not belong to his vocabulary.⁶⁴



⁶² In 4/17/4 Locke explained our automatical seeing of agreement or disagreement between our ideas with the word 'native faculty', a skill, therefore which needs not to be acquired. "The mind ... has a native faculty to perceive the coherence or incoherence of its *ideas*".

⁶³ Cf. Wim Klever, "Hoe men wijs wordt. Een gespannen doch vruchtbare relatie tussen Spinoza en Bouwmeester in het licht van een nieuw document", in *De Zeventiende Eeuw* 21 (2005)335-353. This article provides an interesting background to Locke's statement here.

⁶⁴ John W. Yolton is on page xx of his introduction to the Everymans edition of the *Essay* (reprint 1972) not wrong with his interpretation of the word 'repugnancy' (used by Locke in 4-.1.2 and elsewhere) as meaning 'contradiction or inconsistency', but it is a bit curious to refer to the Middle Ages where the source is contemporary. 'Oppugnantia' was not current in English language, but 'repugnancy' is good enough as a translation.