

# A short history of Locke's "superaddition": from Father Mersenne to Voltaire

Antony McKenna and Gianluca Mori

*Abstract:* Far from being a product of Locke's philosophical genius, the theory of the divine superaddition of thought to matter is rooted in the discussions about Descartes' conception of the soul as *res cogitans* which took place in France and in the Netherlands in the years 1640-1680, from Mersenne to Regius and Bayle. Locke's historical and theoretical relationship with these sources can be clearly documented, as well as the influence of the superaddition theory in the eighteenth century, mostly in the realm of free-thinking, from Collins to Bolingbroke and above all Voltaire. In the light of this intellectual genealogy, the accusations of materialism, or even Spinozism, frequently levelled against Locke acquire a new significance and are worth exploring again.

*Keywords:* Locke, Mersenne, Regius, Bayle, Collins, Bolingbroke, Voltaire, thinking matter, materialism, atheism, Spinozism.

There has been a wide debate in Locke scholarship about the theory of the divine "superaddition" of thought to matter (*Essay*, IV.iii.6)<sup>1</sup>. However, while the internal coherence of Locke's position has been thoroughly explored, the question of its historical origin has never been addressed systematically. With very few exceptions, everyone seems to assume, implicitly or explicitly, that the superaddition theory derives directly from Locke's philosophical genius<sup>2</sup>. This

<sup>1</sup> J. Locke, *An Essay concerning Human Understanding*, ed. by P.H. Nidditch, Clarendon Press, Oxford 1975, IV.iii.6, p. 541. See below, Bibliography (1), for a list of the most important papers on this topic published over the last fifty years. All Latin and French quotations are accompanied by our own translation.

<sup>2</sup> For a partial exception, see D. Clarke, "Henricus Regius", in *The Stanford Encyclopedia of Philosophy* (*Spring 2020 Edition*), ed. by E.N. Zalta, <https://plato.stanford.edu/archives/spr2020/entries/henricus-regius/>: "[Regius] argues that the concepts of extension and thinking are not incompatible and [that], 'accordingly, they may both be present in the same simple subject'. This anticipates the question (and the implied answer) that was discussed by Locke, in the *Essay* IV, iii, 6, whether God may have superadded thought to a material substance". As we shall see, it is historically questionable

is far from the truth: Locke is the inventor neither of the hypothesis of thinking matter as a possible effect of God's omnipotence, nor of its philosophical interpretation in terms of a "superaddition" of a property to a pre-existing subject<sup>3</sup>. It is worthwhile, therefore, to trace the historical path of this doctrine and the chain of sources which lie behind it, in order to better understand its use by Locke and its subsequent fortune in the early Enlightenment up to Voltaire's double *Lettre sur M. Locke* (the official and clandestine versions).

### 1. *Before Locke: Mersenne, Regius, and Bayle*

Within the framework of Aristotelianism, the possibility of a thinking body was not a scandalous thesis: Aristotle's substance was both body and soul, matter and form, power and act. It was Descartes who revolutionized the conception of substance, but in two directions: he saved spiritualism by maintaining that the mind is a distinct substance in itself (*res cogitans*), without need of a material substrate, but at the same time he opened the door to materialism by declaring that matter, too, is a substance (*res extensa*) which can exist as such even in the absence of any spiritual being. For at least a century, this Cartesian distinction defined the intellectual framework of discussions on the soul and its relation to the body. Locke's theory of the possibility of thinking matter emerge precisely in this context, inheriting positions that had appeared in the course of the debate on Cartesian dualism.

In the letter from the purported "*Philosophi et geometrae*" included in the "Sixth Objections" to Descartes' *Meditations* – of which Mersenne was in fact the sole author<sup>4</sup> – it is argued that the existence of a thinking substance is not

to argue that here Regius *anticipates* Locke. It would be more appropriate to maintain that he *follows* Mersenne.

<sup>3</sup> Although very popular in critical literature, the term "superaddition" seems to be absent from Locke's own writings (see *EEBO* and *ECCO* databases) and letters (at least in the years 1680-1704). We will employ it as a legitimate substantive form of the verb "to superadd", that Locke, following Bayle (see below, n. 14), uses several times in the *Essay* and in the debate with Stillingfleet.

<sup>4</sup> Mersenne admits to being the author of the 2<sup>nd</sup> and 6<sup>th</sup> Objections in a letter to Gijsbert Voet dated 13 December 1642 and published in R. Descartes, *Ceuvres complètes* (henceforth AT), ed. by C. Adam and P. Tannery, Vrin, Paris 1996, III, 602: "[...] cum sex illas Meditationes de prima Philosophia saepius, ut se velle testabatur Author, perlegissem, illas objectiones, quae in secundo sunt loco, proposui (quod tibi velim in aurem dictum, nec enim ipse novit cuius fuerint), quibus etiam postea sextas adjunxi". ["after reading several times (as the author required) the six Meditations which he had written concerning the first philosophy, I proposed to him these objections which he placed in the

as certain as the truth of mathematical propositions or logical axioms:

We understand very well that 2 plus 3 makes 5, and that, if from equal things one takes away equal things, the remainders will be equal [...] why then are we not equally convinced by the means of your [i.e. Descartes'] ideas or even by our own, that the soul of man is really distinct from the body [...]?

*[nos optime percipere 3 et 2 facere 5, et, si aequalia ab aequalibus auferas, adhuc aequalia futura; his et mille aliis convincimur, idemque penes te reperies. Cur similiter non convincimur ex ideis tuis vel nostris, animam hominis esse distinctam a corpore [...]?<sup>5</sup>]*

But Mersenne does not stop there. From the observation that it is impossible to consider dualism as an indubitable mathematical truth (which would render contradictory any attempt to attribute thought to matter), he draws the consequence that one cannot deny that God could lend thought to matter. He also adds that this conclusion is made even more cogent by the fact that we do not fully know the capacities of matter and therefore we cannot deny *a priori* that they include the ability to have thoughts (i.e., in a broad sense, conscious cognitive states). We thus observe that what is generally called "Locke's hypothesis" was actually formulated by a Minim friar, in France, some time during the year 1640, half a century before the first edition of the *Essay on human understanding* was published:

As we do not know how far the powers of bodies and their movements can reach, since you [Descartes] confess that there is no one who can know all that God has put or can put in a subject without a particular revelation on his part, where can you have learned that God did not put this power or property in some body, to think, to doubt, etc.?

*[Denique, quamdiu nescimus quid a corporibus et illorum motibus fieri possit, cum et fatearis nullum omnia scire posse, quae Deus in aliquo subjecto posuit atque ponere valet, absque ipsius Dei revelatione, qui scire potuisti hanc a Deo non fuisse positam in quibusdam corporibus vim et proprietatem ut dubitent, cogitent etc.<sup>6</sup>]*

To this objection Descartes replied simply by reiterating his position: if God can give to the body the faculty of thought, He can also separate them,

second rank (but I beg you to keep that between us, because he does not know where they come from), to which I have recently added the sixth [objections]."

<sup>5</sup> Ibid., VII, p. 421.

<sup>6</sup> Ibid.

which confirms that the soul is a distinct and complete substance<sup>7</sup>. In other words, Descartes either did not understand the objection, or he pretended not to understand it. His reply entirely misses the point and avoids examining the possibility of thinking matter. The fact remains that Mersenne, while prudently limiting himself to reasoning by negation, or *ex ignorantia*, had imposed four arguments which were to dominate the ensuing debate:

- 1) since man does not know all the properties of matter, the notion of thinking matter cannot be considered contradictory (as would be the case with  $3+2 \neq 5$ );
- 2) since we do not know how far God's creative power extends, it cannot be denied that God can create thinking matter;
- 3) what we call "thought", in this case, would not be a substance "really distinct" from the body, as Descartes imagined, but a property or a "power" of the body itself;
- 4) only "God's revelation" could enable us know the real essence of the body and its various properties.

All these arguments return, with even greater conviction and resoluteness, in the works of a Dutch physician and philosopher who, after being initially the most faithful Dutch Cartesian, soon became an apostate of Cartesianism to the point of being repudiated by Descartes himself, namely Henricus Regius (1598-1679).

With Regius, the ground immediately becomes slippery: a former pupil, in Padua, of the Aristotelian Cremonini, who, in turn, was a well-known unbeliever and supporter of the mortality of the soul<sup>8</sup>, Regius had not the slightest desire to pass for a spiritualist and was careful to maintain that, from a philosophical point of view, the soul is not necessarily a "substance". But Regius was equally anxious not to pass publicly for a materialist, much less an atheist, and was therefore reduced to disguising his true position. He thus argues that the "mind" *can* be conceived in three different ways: 1) as a "substance"; 2) as a

<sup>7</sup> See *Ibid.*, IX, p. 242.

<sup>8</sup> See especially F. Hallyn, "La philosophie naturelle de Regius et l'écriture athée", in *Libertinage et philosophie au XVII<sup>e</sup> siècle*, "Les Libertins et la science" 9 (2005), pp. 37-49. On Regius' pre-Cartesian period, see A. Strazzoni, "How Did Regius Become Regius? The Early Doctrinal Evolution of a Heterodox Cartesian", *Early Science and Medicine* 23 (2018), 4, pp. 362-412. On the link between Regius and Guy Patin, author of the first atheist treatise of early modern age, the *Theophrastus redivivus*, see G. Mori, *Athéisme et dissimulation au XVII<sup>e</sup> siècle: Guy Patin et le Theophrastus redivivus*, H. Champion, Paris 2022, pp. 142-48.

non-essential property ("accident") of matter; or 3) as an attribute of an underlying "subject", i.e. of a substance which is in itself neither thinking nor material. In the third case, "thought" and "matter" would be different attributes of the same kind of substance, and they would co-exist in the same way that "beauty and eloquence" can co-exist in the same human being.

As far as the nature of things is concerned, it seems that the human mind could be either a substance, or an accident of a corporeal substance, or, if we follow some other philosophers who maintain that the extension and size of the body, and the ability of the mind to think, are attributes that are present in certain substances as subjects, since these attributes are not opposite, but different, nothing prevents us from thinking that the mind could be an attribute that co-exists in its subject together with extension, although the mind is not included, as some claim, in the concept of the latter. [...]

*[Quantum ad naturam rerum attinet ea videtur pati ut mens humana possit esse vel substantia vel quoddam substantiae corporeae accidens vel si nonnullos alios Philosophantes sequamur qui statuunt extensionem, sive magnitudinem corporis, & cogitandi facultatem mentis attributa quae certis substantiis tanquam subjectiis insunt, cum illa attributa non sint opposita sed diversa, nihil obstat quo minus mens possit esse attributum quoddam eidem subjecto cum extensione sive magnitudine corporea conveniens quamvis unum in alterius conceptu ut quidam volunt non comprehenderetur<sup>9</sup>.]*

All these three cases being perfectly conceivable, it follows that God can create the human mind in these three different ways. Regius' syllogism runs as follows:

[1] Whatever we can rightly conceive can indeed be done by divine power, but [2] the mind can be or can be conceived without contradiction in these three ways, since, whether it be substance, accident or attribute, it will always remain a faculty of thinking; ergo [3] the mind can exist in one of these three ways.

*[Quicquid autem recte possumus concipere, id saltem per divinam potentiam potest esse. Atqui, ut mens aliquid horum sit vel esse possit concipi, potest nam nullum horum implicat contradictionem, cum mens, sive sit substantia, sive accidens, sive attributum, manebit tamen semper facultas cogitandi. Ergo ea aliquid horum esse potest<sup>10</sup>.]*

<sup>9</sup> H. Regius, *Medicina et Praxis medica, medicationum exemplis demonstrata*, Ex officina Theodori ab Ackersdijck, Trajecti ad Rhenum 1668, pp. 65-66; the same text is already to be found, with a few minor variants, in Regius' *Explicatio mentis humanae*, 1647, quoted by Descartes, "Notae in programma quoddam", in AT VIIIb, p. 645; 2<sup>nd</sup> edition, *Brevis explicatio mentis humanae*, Utrecht 1648, p. 7.

<sup>10</sup> Ibid.

As to Regius' choice between these three possible ontologies of the mind, it is quite clear that he despises the substantialist (or Cartesian) theory of the mind as *res cogitans* – even though the Bible obliges us to adopt this conception (*Fundamenta physices*, 1646, p. 251). So Regius' philosophical choice will be between the two non-substantialist theories, which correspond, respectively, to a materialist (Hobbesian) ontology, where thought is a non-essential property of matter, and a monist (proto-Spinozist) ontology where thought and matter are different attributes of the same underlying substance. Regius does not seem to make his choice between the two, but he is entirely clear on the most important point of the whole dispute: thought and matter are not incompatible and, in his eyes, to say the contrary is to beg the question (*petitio principii*)<sup>11</sup>.

Regius died in 1679. In that same year, Pierre Bayle entered the debate with one of his first writings: the Latin objections addressed to the Cartesian Pierre Poiret, which were to be published in the second edition of Poiret's *Cogitationes rationales de Deo, anima, et malo* (1685)<sup>12</sup>. In Bayle's objections to Poiret, Mersenne's arguments for the possibility of thinking matter take explicitly the form of a "superaddition" – by God – of a property to a substance which was originally devoid of that property<sup>13</sup>. But Bayle does not limit himself to reproducing Mersenne's short argument: he also integrates Regius' reflections

<sup>11</sup> H. Regius, *Philosophia naturalis. In qua tota rerum universitas, per clara et facilia principia, explanatur* [1654], L. Elzevier, Amsterdam 1661, p. 401: "Nec obest si quis dicat cogitationem nihil extensionis & extensionem nihil cogitationis in suo conceptu includere atque ideo illa attributa esse opposita ac proinde illa eidem simplici subjecto in homine tanquam diversa attribui non posse neque etiam mentem sive facultatem cogitandi corpus extensum posse modificare. Respondetur enim per negationem istius consequentiae quam nemo nisi per petitionem principii probabit unquam".

<sup>12</sup> For the attribution of this text to Bayle, see G. Mori, *Bayle philosophe* [1999], H. Champion, Paris 2020, 2<sup>nd</sup> edition, pp. 55-88.

<sup>13</sup> Thus, Bayle is definitely the hidden source which scholars have often tried to identify for Locke's use of the verb "to superadd" in the context of the debate on thinking matter (see M.R. Ayers, "Mechanism, Superaddition, and the Proof of God's Existence in Locke's Essay", in *Philosophical Review* 90 (1981), p. 228; K.P. Winkler, "Locke on Personal Identity", in V. Chappell (ed.), *Locke*, Oxford University Press, Oxford 1998, pp. 162-63; Ph. Hamou, "L'hypothèse de la matière pensante et ses implications métaphysiques dans l'Essai sur l'entendement humain de Locke", in *Libertinage et philosophie à l'époque classique (XVIe-XVIIIe siècle)* 18 (2021), p. 150). It should also be noted that, like Locke subsequently, Bayle uses the term "*super-adjunctus* /-a /-um", which is the past participle of the verb "*super-adjungere*" ("to superadd"), but not the corresponding noun "*super-adjunctio*" (superaddition). See also P. Bayle, *Œuvres diverses* (henceforth *OD*), Compagnie des libraires, La Haye 1727-31, IV, p. 423 ("*entia super adjuncta*"), p. 499 ("*entitas super adjuncta*"); both occurrences are to be found in *Institutio* [...] *totius philosophiae* – also known as Bayle's "Cours" – written in Sedan around 1675.

– which he certainly knows<sup>14</sup> – on the total independence of thought, understood as a mere property, from the substance in which it inheres, which can be either extended or not extended. In this sense it is also conceivable that there exists a non-extended but non-thinking substance (and, conversely, an extended and thinking substance, as in Mersenne's hypothesis):

There could exist a substance which is both non-extended and non-thinking. Therefore, to conceive a substance deprived of thought is not necessarily to conceive a body. It also follows from this that *thought is a being superadded to a non-extended substance*. If this is so, it will not be difficult to prove that the body is capable of thinking. For, if thought and non-extension could be associated, by God, in spirits, although we do not conceive of any affinity between thought and non-extension, *why could not God unite thought with extension, although we do not perceive any affinity between these two natures?*

[*Ergo substantia posset esse simul non extensa et non cogitans. Ergo qui concipit substantiam sine cogitatione, non ideo concipit corpus. Hinc ulterius sequitur cogitationem esse ens super adjunctum substantie non extense. Quod si res est, tunc certe facile probabitur corpus esse capax cogitandi. Nam si cogitatio et non extensio potuerunt à Deo uniri in spiritibus, licet nullam concipiamus affinitatem inter cogitationem et non extensionem; quidni posset Deus unire cogitationem cum extensione, licet nos non videamus has duas naturas congruere sibi invicem?*<sup>15</sup>]

Bayle pursues his argument, leaning heavily on divine omnipotence and following again Regius' reply to Descartes: it is only by assuming *a priori*, but without any argument, that thought and extension are opposite and incompatible attributes, that one can come to the conclusion that a thinking body is contradictory (a mere *petitio principii*, indeed, just as Regius had maintained):

I ask whether God, by his infinite and all-powerful efficacy, can or cannot make a body become aware of its own existence or of some object. To deny it is to limit the power of God and his omnipotence and it is to say, implicitly, that God composed the universe of a species of substances which are radically unsuitable for their Creator to communicate to them – for God only truly communicates to his creatures in so far as he makes them capable of knowing him. Moreover, since anything that does not imply a contradiction is possible, I ask what contradiction there would be if bodies were made thinking in act. Will it be

<sup>14</sup> See P. Bayle, *Dictionnaire historique et critique*, 2 vols., Reinier Leers, Rotterdam 1697, "Gorlaeus", rem. A, "André", rem. D; "Emilius", rem. B. See also the eulogy of Regius' *Philosophia naturalis* (in French version) that Bayle publishes in the *Nouvelles de la république des lettres*, Oct. 1686, OD I, p. 675.

<sup>15</sup> P. Bayle, "Objections to Poiret" (1679), in OD IV, p. 150.

claimed that it would follow that bodies must be both body and non-body – body, by hypothesis, but non-body, because what thinks is spirit, and therefore really distinct from the body? This is simply begging the question.

[*Quero, num Deus Virtute sua infinita et omnipotenti efficere valent ut corpus existentiae suae, alteriusve cujusdam rei, fiat sibi conscium? Si neget, imminuis Dominium Dei ejusque omnipotentiam, asserisque Deum composuisse Universum ex eo genere substantiarum quae prorsus inepte sint quibus Creator suus seipsum communicet: neque enim Deus vere communicat se suis creatoris nisi in quantum reddit eas capaces suae cognitionis. Praeterea, cum quaecunque non implicent contradictionem possibilis sint, rogo quanam contradictio emergeret ex eo quod corpus redderetur actu cogitans? Fortasse sequeretur illud fore corpus, et simul non fore corpus: foret enim corpus, ex suppositione; non foret vero, quia quod cogitat est spiritus, adeoque distinguitur realiter à corpore. At haec est mera petitio principii<sup>16</sup>.]*

Bayle thus gives new visibility to the hypothesis rapidly evoked by Mersenne and Regius and which had received from Descartes such an evasive and disappointing answer, but he takes a step forward and shows for the first time that the thesis of superaddition actually paves the way for materialism, because it certifies the natural compatibility between matter and thought:

Is it not necessary to know the two terms separately when we want to determine their respective incompatibility? Let it not be said that a body can certainly think by the effect of a miracle: for I will clearly deduce from this that it therefore belongs to the nature of the body to be able to think.

[*Nonne necesse est distincte cognoscere duos terminos si velimus pronuntiare alterum esse impossibilem cum altero? Nec dicas fieri equidem posse per miraculum ut corpus cogitet: nam inde ego manifeste colligam corpus habere sua natura ut sit capax cogitandi<sup>17</sup>.]*

As Bayle will later argue, a “pear” miraculously created by God is not different, once created, from a natural pear which exists by itself (according to the “Stratonic” system of atheism): the two have the same properties and the same powers<sup>18</sup>. In other words, once a being exists with certain properties (including a goal-oriented, or intentional, behaviour), the explanation of its origin (and of

<sup>16</sup> Ibid.

<sup>17</sup> Ibid., p. 150.

<sup>18</sup> See Bayle, *Réponse aux Questions d'un Provincial*, II, § 180, in OD III, p. 882 : “Une poire que Dieu feroit par miracle et qui d’ailleurs ressembleroit en toutes ses qualitez à une poire produite naturellement, ne seroit pas d’une autre espèce que celle-là, et ne seroit propre qu’aux mêmes effets que les poires ordinaires.”

its behaviour) in terms of a free creation by an intelligent being or the simple hypothesis of the *necessity* of that being are exactly equivalent, and neither is epistemologically better founded than the other. Accordingly, either one follows Descartes with his purported perfect knowledge of the essence of mind and body, which implies the logical impossibility of thinking matter, or one admits that man is unable to attain knowledge of the essences of things. In the latter case, the possibility of a naturalistic, or atheistic, theory of the origin of the human mind can no longer be refuted, because mind can be what it is by its nature – i.e. by the simple necessity of things.

## 2. From Bayle's *super-adjunctio* to Locke's *superaddition*

It is evident from what we have seen so far that, when Locke argued for the possibility of thinking matter, he found the ground already cleared. Moreover, he was perfectly acquainted with all the sources involved: he possessed not only the 1658 edition of Descartes' *Meditations*, followed by the "Objections" and "Replies" (which include Mersenne's "Sixth Objections" and in particular the letter ascribed to some "*Philosophi et geometrae*": cf. *The Library of John Locke* [LL], n. 602), but also Regius' *Medicina, et praxis medica, medicationum exemplis demonstratae* [ed. 1668 – LL 2460a], in which are reproduced the same positions on the mind as a faculty of the body that Regius had already expressed in his *Fundamenta physices* (1646) and in the [*Brevis*] *Explicatio mentis humanae* (1647-48, 1657). Locke was probably influenced even more directly by Bayle, as his reference to the divine "superaddition" suggests. The 1677 edition of Poiret's *Cogitationes* is indeed to be found in his library (LL 2365a), and it is likely that Locke, who lived in Amsterdam at that time<sup>19</sup>, also saw the 1685 Amsterdam edition, in which Bayle's objections were published for the first time, since Bayle had himself given a review of the work in the April 1685 issue of his *Nouvelles de la république des lettres* (which Locke possessed – LL 2099).

Whatever the case, the passage from Bayle's *super-adjunctio* to Locke's *superaddition* presents no difficulties, the two doctrines being founded on the same theological premises:

We have the Ideas of Matter and Thinking, but possibly shall never be able to

<sup>19</sup> Locke resided more or less regularly in Amsterdam from May to September 1685. See J. Locke, *Correspondence*, ed. by E.S. de Beer, vol. 2, Oxford University Press, Oxford 1976, p. vii.

know, whether any mere material Being thinks, or no; it being impossible for us, by the contemplation of our own Ideas, without revelation, to discover, whether Omnipotency has not given to some Systems of Matter fitly disposed, a power to perceive and think, or else joined and fixed to Matter so disposed, a thinking immaterial Substance: It being, in respect of our Notions, not much more remote from our Comprehension to conceive, that GOD can, if he pleases, superadd to matter a Faculty of Thinking, than that he should superadd to it another Substance, with a Faculty of Thinking; since we know not wherein Thinking consists, nor to what sort of Substances the Almighty has been pleased to give that Power, which cannot be in any created Being, but merely by the good pleasure and Bounty of the Creator<sup>20</sup>.

As is plain to see, all the main points of this renowned passage of the *Essay on Human Understanding* are taken from the preceding debate: 1) our ignorance of the properties of matter and thought (Mersenne, Bayle); 2) the impossibility of denying that God, being omnipotent, can give thought to matter (Regius, Bayle); 3) the reference to “revelation” as the only possible source of our knowledge of the soul (Mersenne, Regius); 4) the “superaddition” theory, which conceives thought in terms of a simple “power” – or faculty – given by God to a created substance (Bayle). Even the notorious allusion by Locke to the fact that matter must be “fitly disposed” in order to receive a thinking “addition” from God could be an echo of Bayle’s observation that, “in the presence of certain movements”, matter can be modified by God so that it can rejoice or grieve (“*Dicam ego pariter, ad praesentiam certorum motuum materiam sic posse modificari à Deo ut ipsa gaudeat vel doleat*” – Bayle, *Objections à Poiret* [1679, 1685], *OD IV* (1731), p. 151).

Locke returns to the question extensively in his replies to Stillingfleet (1697-99), but even there he still appears to be influenced by the three main actors in the French and Dutch “superaddition” debate of the years 1640-80 (Mersenne, Regius, and Bayle):

You cannot conceive how an extended solid Substance should Think, therefore God cannot make it Think: Can you conceive how your own Soul, or any Substance Thinks? You find indeed, that you do Think, and so do I; but I want to be told how the Action of Thinking is performed: This, I confess, is beyond my Conception; and I would be glad if any one, who conceives it, would explain it to me. God, I find, has given me this Faculty; and since I cannot but

<sup>20</sup> Locke, *Essay*, cit., IV.iii.6, p. 541.

be convinced of his Power in this Instance, which though I every moment Experiment in my self, yet I cannot conceive the manner of; what would it be less than an insolent Absurdity, to deny his Power in other like Cases only for this Reason, because I cannot conceive the manner how?<sup>21</sup>

Far from being original, this "retort" (that if the "manner how" of thinking matter is impossible to conceive, the same should be said of a thinking soul) is indeed the precise paraphrase of Bayle's objection to Poiret:

Do we know the manner in which God applies himself to the spiritual creature in order to move it from one object to another, that is to say, to make succeed to his present thought another quite different thought? Of course, I recognize that necessarily, the action of God, as he changes and modifies our soul in various ways, must remain inaccessible to us. No doubt, we know the effect, namely, we perceive the new excited thought in our mind; but we do not at all perceive the very action of God, the way in which he leads the soul from one thought to another. So, since we do not know how God applies himself to spirits by giving them new modifications, how dare we say that God cannot apply himself to bodies in the same way?

[*An cognoscimus modum quo Deus sese applicat creature spirituali ut ab uno objecto trahat eam ad aliud, hoc est, ut mutet ejus presentem cogitationem alia longe diversa cogitatione? Certe fateamur necesse est, actionem Dei immutantis, diversimodeque modificantis animam, imperviam esse nobis. Ipsum effectum equidem cognoscimus, nempe novam cogitationem in mente excitatam percipimus, neutiquam vero actionem Dei, seu modum quo animam ab una cogitatione in alteram perducit. Si autem ignoremus modum quo Deus sese applicat Spiritibus, ut novam ipsis modificationem tribuat, qua fronte affirmare audemus Deum non posse eodem modo se applicare corporibus?*<sup>22</sup>]

The most interesting novelty of Locke's replies to Stillingfleet (compared to the first enunciation of the superaddition theory in the *Essay*) is the fact that – like Regius and Bayle before him – he now *explicitly* isolates the property "thought" (considered as a "power" or even as an "accident")<sup>23</sup> from *any* sub-

<sup>21</sup> J. Locke, *Reply to the Right Reverend the Lord Bishop of Worcester's Answer to his Second Letter*, London 1699, p. 402.

<sup>22</sup> Bayle, "Objections to Poiret", cit., p. 150.

<sup>23</sup> The roots of this position may also be found in *Essay*, II.xxiii.15, p. 305: "And thus by putting together the *Ideas* of Thinking, Perceiving, Liberty and Power of moving themselves and other things, we have as clear a perception, and notion of immaterial Substances, as we have of material. For putting together the *Ideas* of Thinking and Willing, or the Power of moving or quieting corporeal Motion, joined to Substance, of which we have no distinct *Idea*, we have the *Idea* of an immaterial Spirit

stantial subject. From this point of view, it is completely indifferent whether “thought” is added to an extended substance or to a non-extended substance:

Both these Substances [i.e. an extended substance and a non-extended one] may be created, and exist, without Thought; neither of them has, or can have the Power of Thinking from itself: God may give it to either of them according to the good Pleasure of his Omnipotency; and in which ever of them it is, it is equally beyond our Capacity to conceive, how either of those Substances thinks<sup>24</sup>.

Thus, for Locke, an unextended substance “may be created, and exist without thought” – which is exactly, once again, the same position that Bayle had taken in the *Objections to Poiret*: “I do not grasp any natural connection or ineluctable harmony between non-extension and thought. From which I conclude that there could be a substance which is at the same time non-extended and non-thinking.” (“*nullam enim deprehendo naturalem connexionem aut indispensablem concordiam inter non extensionem et cogitationem. Ergo substantia posset esse simul non extensa et non cogitans*” – Bayle, *OD IV*, p. 150; the same position can be found in Regius, see above, note 7).

It is true that, at the end of his last reply to Stillingfleet, Locke returns to square one, i.e. to Mersenne, and clings again to the mere non-contradiction, or logical possibility, of the hypothesis of thinking matter. Divine omnipotence is still a safe haven, after all:

So that all the Difficulties, that are raised against the Thinking of Matter from our Ignorance or narrow Conceptions, stand not at all in the way of the Power of God, if he pleases to ordain it so; nor prove any thing against his having actually

[See Jolley, *Touchy subjects: Materialism and Immortality*, Oxford University Press, New York-Oxford 2015, p. 74, where “immaterial” is an addition of the fourth edition]; and by putting together the *Ideas* of coherent solid parts, and a power of being moved, joined with Substance, of which likewise we have no positive *Idea*, we have the *Idea* of Matter. The one is as clear and distinct an *Idea* as the other: The *Idea* of Thinking, and moving a Body, being as clear and distinct *Ideas*, as the *Ideas* of Extension, Solidity and being moved. For our *Idea* of Substance, is equally obscure, or none at all, in both; it is but a supposed I know not what, to support *those Ideas we call Accidents*.” [our italics]. On Locke’s monist ontology, see L. Downing, ‘Locke’s Ontology’, in L. Newman (ed.), *The Cambridge Companion to Locke’s Essay*, Cambridge University Press, Cambridge 2007, pp. 352-80 and ‘Locke’s Metaphysics and Newtonian Metaphysics’, in Z. Biener and E. Schliesser (eds.), *Newton and Empiricism*, Oxford University Press, Oxford 2014, pp. 97-118.

<sup>24</sup> Locke, *Reply to the Right Reverend the Lord Bishop of Worcester’s Answer to his Second Letter*, cit., pp. 404-5.

ended some parcels of Matter, so disposed as he thinks fit, with a Faculty of Thinking, till it can be shewn, that it contains a Contradiction to suppose it<sup>25</sup>.

However, despite this outburst of prudence, the concession made above – that is, the reduction of thought to a mere “accident”, in other words the eradication of thought from the essence of substance, perhaps Locke’s most anti-Cartesian move – could not fail to have important consequences for the fortune of his doctrine.

### 3. *After Locke: Bayle (again)*

In the late 1690’s and in the early years of the next century, the question of the superaddition was at the fore in philosophical debate. Bayle, who could not read English, could find an extensive account of the Locke–Stillingfleet debate in Jacques Bernard’s *Nouvelles de la république des lettres* (1699)<sup>26</sup>. He reacted immediately – that is, in the second edition of the *Dictionnaire historique et critique* (1701) – with new additions to be found in the articles “Dicéarque” and “Jupiter”, and then, at length, in the *Réponse aux questions d’un Provincial* (1703-7). In the latter text, he attacks Locke on the question of our ignorance of the “nature” of substances:

Mr Locke, one of the most profound metaphysicians of recent times, did not believe that we know the nature of substances. He admitted that impenetrable extension, divisibility, mobility are properties of matter, or of bodily substance, but are not the essence or the constituent attribute of the substance of matter. He believed, therefore, that these properties subsisted in a subject that we do not know. [*Mr. Locke, l’un des plus profonds Métaphysiciens de ces derniers tems, ne croïoit pas que nous conussions la nature des substances. Il avoïoit que l’étenduë im-pénétrable, la divisibilité, la mobilité étoient des propriétés de la matiere, ou de la substance corporelle, mais non pas l’essence ou l’attribut constitutif de la substance de la matiere. Il croïoit donc que ces propriétés-là subsistoient dans un sujet que nous ne connoissons pas*<sup>27</sup>]

<sup>25</sup> Ibid., pp. 405-6.

<sup>26</sup> See also Bayle’s letter to Shaftesbury, 23 novembre 1699, in P. Bayle, *Correspondance*, ed. by E. Labrousse, A. McKenna et al., vol. 12, Voltaire Foundation, Paris 2015, letter 1456, p.136: “J’ai lû, dans les *Nouvelles de la République des Lettres* du mois dernier, un Extrait du dernier Livre de Mr. Locke contre le feu Evêque de Worcester.”

<sup>27</sup> P. Bayle, *Réponse aux Questions d’un Provincial*, III, chp. 15, in *OD* III, p. 941.

He then addresses to Locke the same remarks and objections he had already put forward in the debate with Poiret, including the hypothesis of a “non-thinking soul” [i.e. a non-thinking immaterial substance], which implies the possibility of “thinking matter”:

If [...] thought is only an accident of the soul, it follows that the soul, considered according to what it possesses essentially and substantially, is not thinking, and that it can exist in the nature of things without having any thought. Mr. Locke could not deny that he was unaware of what matter would be stripped of all extension, and what the soul would be stripped of all thought. Now if we do not know this, I do not see that we can say that there is in matter some attribute incompatible with thought, or that there is in the soul some attribute incompatible with extension. [*Si [...] la pensée n'est qu'un accident de l'ame, il s'ensuit que l'ame considérée selon ce qu'elle a d'essentiel et de substantiel n'est point pensante, et qu'elle peut exister dans la nature des choses sans avoir aucune pensée. Mr. Locke ne pouvoit nier qu'il n'ignorât ce que seroit la matiere dépouillée de toute étendue, et ce que seroit l'ame dépouillée de toute pensée. Or quand on ignore cela je ne vois point que l'on puisse dire qu'il y ait dans la matiere quelque attribut incompatible avec la pensée, ni qu'il y ait dans l'ame quelque attribut incompatible avec l'étendue*<sup>28</sup>.]

As Bayle had already objected to Poiret (and as Regius had admitted back in 1647), thought and extension could be attributes of the same substance, neither thinking nor extended as such. This is, for Bayle, the necessary conclusion of Locke's line of reasoning. Both extension and thought thus appear as “accidents” – or “properties” – which are “added” to an underlying unknown subject (or “substance”). And Bayle finally draws this quasi-Spinozist conclusion – in so far as it is based on the existence of “neutral” substances which are the subjects of the modalities of both thought and extension:

In a word, this doctrine of Mr. Locke leads us straight away to admit only one kind of substance, which by one of its attributes will have extension, and by the other thought, which being once accepted, we can no longer conclude that if a substance thinks, then it is “immaterial”. [*En un mot cette doctrine de Mr. Locke nous mene tout droit à n'admettre qu'une espece de substance, qui par l'un de ses atributs s'alliera avec l'étendue, et par l'autre avec la pensée, ce qui étant une fois posé on ne pourra plus conclure que si une substance pense elle est immatérielle*<sup>29</sup>.]

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

Locke's proximity to Spinoza's position is made explicit in the article on "Jupiter", in which Bayle contends that Locke, recognizing the purely modal status of thought, strengthens Spinoza's position and provides him with an unexpected defence against an aporia that threatened to destroy his system. According to Bayle, "Spinoza, who taught that the Eternal and Necessary Being had both the attribute of thinking and the attribute of extension, recognized that this combination was incomprehensible, and the weakest and most confused doctrine in his system" (Bayle, *OD* III, 942: "Spinoza qui enseignoit que l'Être éternel et nécessaire avoit tout ensemble l'attribut de pensant et l'attribut d'étendu, reconnoissoit que cet alliage étoit incompréhensible, et l'endroit le plus foible et le plus embarrassé de son système."). On the contrary, for Bayle, Locke's thesis not only establishes the logical possibility of thinking matter but ends up positing its real (or physical) possibility, despite Locke's attempt to consider thinking matter as an effect of God's arbitrary "good pleasure". The argument already adopted in the *Objections to Poiret* comes back in order to demonstrate that Locke's thesis opens the door to materialism, if not to atheism, by rendering matter and thought independent of any supernatural causality; nature will accomplish everything that, according to Locke, God alone could do:

[...] there are Philosophers in Christianity who maintain that matter is capable of thinking; and they are Philosophers of very great mind, and of very deep meditation. [...] One does not avoid the objection by the corrective that matter becomes thinking only through a very particular gift from God. This would not prevent it from being true that by its nature it is susceptible of thought, and that to make it actually thinking, it suffices to agitate it, or to arrange it in a certain way, from which it follows that an eternal matter without any intelligence, but not without movement, could have produced Gods and men, as the Poets, and some Philosophers of Paganism have madly claimed.

*[il y a des Philosophes dans le Christianisme qui soutiennent que l'étendue est capable de penser; et ce sont des Philosophes d'un très-grand esprit, et d'une méditation très-profonde. [...] On ne prévient pas l'inconvénient par ce correctif; c'est que la matière ne devient pensante que par un don tout particulier de Dieu. Cela n'empêcheroit point qu'il ne fût vrai que de sa nature elle est susceptible de la pensée, et que pour la rendre actuellement pensante, il suffit de l'agiter, ou de l'arranger d'une certaine façon, d'où il s'ensuit qu'une matière éternelle sans aucune intelligence, mais non pas sans mouvement, eût pu produire des Dieux et des hommes, comme les Poètes, et quelques Philosophes du Paganisme l'ont débité folement<sup>30</sup>.]*

<sup>30</sup> Bayle, *Dictionnaire*, cit., art. «Jupiter», rem. G.

This passage from the article “Jupiter” and the text quoted above from the *Réponse aux questions d'un provincial* are possibly the source of a surprising observation by Des Maizeaux, already known to scholars but never fully explained. Des Maizeaux was a friend and correspondent of Bayle in London, and a great *connoisseur* of the English and Dutch intellectual underground. In December 1706, two years after Locke's death and a few days before Bayle's, he began to spread the rumour that Locke was a Spinozist. This is what we can deduce from the reply of Des Maizeaux's correspondent (Jean Barbeyrac), who explicitly links Locke's purported “Spinozism” to his position on man's ignorance on “the nature of substance”:

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’, this must appear in one of his posthumous works or in private conversations in which he expressed his opinion on it. I do not think one can conclude anything of the sort from his *Essay* and I have not read anything on it in the Extracts of diverse letters by Mr. Bernard. What he said on our ignorance of the nature of substances in no way seems to me to authorize attributing to him anything smacking of Spinozism<sup>31</sup>.

Admittedly, Des Maizeaux was not the first (nor the last) to claim that Locke held Spinozist views<sup>32</sup>, but he was probably the only sympathizer

<sup>31</sup> Jean Barbeyrac to Pierre Des Maizeaux, 22 December 1706, in A. Thomson, *Bodies of thought. Science, Religion and the Soul in the Early Enlightenment*, Oxford University Press, Oxford 2008, pp. 143-44, who also gives the original French text: “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, il faut que cela paroisse ou par quelcun de ses Ouvrages posthumes, ou par des conversations particulières où il ait déclaré ses sentimens là-dessus. Je ne crois pas qu'on puisse rien conclure de tel de son Essai sur l'Entend. & je n'ai rien lû encore là-dessus dans les Extraits des div. Lett. de Mr Bernard. Ce qu'il a dit sur l'ignorance où nous sommes de la nature des Substances, ne me paroît nullement autoriser à lui attribuer quoi que ce soit qui sente le Spinozisme” (B.L., Add. MS 4281, fol. 20). On Locke and Spinoza, see W. Klever, “Slocke, alias Locke in Spinozistic profile”, in W. van Bunge and W. Klever (eds.), *Disguised and Overt Spinozism around 1700*, Brill, Leiden 1996, pp. 235-60 and *Id.*, “Locke's Disguised Spinozism (Part I)”, in *Revista Conatus: Filosofia de Spinoza* 6 (2012), 11, pp. 61-82; Klever's analysis is often questionable as the “evidence” he presents is not always convincing. Curiously enough, he does not mention the superaddition theory among the aspects of Locke's philosophy which show the influence of Spinoza.

<sup>32</sup> See S. Brown, “Locke as secret ‘Spinozist’: the Perspective of William Carroll”, in van Bunge and Klever (eds.), *Disguised and Overt Spinozism around 1700*, cit., pp. 213-25. For Carroll, Locke was a Spinozist since he argued “the Eternal Existence of only one Cogitative and Extended Material Substance, differently modified in the whole World, that is, the Eternal Existence of the whole World itself”. In the article quoted above, Klever also mentions Ruard Andala, who used to show his students the Spinozistic foundations of Locke's thought (“*non pauca etiam Lockii [...]. Spinozistica fundamen-*

of Locke (and close friend of many of Locke's friends, especially Collins) to say so, and his privileged standpoint gives a certain weight to his perception of Locke's real position. Be that as it may, Locke's superaddition hypothesis, whose sources are to be found in the radical wing of Cartesianism (Mersenne, Regius, Bayle), soon became the weapon of all free-thinkers who intended to oppose spiritualism and the existence of a spiritual and immortal soul.

#### 4. *After Locke (II): Collins, Bolingbroke, and Voltaire*

One of Locke's closest disciples, Anthony Collins, was among the first to grasp immediately the anti-spiritualistic potential of the Lockean "superaddition". Collins was engaged since 1706 in a controversy with Samuel Clarke on the nature of the human soul, sparked by the latter's refutation of Henry Dodwell's work entitled: *An Epistolary Discourse, proving from the Scripture and first Fathers, that the Soul is a Principle naturally Mortal* (1706).

Indeed, the first to bring up the question of "superaddition" was Clarke, who argues for a spiritualist version of Locke's position (not so different from Descartes' reply to Mersenne). According to Clarke, the superaddition of thought to matter implies the creation of an immaterial and individual *substratum*, in which individual conscience, superadded by God, will inhere:

If you will suppose God by his infinite Power superadding Consciousness to the united Particles, yet still those Particles, being really and necessarily as distinct Beings as ever, cannot be themselves the Subject in which that individual Consciousness inheres, but the Consciousness can only be superadded by the addition of Something, which in all the Particles must still itself be but one individual Being. The Soul therefore, whose Power of Thinking is undeniably one Individual Consciousness, cannot possibly be a *Material Substance*<sup>33</sup>.

But Collins could not agree. For him, it is not necessary that thought be superadded to an individual subject, it is sufficient that it be superadded to a

*ta*"). Andala associated Locke with the crypto-Spinozists De Volder and Boerhaave; W. Klever, "Burcharde De Volder (1643-1709). A Crypto-spinozist on a Leiden Cathedra", in *LIAS* 15 (1988), pp. 191-241 and *Id.*, *Boerhaave sequax Spinozae: de beroemde medicus als Spinoza's volgeling en eminente uitlegger van de Ethica*, Vrijstad 2006.

<sup>33</sup> S. Clarke, *A Letter to Mr. Dodwell wherein All the Arguments in his Epistolary Discourse against the Immortality of the Soul are particularly answered*, London 1708; see the 1731 edition, p. 23, [www.u.arizona.edu/~scmitche/clarkecollins.html](http://www.u.arizona.edu/~scmitche/clarkecollins.html).

system of material parts, in the same way that an “agreeable sensation” of perfume is connected to that system of material parts that we call “a rose”:

[...] If an Individual Power can be lodged by God in, or superadded to that which is not an Individual Being, or follows from the Composition or Modification of a Material System, consisting of actually separate and distinct Particles, the very Soul and Strength of Mr. Clarke’s Demonstration is gone. And Matter of Fact is so plain and obvious, that a Man cannot turn his Eye but he will meet with Material Systems, wherein there are Individual Powers, which are not in every one, nor in any one of the Particles that compose them when taken apart, and considered singly. Let us instance for example in a Rose. That consists of several Particles, which separately and singly want a Power to produce that agreeable Sensation we experience in them when united. And therefore either each of the Particles in that Union contributes to the Individual Power, which is the external Cause of our Sensation; or else God Almighty superadds the Power of producing that Sensation in us upon the Union of the Particles And therefore either each of the Particles in that Union contributes to the Individual Power, which is the external Cause of our Sensation; or else God Almighty superadds the *Power* of producing that Sensation in us upon the Union of the Particles. And this, for ought I can see, may be the Case of Matter’s Thinking<sup>34</sup>.

With Collins, the shift – predicted by Bayle – from “superaddition” to materialism (or Spinozism) was now very real. In fact, Collins takes possession of Locke’s (and now Clarke’s) “superaddition” to make of it a sort of screen that allows him to insinuate materialist doctrines. Bayle had said that, since God can add thinking modalities to matter, it follows that thought is not incompatible with matter, and that therefore matter could have those qualities by itself, even without God’s intervention. Bayle did not overtly assume the latter position: he simply showed that this is the secret poison of the ostensibly pious doctrine of superaddition. Collins, certainly a friend and disciple of Locke, but also a die-hard admirer of Bayle, is less prudent than his hero and argues explicitly that matter can have the “power of thinking” by itself. He says it almost *en passant* (Clarke doesn’t even notice), but he makes it quite explicit:

Those Particles which compose the Brain, may under that Modification *either have the Power of Thinking necessarily flowing from them*, or else may have the Power of Thinking superadded to them by the Power of God, though singly and separately they may not have the Power of Thinking<sup>35</sup>.

<sup>34</sup> Ibid., p. 79.

<sup>35</sup> Ibid.

As one can see, any mention of divine omnipotence (Regius, Locke), or even just of the impossibility of putting limits on the action of God (Mersenne, Locke) has now disappeared. There are only two mutually independent "powers" left: the "power" of matter to be (sometimes) thinking and the "power" of God to perhaps add thought to matter, but the latter is now completely unnecessary since it is assumed that the various parts of matter in the brain may, under certain conditions, "have the Power of Thinking necessarily flowing from them". The word "necessarily" is highly significant. It means that matter could be thinking in some configurations, simply out of natural necessity (like the qualities of Bayle's pear), which obviously implies that there is no longer any need to suppose a divine "superaddition".

Thus, even if Locke's theory had been conceived in order to offer a more or less effective barrier against materialism, showing how *only* God could create thinking matter, it allowed Collins to argue exactly the opposite, against Locke's explicit text but following the dangerous concession that Locke had made in his last reply to Stillingfleet concerning the non-substantiality of thought, and the absence of any necessary link between thought and an unextended substance. As Bayle had perfectly understood, the necessity of nature is the strongest reply that a Spinozist atheist (like Collins) could oppose to the objections of theologians.

It not at all surprising, then, to see that, after his second reply to Clarke, Collins no longer mentions God when he evokes "thinking matter" and "consciousness superadded to it": "The Question is, Whether a System of Matter can have a Power of Thinking, or an Individual Consciousness superadded to it, or flow from any Modification of that System<sup>36</sup>."

Finally, Collins challenges Clarke to prove the possibility of *ex nihilo* creation: "for unless we have an Idea of the Creation of Matter *ex nihilo*, we must inevitably conclude Matter a Self-existent Being" – which is obviously Collins' philosophical conclusion, and the foundation of his theory of thought as "necessarily flowing" from the powers of matter. Collins ascribes the same conclusion to Spinoza and, more generally, to the "atheists" of his time, including the Chinese *literati*:

As far as I can judge of the Opinions of *Strato*, *Xenophanes*, and some other antient Atheists, from a few Sentences of theirs which yet remain, and of the

<sup>36</sup> S. Clarke and A. Collins, *Correspondence*, ed. by W.L. Uzgalis, Broadview Press, Calgary 2011, p. 69.

Opinions of that *Sect* called *Literati* in *China*, from the Accounts we have in the several Voyages thither, and more particularly from Father *Gobien's* Preface before his *Histoire de l'édit de l'Empereur de la Chine en faveur de la Religion Chretienne*, 8<sup>vo</sup>, Par[is] 1698, they seem all to me to agree with *Spinoza* (who in his *Opera Posthuma* has endeavoured to reduce Atheism into a System) that there is no other Substance in the Universe but Matter, which *Spinoza* calls *God*, and *Strato*, *Nature*. (*The Correspondence of Samuel Clarke and Anthony Collins*, ed. Uzgalis, p. 245)

Collins was the first but certainly not the only “Spinozist” to adopt Locke’s superaddition hypothesis in order to make his positions more presentable. Bolingbroke’s case is just as interesting – with Voltaire still behind the scenes.

Henry St John, better known as Viscount Bolingbroke, is a neglected author – perhaps for good reason, given the chaos of his writings – but seems to have been more influential than has been thought in the British and French Enlightenment (even Hume seems to take account of his ideas in the *Dialogues on natural religion*)<sup>37</sup>. For Bolingbroke, as for Collins (and Regius), the mind is not a substance but a faculty of the body, and only by abstraction could we conclude that matter cannot think. Bolingbroke ironically addresses the position of the “ontosophists” and “metaphysicians” who believe that mind is substantially different from body:

We metaphysicians and ontosophists have fixed the essence of matter. It can be no other than it is represented in our abstract ideas, those eternal natures independent of God himself. If you suppose it modified or mixed in any system so as to be no longer inert and senseless, it is no longer conformable to our ideas, it is therefore no longer matter such as it came out of the region of possibility into that of actuality, it is another substance and must be called by another name. God cannot make our ideas of incogitativity to be ideas of thinking, nor our ideas of necessity to be ideas of acting freely<sup>38</sup>.

Once again, the superaddition theory serves as a shortcut to materialism or naturalist monism, with the weaker and weaker justification of divine omnipotence. For Bolingbroke both “cogitativity” (i.e. the faculty of thinking) and “mobility” are powers “given” by God to “systems of matter”, whose essence is determined by solidity and extension:

<sup>37</sup> See G. Mori, “Hume, Bolingbroke, and Voltaire: *Dialogues concerning Natural Religion*, Part XII”, in *Etica & Politica* 20 (2018), 3, pp. 319-40.

<sup>38</sup> H.St.J. Bolingbroke, *The Philosophical Works*, ed. by D. Mallet, vol. 3, J. Whitston and B. White, London 1755, pp. 516-18.

It would be nonsense to assert, what no man does assert, that the idea of incogitativity can be the idea of thinking, but it is nonsense, and something worse than nonsense to assert what you assert, that God cannot give the faculty of thinking – a faculty [of which] the principle [is] entirely unknown to you – to systems of matter whose essential properties are solidity extension & not incogitativity. This term of negation can be no more the essence of matter than that other <immateriality> can be the essence of spirit. Our ideas of solidity and extension do not include the idea of thought, neither do they include that of motion, but they exclude neither and the arguments you draw from the divisibility of matter against its cogitability, which you deny, might be not ill employed against its mobility, which you admit, as I suppose<sup>39</sup>.

Bolingbroke is indeed a Spinozist who, like Collins, argues that God is necessary<sup>40</sup>: therefore, to argue that God can “give” thought to matter – from his point of view – simply means to argue that nature, sooner or later, necessarily generates thought on the occasion of certain configurations of matter. The conflation of liberty and necessity in God, another typically Spinozist point, erases any difference between the superaddition theory and pure materialism or naturalism.

Far from being without influence on continental philosophy, Bolingbroke was an important source for Voltaire, and it is not arbitrary to suppose that it was by Bolingbroke that Voltaire was induced to adopt the superaddition theory. The two met for the first time in 1722, when Bolingbroke was in France, and it is well known that it was Bolingbroke who recommended his young friend to read Locke's *Essay*<sup>41</sup>. But Voltaire certainly also knew Mersenne's “Sixth

<sup>39</sup> Ibid., pp. 518-19.

<sup>40</sup> See Bolingbroke, *Philosophical Works*, ed. by D. Mallet, vol. 1, J. Whitston and B. White, London 1754, pp. 20-21 (with a reference to Locke's thesis of thought *superadded* by God to matter), and also Ibid., p. 220.

<sup>41</sup> See Bolingbroke to Voltaire, June 27, 1724 (D190): “La Nature vous a donné un grand fonds de bien, dépêchez vous à le faire valoir. Joignez ensemble, il ne tient qu'à vous, deux choses qui se trouvent rarement unies, et dont l'union pourtant forme ce qu'il y a de plus parfait dans notre monde intellectuel; la faculté d'inventer et d'orner, avec celle de tordre ces fils de raisonnemens sans le secours des quels il est impossible de tirer la vérité des Recoins de ce Labyrinthe où elle se cache fort souvent. Si vous lisez l'Essay sur l'Entendement humain, vous lisez le livre que je connois le plus capable d'y contribuer. Si vous n'y trouvez que peu de choses, prenez garde que ce ne soit votre faute. Vous y trouverez des vérités prodigieusement fertiles. C'est à vous à en faire les applications, et à en tirer les conséquences”. See Voltaire, *Œuvres complètes* (henceforth OCV), ed. by T. Besterman *et al.*, Voltaire Foundation, Genève, Banbury, Oxford 1968-, *Correspondence*, vol. 85, p. 203. Voltaire had made the acquaintance of Bolingbroke at La Source in December 1722 and had given an account of his visit to Thiriot in his letter of December 4, 1722 (D135): “Il faut que je vous fasse part de l'enchantement

Objections” to Descartes’ *Meditations*, and had been a voracious reader of the Clarke-Collins debate on free will, where he always took Collins’ side<sup>42</sup>. In any case, it is easy to show that all the arguments for the materiality of soul that had emerged in the previous decades reappear in Voltaire’s *Letter on Mr. Locke* (of which the official version was published in 1733, in the English version of the *Lettres philosophiques*, while the clandestine version began to circulate in the late spring of 1736, probably by a vengeful manoeuvre of Alexis Piron)<sup>43</sup>:

- 1) Mersenne’s and Locke’s epistemological scepticism on the essence of matter and thought;
- 2) Regius’ and Locke’s theological argument of God’s omnipotence as the foundation for the possibility of thinking matter;
- 3) Bayle’s and Collins’ line of reasoning, which allows the switch from the possible creation (by God) of thinking matter to its natural possibility or even reality based on the mere necessity of things;
- 4) A Spinozist conclusion: thought could be an eternal and original character of being, which can be associated, as a property, to matter, or to single parts of matter endowed with a special “organisation”.

The official *Letter on Mr. Locke* is obviously very prudent regarding the issue of “thinking matter”. Voltaire mentions again the epistemological argument (our ignorance of the essences of substances) coupled with the theological dogma of God’s omnipotence:

At least confess yourselves to be as ignorant as I. Neither your imaginations nor mine are able to comprehend in what manner a body is susceptible of ideas; and do you conceive better in what manner a substance, of what kind soever, is susceptible of them? Since you cannot comprehend either matter or spirit, why will you presume to assert anything? [...] And indeed, what man can presume to assert, without being guilty at the same time of the greatest impiety, that it is impossible for the Creator to form matter with thought and sensation?<sup>44</sup>

The clandestine version of the *Lettre sur M. Locke* takes a decisive step: the whole question is now analysed on the basis of Newton’s empiricist epistemology.

où je suis du voiage que j’ai fait à la Source chez milord Bolimbrok et chez madame de Villette. J’ai trouvé dans cet illustre anglois, tout l’érudition de son pays, et toute la politesse du nôtre”. See OCV, Vol. 85, p. 143.

<sup>42</sup> See, for example, Voltaire, *Eléments de la philosophie de Newton*, in OCV, vol. 15, pp. 213-14.

<sup>43</sup> See A. McKenna, G. Mori, “Introduction”, in Voltaire, *Lettre sur M. Locke, manuscrit clandestin*, ed. by A. McKenna and G. Mori, OCV, vol. 6C, pp. 15-33.

<sup>44</sup> Voltaire, *Letters Concerning the English Nation*, C. Davis and A. Lyon, London 1733.

Newton's Rule n° 1 ("*I must not* attribute to several causes, and above all not to unknown causes, what can be attributed to a known cause" – in Voltaire's formulation) constitutes the major – negative – premise of Voltaire's argument, while the minor premise is provided by Locke's dogma of our invincible ignorance of essences, which implies provisionally the possibility of materialism ("*I can* attribute to my body the faculty of thinking and feeling"). The conclusion drawn by Voltaire is also negative: "*I must not* seek this faculty in another being called soul, or spirit, of which I have not the slightest idea". But this conclusion masks a corollary which, while remaining unexpressed and implicit, is nevertheless obvious: if we are seeking the cause of the faculty of thought, materialism is alone feasible, since spiritualism is excluded by its lack of empirical evidence<sup>45</sup>.

We can thus grasp the obvious dissymmetry which is at the heart of Voltaire's Lockean-inspired empiricism: while it is clear in general that "we do not know the essence of things", this does not imply that our knowledge of the body and the knowledge that we might claim to possess of a being different from the body and devoid of extension have the same status. For Voltaire, as for Collins, we know the body more easily than the mind: the body is a "known cause", although imperfectly known; the mind is totally unknown and all that we can say about a possible "immaterial soul" is that it is not extended or that it is "not a body". Voltaire thus adopts Collins' position (possibly harking back to Hobbes)<sup>46</sup>.

As we have seen, for Bayle, however mysterious may be the way in which the body engenders thought – and even because of that very mystery – Locke's thesis opens the door to materialism and even to atheism. Voltaire seems to adopt the same anti-spiritualist conclusion in the clandestine version of the *Letter on Locke*. "Thought" is no longer a substance, it is a faculty, or a mode, of the body and it is a logical flaw (as Regius and Bayle had underlined) to suppose that matter and thought are incompatible.

<sup>45</sup> See Voltaire, *Lettre sur M. Locke*, OCV, vol. 6B, pp. 136-39.

<sup>46</sup> See also Voltaire, *Dictionnaire philosophique*, OCV, Vol. 17, p. 567, art. «Bêtes»: "Nous ne pouvons entendre par esprit que quelque chose d'inconnu qui n'est pas corps". See A. Collins, "An Answer to Mr. Clarke's Third Defence of his Letter to Mr. Dodwell", in S. Clarke, *Works*, Garland Press, New York 1928, vol. 3, p. 318: "[...] But as far as I can judge, all this talk of the Essences of Things being unknown, is a perfect Mistake: and nothing seems clearer to me, than that the Essence or Substance of Matter consists in Solidity, and that the Essence or Substance of a Being, distinct from Matter, must consist in want of Extension, and is truly defined an unextended Being". See also Voltaire to Formont, 15 August 1733: "l'immortalité [peut] être attachée tout aussi bien à la matière, que nous ne connaissons pas, qu'à l'esprit, que nous connaissons encore moins", OCV, Vol. 86, p. 379.

By “mind”, you can only imagine the faculty of thinking; by “matter” you can only understand a certain assemblage of qualities, colours, extent, solidity, and you like to call that “matter”, and you assign the limits of matter and soul before being sure of the very existence of one and the Other. As for matter, you gravely teach that there is only extension and solidity in it. And I inform you modestly that it is capable of a thousand properties that you and I do not know: you say that the soul is indivisible, eternal, and you are begging the question.

[Par l'esprit, vous ne pouvez vous imaginer que la faculté de penser; par matière vous ne pouvez entendre qu'un certain assemblage de qualités, de couleurs, d'étendue, de solidité, et il vous a plu d'appeler cela matière, et vous avez assigné les limites de la matière et de l'âme avant d'être sûr seulement de l'existence de l'une et de l'autre. Quant à la matière, vous enseignez gravement qu'il n'y a en elle que de l'étendue et de la solidité. Et moi, je vous dirai modestement qu'elle est capable de mille propriétés que vous ni moi ne connaissons pas: vous dites que l'âme est indivisible, éternelle, et vous supposez ce qui est en question<sup>47</sup>]

However, despite this first step down the pathway of mechanical materialism, Voltaire recoils and refuses to envisage thought as the simple effect of the organisation of matter, being content to observe that thought exists *where there is organisation and in direct proportion to the degree of organisation*<sup>48</sup>. Thought thus remains a *property* of the body – an activity of which the body is capable – when it is – we do not know how – organised or animated. In this sense, thought is conceived as a modality of matter but which is not engendered by matter; this modality is supposed to have existed eternally: it cannot be born of nothing and cannot be born of something that does not think (inert matter)<sup>49</sup>.

In the last years of his life, Voltaire espouses a revised version of Spinozism, based on the existence of an eternal being, source of matter and thought<sup>50</sup>. In Voltaire's new theology – or “theism”, as he calls it, again following Bolingbroke – God is a necessary being, whose action is limited by his own essence

<sup>47</sup> Voltaire, *Lettre sur Locke*, OCV, vol. 6C, pp. 196-97.

<sup>48</sup> See Voltaire, *Traité de métaphysique*, OCV, Vol. 22, p. 210: “c'est donc Dieu qui avait donné à tous ces corps la puissance de sentir et d'avoir des idées dans des degrés différents, proportionnés à leurs organes: voilà assurément ce que je soupçonnerai d'abord.”

<sup>49</sup> See N. Jolley, *Locke's Touchy Subjects*, cit., chap. 5 (on Locke's “soft materialism”). T. Dagron, *Toland et Leibniz. L'invention du néo-spinozisme*, Vrin, Paris 2009, offers a detailed analysis of the debate between Locke, Toland, Bayle and Leibniz (among others) and suggests the influence of this conception of thought (or of the soul) as an “effect of the organization of matter” on Collins, La Mettrie, Diderot and d'Holbach.

<sup>50</sup> On this point, see G. Mori, *Early Modern Atheism from Spinoza to d'Holbach*, Liverpool University Press, Liverpool 2021, chap. 6.

and whose powers are strictly included in his nature<sup>51</sup>.

I am a body, and this arrangement of my body, this power to move and to move other bodies, this power to feel and to reason, I derive them all from the intelligent and necessary power which animates nature.

[Je suis corps, et cet arrangement de mon corps, cette puissance de me mouvoir et de mouvoir d'autres corps, cette puissance de sentir et de raisonner, je les tiens donc de la puissance intelligente et nécessaire qui anime la nature<sup>52</sup>]

Just like Collins and Bolingbroke before him, Voltaire has moved quietly from his early sympathy for the "modest" Locke to a more ambitious Spinozist *credo* where the superaddition argument (which he still mentions, from time to time, even in his later years<sup>53</sup>) dissolves within a theory of God's eternal necessity, where there is no longer any place for the myth of a "soul" separated from the body. Accordingly, thought is reduced once again to a non-essential property of matter which is the direct effect of the action of the "Great Being" on man:

How do we think? how do we feel? Who can tell us? God did not put (it must be repeated over and over again), God did not hide in plants a secret being called vegetation; they vegetate because it was thus ordained throughout the centuries. There is not in the animal a secret creature called sensation; deers run, eagles fly, fishes swim, without needing an unknown substance residing in them, which makes them fly, run, and swim. What we have called their instinct is an ineffable faculty, inherent in them by the ineffable laws of the great Being. We have in the same way an ineffable faculty in the human understanding; but there is no real being which is human understanding, nor is there one which is called the will. Man reasons, man desires, man wants; but his wills, his desires, his reasoning, are not separate substances. The great fault of the Platonic school, and then of all our schools, was to take words for things: let us not fall into this error. We are sometimes thinking, sometimes not thinking, sometimes awake, sometimes sleeping, sometimes excited by involuntary desires, sometimes plunged into a fleeting apathy; slaves, from our childhood until death, of all that surrounds us; unable to do anything by ourselves, receiving all our ideas without ever being able to foresee

<sup>51</sup> See OCV, vol. 80C, p.139: "The fact that an architect has built a fifty-foot house out of marble, does not mean that he could have made a fifty-mile house out of jam. Each being is circumscribed in its nature; and I dare believe that the Supreme Being is circumscribed in his".

<sup>52</sup> Voltaire, *Lettres de Memmius à Ciceron* (1771), OCV, vol. 72, p. 258.

<sup>53</sup> See one of Voltaire's last writings, *Dernières remarques sur les Pensées de Mr. Pascal* (1777), OCV, vol. 80C, p. 182: "Locke, the wise Locke, did he not confess that man cannot know if God cannot grant the gift of thought to such a being that he will deign to choose? Did he not thereby confess that it is not given to us to know the nature of our understanding any more than to know the way in which our blood is formed in our veins?".

those that we will have the next moment, and always under the hand of the great Being who acts in all nature by ways as incomprehensible as himself.

[Comment pensons-nous? comment sentons-nous? Qui pourra nous le dire? Dieu n'a pas mis (il faut le répéter sans cesse), Dieu n'a pas caché dans les plantes un être secret qui s'appelle végétation; elles végètent parce qu'il fut ainsi ordonné dans tous les siècles. Il n'est point dans l'animal une créature secrète qui s'appelle sensation; et le cerf court, et l'aigle vole, et le poisson nage, sans avoir besoin d'une substance inconnue, résidante en eux, qui les fasse voler, courir, et nager. Ce que nous avons nommé leur instinct est une faculté ineffable, inhérente dans eux par les lois ineffables du grand Être. Nous avons de même une faculté ineffable dans l'entendement humain; mais il n'y a point d'être réel qui soit l'entendement humain, il n'en est point qui s'appelle la volonté. L'homme raisonne, l'homme désire, l'homme veut; mais ses volontés, ses désirs, ses raisonnements, ne sont point des substances à part. Le grand défaut de l'école platonicienne, et ensuite de toutes nos écoles, fut de prendre des mots pour des choses: ne tombons point dans cette erreur. Nous sommes tantôt pensants, tantôt ne pensant pas, comme tantôt éveillés, tantôt dormants, tantôt excités par des désirs involontaires, tantôt plongés dans une apathie passagère; esclaves, dès notre enfance jusqu'à la mort, de tout ce qui nous environne; ne pouvant rien par nous seuls, recevant toutes nos idées sans pouvoir jamais prévoir celles que nous aurons l'instant suivant, et toujours sous la main du grand Être qui agit dans toute la nature par des voies aussi incompréhensibles que lui-même<sup>54</sup>.]

Yet the fact that the superaddition theory, after being invented by cryptomaterialists or Devil's advocates such as Mersenne, Regius and Bayle, was adopted, at the beginning of the eighteenth century, by three philosophers who ended up embracing Spinozism (*lato sensu*) or materialism<sup>55</sup>, does justice to Bayle's prediction and gives new significance to Des Maizeaux's conclusion, or insinuation, about Locke's hidden thoughts. The superaddition theory was indeed entirely compatible with a materialist (or monist) ontology and needed

<sup>54</sup> Voltaire, *Les Adorateurs* (1769), OCV, vol. 70B, p. 287.

<sup>55</sup> Beside the authors quoted above, we should add the manuscript treatise intitled *L'Âme matérielle* (written ca. 1720-25 and possibly authored by the abbé Guillaume), on which see J. Yolton, *Locke and French Materialism*, Oxford University Press, Oxford 1991, p. 57: "Almost six pages [of *L'Âme matérielle*, see Niderst's edition, pp. 143-49] are inserted from Locke's reply to Stillingfleet's attack on the IV.iii.6 *Essay* passage, Locke's suggestion about thinking matter. Niderst reminds us that these passages had also appeared in Coste's second edition of the French translation of the *Essay* in 1729, and in the *Nouvelles de la république des lettres* in 1699". For the attribution of *L'Âme matérielle* to the abbé Guillaume, see G. Mori, A. Mothu, "'L'Âme matérielle': 'De la conduite qu'un honnête homme doit garder pendant sa vie'; 'Préface du traité sur la religion de M.\*\*\*': trois manuscrits, un seul auteur?", in *La Lettre clandestine* 12 (2003), pp. 311-39.

only to be associated with a necessitarian conception of God – as adopted precisely by Collins, Bolingbroke and the late Voltaire – to become a weapon against orthodox and non-orthodox Christian theologies. This was the written fate of Locke's theory and of his anti-substantialist and anti-Cartesian strategic move. Was it also Locke's concealed intention? In other words – as Voltaire claimed in a letter to Formont in December 1735 – was "thinking matter" really "what Locke thought but did not dare to say"<sup>56</sup>? We may never know, but the question is worth raising again, in a historical and contextual perspective<sup>57</sup>.

### *Bibliography*

#### I. The superaddition debate (1975-)

- M. Al-Allaf, "Superaddition and Miracles in Locke's Philosophy of Science and Metaphysics", paper written for the John Locke Trecentenary Conference, St. Anne's College, Oxford, 2-4 April 2004.
- M.R. Ayers, "Mechanism, superaddition, and the proof of God's existence in Locke's *Essay*", in *Philosophical Review* 90 (1981), pp. 210-51.
- M.R. Ayers, "The ideas of power and substance in Locke's philosophy", in *Philosophical Quarterly* 25 (1975), pp. 1-27.
- J. Bennett, "God and matter in Locke: an exposition of *Essay* 4.10", in C. Mercer, E. O'Neill (eds.), *Early Modern Philosophy: Mind, Matter, and Metaphysics*, Oxford University Press, Oxford 2005.

<sup>56</sup> See Voltaire to Formont, 13 December 1735 (D960), OCV, vol. 88, p. 32: "c'est ce que pensait Locke, et ce qu'il n'a pas osé dire".

<sup>57</sup> Recent research by Philippe Hamou, Nicholas Jolley, and Lisa Downing shows that a certain amount of dissimulation must be supposed in Locke's philosophical and theological reflections. On the question of God's infinite extension, see G. Gorham, "Locke on Space, Time and God", in *Ergo* 7 (2020), 7, pp. 219-40. See also Locke's 30 June 1704 letter to Collins, published by Des Maizeaux in *A Collection of Several Pieces of Mr. John Locke, Never Before Printed, Or Not Extant in His Works*, London 1720, p. 318 (Locke, *Correspondence*, cit., vol. 8, Oxford University Press, Oxford 1989, pp. 337-38): "[...] tho' I call the thinking faculty in me, Mind, yet I cannot, because of that name, compare or equal it in any thing to that infinite and incomprehensible Being which for want of right and distinct conceptions is call'd Mind also or the eternal Mind". One could conclude that, for Locke, "God" was an "eternal mind" bounded with an equally eternal and infinite extension, which resembles what in 18<sup>th</sup> century Europe was (rightly or wrongly) called "Spinozism" (see Bayle, *Dictionnaire*, cit., art. "Spinoza", A). On Locke's secret reading of Hobbes, see F. Waldmann, "John Locke as a Reader of Thomas Hobbes's Leviathan: A New Manuscript", in *The Journal of Modern History* 93 (2021), 2, pp. 245-82.

- R. Boeker, *Locke on Persons and Personal Identity*, Oxford University Press, Oxford 2021 (esp. pp. 224-45).
- M. Bolton, "The idea-theoretic basis of Locke's anti-essentialist doctrine of nominal essence", in P. Cummins and G. Zoeller (eds.), *Minds, Ideas, and Objects: Theories of Representation in Early Modern Philosophy*, Ridgefield, Atascadero 1992, pp. 565-88.
- M. Bolton, "Locke's account of substance in view of his general theory of identity", in O. Lodge and T. Stoneham (eds.), *Locke and Leibniz on Substance*, Routledge, New York 2014.
- M. Bolton, "Locke on Thinking Matter", in M. Stuart (ed.), *A Companion to Locke*, Wiley Blackwell, Malden 2016.
- S. Brown, "Locke as secret 'Spinozist': the Perspective of William Carroll", in W. van Bunge and W. Klever (eds.), *Disguised and Overt Spinozism around 1700*, Brill, Leiden 1996, pp. 213-25.
- V. Chappell (ed.), *Locke*, Oxford University Press, Oxford 1998.
- D. Clarke, "Henricus Regius", in *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), ed. by E.N. Zalta, <https://plato.stanford.edu/archives/spr2020/entries/henricus-regius/>
- P.J. Connolly, "Lockean superaddition and Lockean humility", in *Studies in History and Philosophy of Science* 51 (2015), pp. 53-61.
- P.J. Connolly, "Thinking Matter in Locke's Proof of God's Existence", in *Oxford Studies in Early Modern Philosophy* 9 (2019), pp. 105-30.
- L. Downing, "Locke's Choice between Materialism and Dualism", in P. Lodge and T. Stoneham (eds.), *Locke and Leibniz on Substance*, Routledge, New York 2015, pp. 128-45.
- L. Downing, "Locke's Metaphysics and Newtonian Metaphysics", in Z. Biener and E. Schliesser (eds.), *Newton and Empiricism*, Oxford University Press, Oxford 2014, pp. 97-118.
- L. Downing, "Locke's Ontology", in L. Newman (ed.), *The Cambridge Companion to Locke's Essay*, Cambridge University Press, Cambridge 2007, pp. 352-80.
- S. Duncan, "Locke, God, and Materialism", in *Oxford Studies in Early Modern Philosophy* 10 (2021), pp. 101-31.
- F. Hallyn, "La philosophie naturelle de Regius et l'écriture athée", in *Libertinage et philosophie au XVII<sup>e</sup> siècle: "Les Libertins et la science"* 9 (2005), pp. 37-49.
- P. Hamou, "L'hypothèse de la matière pensante et ses implications métaphysiques dans l'Essai sur l'entendement humain de Locke", in *Libertinage et philosophie à l'époque classique (XVI<sup>e</sup>-XVIII<sup>e</sup> siècle)* 18 (2021), pp. 149-74.
- P. Hamou, "L'opinion de Locke sur la 'matière pensante'", in *Methodos* 4 (2004), repr. in P. Anstey (ed.), *John Locke*, Routledge, London 2006, pp. 176-212.

- N. Jolley, *Locke's Touchy Subjects: Materialism and Immortality*, Oxford University Press, Oxford 2015.
- W. Klever, "Locke's Disguised Spinozism (Part I)", in *Revista Conatus: Filosofia de Spinoza* 6 (2012), 11, pp. 61-82.
- W. Klever, *Boerhaave sequax Spinozae: de beroemde medicus als Spinoza's volgeling en eminente uitlegger van de Ethica*, Vrijstad 2006.
- W. Klever, "Slocke, alias Locke in Spinozistic profile", in W. van Bunge and W. Klever (eds.), *Disguised and Overt Spinozism around 1700*, Brill, Leiden 1996, pp. 235-60.
- W. Klever, "Burchard De Volder (1643-1709). A Crypto-spinozist on a Leiden Cathedra", in *LIAS* 15 (1988), pp. 191-241.
- H.-K. Kim, "A System of Matter Fitly Disposed: Locke's Thinking Matter Revisited", in *American Catholic Philosophical Quarterly* 90 (2016), 1, pp. 125-45.
- P. Lodge, "Whether any material being thinks, or no': Leibniz's Critique of Locke on Superaddition.", in W. Li et al. (eds.), *Für Unser Glück, oder das Glück Anderer. Vorträge des X. Internationalen Leibniz-Kongress*, Georg Olms, Hildesheim 2016, pp. 103-20.
- E. McCann, "Lockean Mechanism", in A.J. Holland (ed.), *Philosophy, Its History and Historiography*, Reidel, Dordrecht 1985, pp. 209-31.
- V. Nuovo, "Locke on Superaddition and Thinking Matter", in J. Gordon-Roth, S. Weinberg (eds.), *The Lockean Mind*, Routledge, New York-London 2021, pp. 149-51.
- A. Pavelich, "Locke on the possibility of thinking matter", in *Locke Studies* 6 (2005), pp. 101-26.
- S. Rickless, "Locke on the Probability of the Mind's Immateriality", in *Locke Studies* 20 (2020), pp. 1-28.
- T. Ryan, "Bayle's Critique of Lockean Superaddition", in *Canadian Journal of Philosophy*, 36 (2006), 4, pp. 511-34.
- P. Schuurman, "Vision in God and Thinking Matter: Locke's Epistemological Agnosticism Used Against Malebranche and Stillingfleet", in S. Hutton and P. Schuurman (eds.), *Studies on Locke: Sources, Contemporaries, and Legacy*, Springer, Dordrecht 2008, pp. 177-93.
- K.M. Squadrito, "Mary Astell's critique of Locke's view of thinking matter", in *Journal of the History of Philosophy* 25 (1987), pp. 433-39.
- A. Strazzoni, "How Did Regius Become Regius? The Early Doctrinal Evolution of a Heterodox Cartesian", *Early Science and Medicine* 23 (2018), 4, pp. 362-412.
- M. Stuart, *Locke's Metaphysics*, Oxford University Press, Oxford 2013.
- M. Stuart, "Locke on superaddition and mechanism", in *British Journal for the History of Philosophy*, 6 (1998), pp. 351-79.

- A. Thomson, *Bodies of thought. Science, Religion and the Soul in the Early Enlightenment*, Oxford University Press, Oxford 2008.
- M.D. Wilson, "Superadded Properties: A Reply to M.R. Ayers", in *The Philosophical Review* 91 (1982), pp. 247-52.
- M.D. Wilson, "Superadded properties: the limits of mechanism in Locke", in *American Philosophical Quarterly* 16 (1979), pp. 143-50.
- K.P. Winkler, "Locke on personal identity", in *Journal of the History of Philosophy*, 29 (1991), 2, pp. 201-26, repr. in V. Chappell (ed.), *Locke*, Oxford University Press, Oxford 1998.
- J.M. Wood, "On grounding superadded properties in Locke", in *British Journal for the History of Philosophy* 24 (2016), 5, pp. 878-96.
- J. Yolton, *Locke and French Materialism*, Clarendon Press, Oxford 1991.

## II. Other works cited

- P. Bayle, *Correspondance*, 15 vols., ed. by E. Labrousse, A. McKenna *et al.*, Voltaire Foundation, Paris 1999-2017.
- P. Bayle, *Ceuvres diverses* [OD], 4 vols, Compagnie des libraires, La Haye 1727-31.
- P. Bayle, *Dictionnaire historique et critique*, 2 vols., Reinier Leers, Rotterdam 1697.
- H.St.J. Bolingbroke, *The Philosophical Works*, 5 vols., ed. by D. Mallet, London 1754-77.
- S. Clarke and A. Collins, *Correspondence*, ed. by W.L. Uzgalis, Broadview Press, Calgary 2011.
- S. Clarke, *Works*, 4 vols., Garland Press, New York 1928.
- S. Clarke, *A Letter to Mr. Dodwell wherein All the Arguments in his Epistolary Discourse against the Immortality of the Soul are particularly answered*, London 1708; 1731 edition at <http://www.u.arizona.edu/~scmitche/clarkecollins.html>.
- T. Dagron, *Toland et Leibniz. L'invention du néo-spinozisme*, Vrin, Paris 2009.
- R. Descartes, *Meditationes de prima philosophia*, M. Soly, Paris 1641; J. Janssonius, Amsterdam 1658.
- R. Descartes, *Ceuvres complètes* [AT], 12 vols., ed. by C. Adam and P. Tannery, Vrin, Paris 1964-74.
- P. Des Maizeaux (ed.), *A Collection of Several Pieces of Mr. John Locke, Never Before Printed, Or Not Extant in His Works*, R. Francklin, London 1720.
- G. Gorham, "Locke on Space, Time and God", in *Ergo* 7 (2020), 7, pp. 219-40.
- P. Hamou, *Dans la chambre obscure de esprit. Locke et the invention du mind*, Ithaque, Paris 2018.

- P. Hamou, "Leibniz lecteur de Locke sur la matière pensante", in M. de Gaudemar, P. Hamou (eds.), *Locke et Leibniz sur l'entendement humain: deux styles de rationalité*, Hildesheim 2011.
- J. Harrison, P. Laslett, *The Library of John Locke*, Oxford University Press, Oxford 1965.
- T. Hobbes, "Human Nature", in W. Molesworth (ed.) *The English Works of Thomas Hobbes*, London 1841.
- J. Locke, *Correspondence*, 8 vols., ed. by E.S. de Beer, Oxford University Press, Oxford 1976-89.
- J. Locke, *An Essay Concerning Human Understanding*, ed. by P.H. Nidditch, Clarendon Press, Oxford 1975.
- J. Locke, *Reply to the Right Reverend the Lord Bishop of Worcester's Answer to his Second Letter*, London 1699.
- G. Mori, *Athéisme et dissimulation au XVIIe siècle; Guy Patin et le Theophrastus redivivus*, Honoré Champion, Paris 2022.
- G. Mori, *Early Modern Atheism from Spinoza to d'Holbach*, Liverpool University Press, Liverpool 2021.
- G. Mori, "Hume, Bolingbroke, and Voltaire: *Dialogues concerning Natural Religion*, Part XII", in *Etica & Politica* 20 (2018), 3, pp. 319-40.
- G. Mori, A. Mothu, "L'Âme matérielle"; 'De la conduite qu'un honnête homme doit garder pendant sa vie'; 'Préface du traité sur la religion de M.\*\*\*': trois manuscrits, un seul auteur?", in *La Lettre clandestine* 12 (2003), pp. 311-39.
- G. Mori, *Bayle philosophe*, Honoré Champion, Paris 1999.
- B. Pascal, *Pensées, opuscules et lettres*, ed. by Philippe Sellier, Garnier, Paris 2011.
- B. Pascal, *Pensées sur la religion et sur quelques autres sujets*, Guillaume Desprez, Paris 1678.
- H. Regius, *Medicina et Praxis medica, medicationum exemplis demonstrata*, Ex officina Theodori ab Ackersdijck, Trajecti ad Rhenum 1668.
- H. Regius, *Philosophia naturalis. In qua tota rerum universitas, per clara et facilia principia, explanatur* [1654], L. Elzevier, Amsterdam 1661.
- H. Regius, *Brevis explicatio mentis humanae*, Utrecht 1648.
- J. Roger, *Les Sciences de la vie dans la pensée française du XVIII<sup>e</sup> siècle. La génération des animaux de Descartes à l'Encyclopédie*, Armand Colin, Paris 1963.
- J. Toland, *Pantheisticon*, Cosmopoli, London 1720.
- Voltaire, *Œuvres complètes* [OCV], 205 vols., ed. by T. Besterman *et al.*, The Voltaire Foundation, Genève, Banbury, Oxford 1968-.
- Voltaire (pseud. F.-M. Arouet), *Lettre sur Locke, manuscrit clandestin*, ed. by A. McKenna and G. Mori, in *Œuvres complètes*, vol. 6C, The Voltaire Foundation, Oxford 2020.

- Voltaire, "Dernières remarques sur les Pensées de Mr. Pascal" (1777), in *Œuvres complètes*, vol. 31, The Voltaire Foundation, Oxford 2018.
- Voltaire, "Traité de métaphysique", in *Œuvres complètes*, vol. 14, The Voltaire Foundation, Oxford 2012, pp. 357-503.
- Voltaire, "*Les Adorateurs*" (1769), in *Œuvres complètes*, vol. 28, The Voltaire Foundation, Oxford 2010, pp. 309-26.
- Voltaire, "Lettres de Memmius à Ciceron" (1771), in *Œuvres complètes*, vol. 28, The Voltaire Foundation, Oxford 2010, pp. 437-63.
- Voltaire, "Cambridge Notebook", in *Œuvres complètes*, vol. 81, The Voltaire Foundation, Oxford 2000.
- Voltaire, "Dictionnaire philosophique", in *Œuvres complètes*, vol. 35, The Voltaire Foundation, Oxford 1994.
- Voltaire, "Éléments de la philosophie de Newton", in *Œuvres complètes*, vol. 15, The Voltaire Foundation, Oxford 1992.
- I.O. Wade, *The Intellectual Development of Voltaire*, Princeton University Press, Princeton 1969.