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'Celeberrimus Atheismi patronus praecedentis saeculi': Petrus van Musschenbroek's anti-Spinozism unveiled**

Abstract: In this essay, I will bring several hitherto neglected sources, which pertain to Petrus van Musschenbroek's (1692-1762) unpublished manuscripts, to the fore. The folios at hand show that Musschenbroek read and actively engaged with Spinoza's (1632-1677) *Ethica*. More precisely, it will be shown that Musschenbroek held clear-cut anti-Spinozistic convictions.

Keywords: Petrus van Musschenbroek (1692-1762), Spinozism, *Ethica*, Willem Jacob 's Gravesande (1688-1742), John Toland (1670-1722)

Ι

It is well documented that Petrus van Musschenbroek's (1692-1761) colleague at the University of Leiden between 1740 and 1742, Willem Jacob 's Gravesande (1688-1742), owned and commented upon Spinoza's work. Both professors have been labelled 'Newtonians' and Newtonianism has in recent years been portrayed as an important

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^{**} I am thankful to the Special Collections Department at Leiden University Library and to the Boerhaave Museum for kind permission to quote from the material in their care. I am greatly indebted to the anonymous referees for their valuable suggestions. Needless to say, I alone am responsible for any remaining mistakes. Conventions for transcription: words or letters between arrows pointed downwards have been added from above the line; words or letters between braces refer to words or letters whose transcription is conjectural; words between pointed brackets refer to my own explanatory comments or additions, words or letters that are crossed out were crossed out in the original.

¹⁾ See, for example, the following pivotal studies: P. Brunet, Les physiciens hollandais et la méthode expérimentale en France au XVIIIe siècle, Paris, 1926 and E.G. Ruestow, Physics at Seventeenth and Eighteenth-century Leiden: Philosophy and the New Science in the University, The Hague, 1973.

countermovement against different forms of Spinozism in the Dutch Republic.² In this modest contribution, no claims will be made concerning the rapport between Newtonianism and anti-Spinozism. Whereas, as I shall indicate in the next paragraph, we have a clear idea of the *loci* in 's Gravesande's *corpus* in which he mentioned Spinoza and dealt with his ideas, we are currently ignorant whether Musschenbroek indeed engaged with Spinoza's ideas at all. The aim of this contribution is to document – by drawing attention to hitherto neglected evidence taken from his unpublished manuscripts – that he was indeed highly concerned with the philosophical views of Spinoza. Musschenbroek's published work, it should be emphasised, contains no signs that he engaged with Spinoza's work in a thorough manner. Close scrutiny of Musschenbroek's published work shows that there in fact are only two passages in which he explicitly mentioned Spinoza's name in passing: in his *Oratio inauguralis de mente humana semet ignorante* (1740) and eight years later in his *Institutiones logicae* (1748).³

Here I shall show that in numerous places amongst his manuscripts, which still remain understudied,⁴ Musschenbroek vehemently criticised Spinoza's philosophical system as early as 1725.⁵ In section IV, I draw attention to a several folios among his manuscripts, in which

²⁾ See E. Jorink and H. Zuidervaart, 'How Isaac Newton was Fashioned in the Netherlands', in: E. Jorink and A. Maas, eds, *Newton and the Netherlands, How Isaac Newton was Fashioned in the Dutch Republic*, Amsterdam, 2012, pp. 13-65 and E. Jorink, 'Honouring Sir Isaac, or, Exorcizing the Ghost of Spinoza: Some Remarks on the Success of Newton in the Dutch Republic', in: S. Ducheyne, ed, *Future Perspectives on Newton Scholarship and the Newtonian Legacy in Eighteenth-century Science and Philosophy*, Brussels, 2009, pp. 23-43.

³⁾ As part of an exposition of several philosophical positions on the nature of the mind, Musschenbroek briefly mentioned Averroes and 'the most unhappy character Spinoza [infelicissimique ingenii Spinoza]' as scholars who believe that the mind is a mode of God (P. van Musschenbroek, *Oratio inauguralis de mente humana semet ignorante*, Lugduni Batavorum, Apud Samuelem Luchtmans, 1740, p. 6). In his textbook on logic, Musschenbroek briefly mentioned Spinoza's position on universals (id., *Institutiones logicae, Praecipue comprehendentes artem argumentandi*, Lugduni Batavorum, Apud Samuelem Luchtmans et filium, 1748, p. 29).

⁴⁾ Leiden University bought Musschenbroek's manuscripts from his relatives in 1826 (see [anon.], *Bibliotheca Musschenbroekiana, sive catalogus librorum*, Lugduni Batavorum, Per S. et L. Luchtmans, 1826). To this day, his manuscripts, which contain approximately 12,000 folios (C. de Pater, *Petrus van Musschenbroek [1692-1761], Een newtoniaans natuuronderzoeker*, PhD thesis, Utrecht University, 1979, pp. 361-365), are preserved in the Special Collections of Leiden University Library.

⁵⁾ For a detailed reassessment of Musschenbroek's Newtonianism, see my currently unpublished manuscript, tentatively entitled 'Petrus van Musschenbroek's on *Physica* and Method, or Why Newtonianism abounds in Variety'. On 's Gravesande's 'Newtonianism', see S. Ducheyne, 'W. J. 's Gravesande's Appropriation of Newton's Natural Philosophy, Part I: Epistemological and Theological Issues', *Centaurus*, vol. 56:1, 2014, pp. 31-55 and id., 'W. J. 's Gravesande's Appropriation of Newton's Natural Philosophy, Part II: Methodological Issues', *Centaurus*, vol. 56:2, 2014, pp. 97-120.

he attacked specific doctrines of Spinoza's system in considerable detail. At the end of this contribution, the readers will be provided with a complete transcription of this important source. In section III, I will give a brief overview of other *loci* in Musschenbroek's manuscripts in which he dealt with Spinoza. Before I do so, I will briefly touch upon 's Gravesande's anti-Spinozism, which is relevant to contextualise Musschenbroek's.

II

's Gravesande's private library, which was auctioned in the year of his death, contained a copy of Spinoza's *Tractatus theologico-politicus* (1670) and a copy of his *Opera posthuma* (1677).⁶ Elsewhere, I have documented 's Gravesande's negative attitude towards Spinoza's philosophical system and I need not to repeat the details here.⁷ In several chapters in his *Introductio ad philosophiam* (1736), he openly castigated the unwelcome implications of Spinoza's ideas for human freedom.⁸ In the chapters referred to, 's Gravesande argued against Spinoza that not all human actions are determined by mechanical causes or, in other words, by absolute or 'fatal' necessity.⁹ In certain circumstances, humans are able make decisions based on rational deliberation and, when they do, they are genuinely free, according to 's Gravesande. In a similar vein, in a posthumously published manuscript, entitled *Essais de métaphysique*, which was intended for 'a small number of persons [un petit nombre de personnes],'¹⁰ 's Gravesande argued, as opposed to Proposition 33, Part I, of Spinoza's *Ethica*, which states that '[t]hings could have been produced by God in no other way, and in no other order than they have been produced', ¹¹ that God is bounded, not by absolute necessity, but by

^{6) [}anon.], Bibliotheca 'sGravesandiana, sive catalogus librorum bibliothecae selectissimae viri clarissimi D. Gul. Jac. 's Gravesande, Lugduni Batavorum, Apud Joh. & Herm. Verbeek, 1742, p. 101.

⁷⁾ Ducheyne, 'W. J. 's Gravesande's Appropriation of Newton's Natural Philosophy, Part I' (as in n. 5), pp. 44-46.

⁸⁾ W.J. 's Gravesande, *Introductio ad philosophia, metaphysicam et logicam continens*, Leidae, Apud Johannem et Herman Verbeek, 1736, pp. 42-63, esp. pp. 51-52.

⁹⁾ On fatal necessity, see Leiden University Library, Special Collections, Bibliotheca Publica Latina, codex 240 (hereafter: BPL 240), no. 24, fol. 70^r and fol. 180^r.

¹⁰⁾ J.-N.-S. Allamand, ed, *Oeuvres philosophiques et mathématiques de Mr. G. J. 's Gravesande*, 2 vols, Amsterdam, Marc Michel Rey, 1774 [1744], vol. 1, p. 173.

¹¹⁾ E.M. Curley, ed., The Collected Writings of Spinoza, Volume I, Princeton, 1985, p. 436.

moral necessity – a view which is very much in line with Samuel Clarke's *A Demonstration* of the Being and Attributes of God (1705), which he owned.¹²

Is there any historical evidence that Musschenbroek ever read Spinoza? To this day, this has remained a matter of mere speculation. The auction catalogue of Musschenbroek's library, for instance, does not contain a single work by Spinoza. Musschenbroek's self-compiled 'Catalogus librorum meorum ao 1720' contains, as I was able to determine recently, the entry 'Spinoza in philosophiam Cartesii', his which refers to Spinoza's *Renati Des Cartes Principiorum philosophiae pars I et II* (1663), but what we really want to know is whether Musschenbroek ever read Spinoza's *Ethica* or his *Tractatus theologico-politicus*.

As will be shown below, there is ample evidence that Musschenbroek read and even reacted to Spinoza's *Ethica*. In what follows, I shall document three sorts of contexts in which Musschenbroek discussed Spinoza's *Ethica*: namely, when discussing the latter's views on human liberty, his idea of God, and his philosophical system as a whole.

Ш

To the best of my knowledge, the earliest datable source in which Musschenbroek refers to Spinoza occurs in the manuscript 'Praelectiones de Deo ejusque attributis' which contains a series of lectures 'held in the year 1725 [habitae A° 1725]'. Spinoza is mentioned – together with Thomas Hobbes – at the beginning of the manuscript as an atheist 'who cultivates reason and believes by the force of his arguments that there probably is no God [qui rationem excolit, et credit ex viribus suorum argumentorum probabiliter esse ↓fluere↓ non dari Deum]'. The second chapter of this manuscript, entitled 'Caput secundum de Existentia Dei', contains

¹²⁾ S. Clarke, A Demonstration of the Being and Attributes of God: More Particularly in Answer to Mr. Hobbs, Spinoza, and Their Followers, Wherein the Notion of Liberty is Stated, and the Possibility and Certainty of it Proved, In Opposition to Necessity and Fate, London, W. Botham, for J. Knapton, 1705, esp. pp. 236-237; [anon.], Bibliotheca 'sGravesandiana (as in n. 6), p. 52, item n° 117.

^{13) [}anon.], Bibliotheca Musschenbroekiana (as in note 4).

¹⁴⁾ Leiden, Boerhaave Museum, Archives ms. a 138.d, fol. 37^v.

¹⁵⁾ B. de Spinoza, *Renati Des Cartes Principiorum philosophiae pars I et II*, Amstelodami, Apud Johannem Riewerts, 1663.

¹⁶⁾ BPL 240 (as in n. 9), no. 12, fols 1^r-118^v. Musschenbroek was appointed at the University of Utrecht between 1723 and 1739.

¹⁷⁾ Ibid., no. 12, fol. 2^r, cf. fol. 2^v. Spinoza is briefly mentioned again on Musschenbroek's 'Praelectiones de Deo ejusque attributis' on fol. 15^{r-v}.

Musschenbroek's most detailed attack against Spinoza's philosophy. ¹⁸ This material will be analysed separately in the following section.

In a lengthy manuscript entitled 'Ad S Gravesandii Introductionem in Philosophiam notae', which is to be found in Leiden University Library, Special Collections, ¹⁹ Musschenbroek took extensive notes on 's Gravesande's *Introductio ad philosophiam* (1736). ²⁰ In these notes, which were composed at some point after 1736, Musschenbroek sided with many of the criticisms that 's Gravesande had raised against Spinoza in his *Introductio ad philosophiam*. Not surprisingly, Musschenbroek's notes contain a sustained attack, that was inspired by 's Gravesande's views on the matter, on what he saw as the absurdities of Spinoza's denial of human freedom. Like 's Gravesande, Musschenbroek was convinced that a 'sane human individual [homo sanae mentis]' is free in the sense that he is capable to determine his actions by his own will and that his actions are not determined by external causes. In those cases, he is not determined 'by a blind external cause [non â causa caeca externa]', but by his own reason. ²² By contrast, Spinoza was convinced, Musschenbroek explained, that human actions are determined by external, corporeal causes only and that, accordingly, their actions are determined by fatal necessity. ²³ In this context, Musschenbroek cited from Spinoza's famous letter on freedom and necessity, ²⁴ just as 's

¹⁸⁾ This particular chapter is to be found on ibid., no. 12, fols 30^r-53^v. The first chapter, 'Caput primum de Idea Dei', is to be found on ibid., no. 12, fols 7^v-29^v, the third, 'Caput Tertium De Attributis Divinis', on ibid., no. 12, fols 54^r-64^r, and the fourth untitled chapter on ibid., no. 12, fols 65^r-73^r. These numbered chapters are followed by several unnumbered chapters, to wit 'De Deo Aeterno' (ibid., no. 12, fols 73^v-81^r), 'De Omnipraesentia Divina' (ibid., no. 12, fols 81^v-93^v), 'De Deo Immenso' (ibid., no. 12, fols 94^r-97^r), 'De Deo Infinito' (ibid., no. 12, fols 97^v-105^r), 'De Deo Unico' (ibid., no. 12, fols 106^r-113^r), and 'De Deo Simplici' (ibid., no. 12, fols 113^v-116^r).

¹⁹⁾ Ibid., no. 24, ff. 1^r-446^r and ibid., no. 12, fols 117^r-267^r.

²⁰⁾ On ibid., no. 24, fols 1^r-446^r Musschenbroek commented extensively on Book I, Parts I and II of 's Gravesande's *Introductio ad philosophiam* ('s Gravesande, *Introductio ad philosophiam* (as in n. 8), pp. 1-101) and on ibid., no. 12, fols 117^r-267^r he commented on Book II, Parts I and II ('s Gravesande, *Introductio ad philosophiam*, pp. 102-257).

²¹⁾ BPL 240, no. 24, fol. 180^r.

²²⁾ Ibid., , no. 24, fol. 179^v.

²³⁾ Ibid., , no. 24, fols 221^r-225^r, fol. 180^v.

²⁴⁾ B. d. S., *Opera posthuma*, s.l., s.n., pp. 583-586. More specifically, Musschenbroek offers the words 'Humana libertas, quam omnes se habere jactant, in eo solo consistit, quod homines sui appetitus sint conscii, sed causarum, â quibus determinantur ignari.' (BPL 240, no. 24, fol. 222^v) as a quotation of 'Atque haec humana

Gravesande had done,²⁵ and from Proposition 48, Part II, of Spinoza's *Ethica*, which states that '[*i*]*n the Mind there is no absolute*, or *free*, *will*, *but the Mind is determined to will this or that by a cause which is also determined by another, and this again by another, and so to infinity*',²⁶ to substantiate his claim.²⁷ According to Musschenbroek, Spinoza's doctrine of fate 'absolutely leads to atheism [absolute ducit ad atheismum]'²⁸ and subverts the very idea that humans are morally accountable for their actions.²⁹

At another occasion in the same manuscript, when commenting upon Part II of Book II of 's Gravesande's *Introductio ad philosophiam*, i.e. 'De Causis Errorum', ³⁰ Musschenbroek took issue with Spinoza's idea of God. Musschenbroek noted that it is a common strategy amongst heretics to use the word 'God' in a sense which differs from its proper meaning. 'Some heretics', he elaborated, 'practiced crafts of this kind under the appearance and veil of piety, as Spinoza and chiefly Pontianus van Hattem³¹ and others have done [quales artes nonnulli haeretici sub facie \& velo\pietatis exercent, ita Spinoza, & \praecipue\pontianus van Hattem, aliique fecerunt]'. ³² Musschenbroek contrasted what he considered to be the proper idea of God, namely 'an incorporeal, eternal being which is endowed with an infinite intelligence and operating power and which depends on no other being [Ens incorporeum,

illa libertas est, quam omnes habere jactant, & quae in hoc solo consistit, quòd homines sui appetitûs sint conscii, & causarum, à quibus determinantur, ignari.' (B. d. S., *Opera posthuma*, p. 585).

- 25) 's Gravesande, Introductio ad philosophiam, pp. 51-52.
- 26) Curley, The Collected Writings of Spinoza, Volume I (as in n. 11), p. 483.
- 27) B. d. S., Opera posthuma (as in n. 24), p. 85: 'In Mente nulla est absoluta, sive libera voluntas; sed Mens ad hoc, vel illud volendum determinatur à causâ, quae etiam ab aliâ determinata est, & haec iterum ab aliâ, & sic in infinitum.' On BPL 240, no. 24, fol. 221^r, Musschenbroek quotes the above proposition as follows: 'In mente nulla est absoluta seu Libera voluntas, sed Mens ad hoc vel illud volendum determinatur â causâ, quae etiam ab aliâ determinata est, & haec iterum ab aliâ, & sic in infinitum.' The same proposition is also referred to on ibid., fol. 180^v.
 - 28) BPL 240, no. 24, fol. 272^v.
 - 29) Ibid., , no. 24, fol. 180° and fol. 224^{r-v}.
 - 30) 's Gravesande, Introductio ad philosophiam, pp. 223-257.
- 31) On the preacher from St. Philipsland, Pontiaan van Hattem (1641?-1706), who was accused of holding heretical views, which were associated with the teachings of Spinoza, see P.C. Molhuysen and P.J. Blok, *Nieuw Nederlandsch Biografisch Woordenboek*, 10 vols, Leiden, 1911-1937, vol. 4, pp. 727-728 and A. Roothaan, 'Pontiaan van Hattem: Een vroege kentheoretische criticus van Spinoza', *Tijdschrift voor filosofie*, vol. 50:3, 1988, pp. 525-535. For van Hattem and Hattemism more generally, see M. Wielema, *The March of the Libertines, Spinozists and the Dutch Reformed Church* (1660-1750), Hilversum, 2004, Chapter 6.
 - 32) BPL 240, no. 12, fol. 256^r.

↓aeternum,↓ infinita intelligentia et potentia operante praeditum â nullo alio Ente dependens]',³³ with Spinoza's misguided idea of God 'by which God is understood to be an absolutely infinite being or substance which consists of an infinity of attributes [per Deum intelligere Ens absolute infinitum, sive substantiam ex infinitis attributis constantem]'. On Spinoza's understanding of 'God', Musschenbroek pointed out, 'God and the world are one and the same [Deus & mundus ipsi sint ↓unum &↓ idem]'.³⁴

IV

In the second chapter of his 'Praelectiones de Deo ejusque attributis' (1725) – namely, on folios 49^r to 52^v, which are transcribed in their entirety in the appendix to this contribution – Musschenbroek commented upon Spinoza's *Ethica*. These folios contain Musschenbroek's most detailed criticism of Spinoza's ideas. Although his notes are oftentimes redundant, they provide us with valuable insight into those aspects of Spinoza's thought which Musschenbroek found theologically unacceptable. As will be shown, in order to pinpoint several differences of opinion Musschenbroek referred to specific *loci* in Spinoza's *Ethica*.

At the outset of his notes on Spinoza (and, to some extent, on John Toland), Musschenbroek reported on the atheistic conviction that 'motion is originally something necessary of all matter [motum in genere omnis materiae esse necessarium]'. The idea of motion being inherently essential to matter is inconsistent with the idea that there is 'some matter at rest [aliquam materiam quiescentem]', Musschenbroek pointed out.³⁵ 'Nevertheless', he continued, 'an author of this century, John Toland, has endeavoured to show, in his Third Letter,³⁶ that motion or endeavour to motion is essential to matter [Hujus tamen saeculi autor Tolandus Litt: 3. conatus fuit demonstrare, motum vel conatum ad motum, esse essentialem mater{i}ei]'.³⁷ 'From matter alone', however, 'nothing will ever be brought about [ex sola mate{ri}a nihil unquam fiet]', Musschenbroek pointed out. He, furthermore, raised the issue

³³⁾ Ibid., no. 12, fol. 256^v.

³⁴⁾ Ibid., no. 12, fol. 257^r.

³⁵⁾ Ibid., no. 12, fol. 49^r.

³⁶⁾ Musschenbroek's reference is to John Toland, *Letters to Serena*, London, Bernard Lintot, 1704. However, the reference to Letter III is mistaken. Given the contents of *Letters to Serena*, it was probably Musschenbroek's intention to refer to the content of Letter IV (ibid., esp. pp. 158-61) and Letter V, which is entitled 'Motion essential to Matter; *in Answer to some Remarks by an noble Friend on the* Confutation of Spinosa' (ibid., p. 163).

³⁷⁾ BPL 240, no. 12, fol. 49^r.

of whether, given the atheistic supposition of the (absolute) necessity of matter, 'the force of gravity is included in matter <as one of its essential, i.e. universal properties> or not [an mater{iae}] inclusa est potentia gravitatis vel non]'. If it is not, he argued, then, given the materialistic ontology proposed by Toland, 'in a world that is merely corporeal, in which there is no Intelligent Being, no motion will originate [tum in mundo mere corporeo, in quo nullum Ens adest Intelligens, nullus oriri poterit motus]'. If gravity is claimed to be a 'universal property of matter [proprietas Universalis materiae]', then this conflicts with the fact that there is a vacuum, because the notion of a vacuum implies, as Musschenbroek argued, that matter – and the properties which are deemed essential to it (including, *ex suppositione*, gravity) – can be absent from parts in space, which entails, as he pointed out quickly, that matter is, contrary to the atheist's supposition, not 'absolutely necessary [absolute necessaria]' and that gravity cannot be claimed to be a truly universal or – which was the same for him – essential property of matter.

In the remaining paragraphs, Musschenbroek turned his attention to Spinoza, to whom he referred as 'the most famous patron of atheism of the preceding century [celeberrimus Atheismi patronus praecedentis saeculi]'. In his Ethica Spinoza endorsed the view that 'the entire world and its parts exist <absolutely> necessarily [totum mundum, omnesque ejus partes existere necessario]', Musschenbroek explained.³⁸ In order to illustrate Spinoza's views, he cited from the following statements from Part I of Spinoza's Ethica: namely, Proposition 6, which states that '[o]ne substance cannot be produced by another substance³⁹ [Una substantia non potest produci ab alia substantia]', Proposition 7, which states that '[i]t pertains to the nature of a substance to exist⁴⁰ [ad naturam substantiae pertinet existere]', Proposition 8, which states that '[e]very substance is necessarily infinite⁴¹ [Omnis substantia est necessario infinita]', and Proposition 14, which states that '[e]xcept God, no substance can be or be conceived [Praeter Deum nulla dari, neque concipi potest substantia]'. 42 Moreover, Spinoza, Musschenbroek continued on f. 50°, describes things 'with ambiguous expressions [ambiguis expressionibus]'. For instance, 'he first audaciously posits that every substance is necessary and afterwards he tries to reject this [primo audacter ponit Omnem Substantiam esse necessariam; et postea hoc rejicere tentat]', although in Proposition 33 [Part I] he says that

³⁸⁾ Ibid., no. 12, fol. 49^v.

³⁹⁾ Curley, The Collected Writings of Spinoza, Volume I, p. 411.

⁴⁰⁾ Ibid.

⁴¹⁾ Ibid, p. 412.

⁴²⁾ Ibid., p. 420; BPL 240, no. 12, fol. 50°.

'[t]hings could have been produced by God in no other way, and in no other order than they have been produced'43 and in Proposition 16 that '[f]rom the necessity of the divine nature there must follow infinitely many things in infinitely many modes, (i.e., everything which can fall under an infinite intellect.)'. 44 Musschenbroek also argued that the necessity by which God has created the world and the things contained in it is not determined 'by a natural <i.e. fatal> necessity without will and deliberation [a naturali necessitate, absque voluntate et arbitrio]', as posited by Spinoza, but 'by a necessity of Wisdom and Goodness [a necessitate Sapientiae et Bonitatis]', i.e. by what Clarke and 's Gravesande have called 'moral necessity'. 45 In this context, Musschenbroek quoted from Corollary 1 to Proposition 32, Part I, which states that 'God does not produce any effect by freedom of the will 46 [Deum non operari ex Libertate voluntatis],' and he also referred to the Scholium to Proposition 17, Part I⁴⁷, in which Spinoza made related claims. ⁴⁸ According to Musschenbroek, Spinoza's view that there is but one eternal and absolutely necessary substance leads to several absurdities. First, that it will be a contradiction 'to conceive of more <than one substance> or that there are substances <other than God> [plures concipere aut esse substantias]'. 49 Second, that it is contradictory to conceive of the world 'in a different order [in alio ordine]' than the present one. Moreover, if motion is essential to matter, then either it is a contradiction to suppose that matter is at rest or motion is to be considered as 'something which is eternally communicated from one body to another without any original cause [rem [...] ab aeterno communicatam ab uno corpore in aliud, absque ulla causa originali]. ⁵⁰ These two absurdities, Musschenbroek underscored, are implied in Lemma 3, Proposition 13, Part II of Spinoza's Ethica, which states that '[a] body which moves or is at rest must be determined to motion or rest by another body, which has also been determined to motion or rest by another, and that again by another, and so on, to infinity⁵¹ [corpus motum vel quiescens, ad motum vel quietem determinari debuit ab alio corpore, quod etiam ad motum vel quietem determinari debuit ab alio, et illud iterum ab alio, et sic in infinitum].' The world has been created by God and 'only God is the

⁴³⁾ Curley, The Collected Writings of Spinoza, Volume I, p. 436.

⁴⁴⁾ Ibid., p. 424.

⁴⁵⁾ BPL 240, no. 12, fol. 51^r.

⁴⁶⁾ Curley, The Collected Writings of Spinoza, Volume I, p. 435.

⁴⁷⁾ Ibid., pp. 425-428.

⁴⁸⁾ BPL 240, no. 12, fol. 51^v.

⁴⁹⁾ Ibid., no. 12, fol. 52^r.

⁵⁰⁾ Ibid., no. 12, fol. 52^{r-v}.

⁵¹⁾ Curley, The Collected Writings of Spinoza, Volume I, p. 459.

eternal cause without beginning and end, because He carries in him all perfections and He is never bigger or smaller, but always the same without any shade of change, ⁵² as it is excellently expressed in the Sacred (Scriptures) [solus Deus est causa Aeterna absque origine et fine, quia capit omnes perfectiones in se, et nunquam major, minorve est, sed semper idem absque ulla umbra mutationis, uti optime in Sacris expressum].⁵³

V

In view of the above analysis, it can no longer be doubted that Musschenbroek read Spinoza's writings. We have seen that he was in fact highly familiar with the contents of Spinoza's *Ethica*, which he ardently criticised in his unpublished manuscripts. In these manuscripts, Musschenbroek drew attention to what he considered as theologically unacceptable implications of the following *loci* in Spinoza's *Ethica*: to wit, Propositions 6-8, Proposition 14, Proposition 16, the Scholium to Proposition 17, Corollary 1 to Proposition 32, Proposition 33, Part I, and Lemma 3 to Proposition 13 and Proposition 48, Part II. From what has been surveyed above, it is now clear that Musschenbroek fiercely opposed, on the one hand, Spinoza's metaphysical necessitarianism, which rendered the very notion of human or divine freedom of will obsolete, and, on the other hand, his views on matter and motion, which entailed that the world is eternal and causally independent from a divine cause. It should by now be clear that, like 's Gravesande, Musschenbroek held clear anti-Spinozistic convictions.

⁵²⁾ This might very well be a reference to James 1:17, which in the King James version reads: 'Every good gift and every perfect gift is from above, and cometh down from the Father of lights, with whom is *no variableness, neither shadow of turning*.' (R. Carroll and S. Prickett, eds, *The Bible, Authorized King James Version*, Oxford, 1997, p. 281 [italics added]).

⁵³⁾ BPL 240, no. 12, fol. 52^v.

Appendix: Transcription of BPL 240, no. 12, ff. 49^r-52^v

[f. 49^r] Si Atheus dicit motum in genere omnis materiae esse necessarium, tum sequit{ur} debere esse contradictionem in terminis supponere aliquam materiam quiescentem, quod est adeo absurdum, ut à nemine supponi possit. Hujus tamen saeculi autor Tolandus Litt: 3. conatus fuit demonstrare, motum vel conatum ad motum, esse essentialem mater{ie}i, sed quam philosophicè, ex hâc sola consideratione patebit. Essentialis conatus ad motum cujusvis particul{ae} in hoc pleno⁵⁴, debet esse vel juxta unam aliquam determinationem, vel versus omnem determinationem. Conatus ad motum versus unam determinationem non potest esse essentialis corpusculo, sed debet oriri exquadam externa causâ; quoniam nihil est in supposita necessaria natura alicujus corpusculi, ad ejus motum magis versus hanc, quam versus aliam determinationem disponendum: sed conatus ad motum versus omnem determinationem, est absoluta contradictio, vel posset modo aeternam quietem producere in corpusculo.

⁵⁴⁾ Note that Toland endorsed a plenum (Toland, Letters to Serena (as in n. 36), p. 159, pp. 172-173).

[f. 49^v] Si vero atheus supponit motum esse necessarium et Essentialem aliquibus corporibus, non vero omnibus; sequetur idem absurdum circa determinationem motus<.> Sed praeterea tum supponit absolutam aliquam necessitatem, et quae non esset Universalis, quod est magis absurd{um}. Sed ad ultimum {casum} veniamus in quo sola materia ponatur necessaria; tum vero {quaeram} ubi manet motus. nam ex sola materia nihil unquam fiet: praeterea, an mater{iae} inclusa est potentia gravitatis vel non: Si non, tum in mundo mere corporeo, in quo nullum Ens adest Intelligens, nullus oriri poterit motus; quoniam motus, ut supra ostensum est, non est absolute per se necessarius. Sed si gravitas sit inclusa necessari{ae} existenti{ae} corporu{m} tum erit inclusa in necessaria existentia omnis materiae, vel alicujus materiae (verum idea gravitatis potest separari ab idea corporis, et corpus concipi absque gravitate)<.> Si quoque sit gravitas modo in aliqua materia et non in omni, tum materia non

[f. $50^{\rm r}$] est res homogenenea, adeoque \tilde{n}^{55} absolute necessaria: nam in re absolute necessaria non potest esse varietas, neque aliqui<s>⁵⁶ gradus. Sed si gravitas sit proprietas Universalis materiae, tum datur vacuum, et quando datur vacuum, materia non est absolute necessaria, tum ë⁵⁷ fieri potest ut materia non sit in spatio: Si nunc Atheus vult affirmare, materiam quidem esse necessariam, sed non adeo necessariam, ut repleat omnia spatia; tum dico illum ponere absolutam contradictionem; nam absoluta necessitas, est absoluta necessitas sibi similis in omni spatio et loco: et si non sit impossibile, ut materia absit ex certo spatio, etiam non est absolut{a} necessitas ut adsit materia alteri loco: vel non {r}equirit{ur} ut sit in omni loco. Spinoza, celeberrimus Atheismi patronus praecedentis saeculi, credidit nullam esse substantiarum diversitatem; sed totum mundum, omnesque ejus partes existere necessario: dicit enim in Ethic:

⁵⁵⁾ This is an abbreviation for 'non'.

⁵⁶⁾ In combination with 'gradus', the nominative 'aliquis' makes more sense than the dative 'alicui'.

⁵⁷⁾ This is probably an abbreviation for 'enim'.

[f. 50^{v}] part: i. prop: 6^{58} . Una substantia non potest produci ab alia substantia et prop: 8⁵⁹. Omnis substantia est necessario infinita, et propos: 7⁶⁰ ad naturam substantiae pertinet existere. hic idem philosophus asseruit non esse alium Deum, praeter hoc Universum: nam in prop: i4⁶¹ haec habet. Praeter Deum nulla dari, neque concipi potest substantia. Sed quaecunque sic proponit, ambiguis expressionibus describit in sequentis propositionibus, ut eludere argumenta eorum posset, quos in se invecturos praevidebat. Nam primo audacter ponit Omnem Substantiam esse necessariam; et postea hoc rejicere tentat; quamvis prop: 33⁶² dicat Res nullo alio modo, neque ordine à Deo produci potuerunt, quam productae sunt: et in prop: i6⁶³: Ex necessitate divinae naturae, infinita infinitis modis; hoc est omnia, quae sub intellectum infinitum cadere possunt sequi debent.

⁵⁸⁾ The original reads: 'Una Substantia non potest produci ab aliâ substantiâ.' (B. d. S., Opera posthuma, p. 4).

⁵⁹⁾ The original reads: 'Omnis substantia est necessariò infinita.' (ibid., p. 5).

⁶⁰⁾ The original reads: 'Ad naturam substantiae pertinent existere.' (ibid.).

⁶¹⁾ The original reads: 'Praeter Deum nulla dari, neque concipi potest substantia.' (ibid., p. 12).

⁶²⁾ The original reads: 'Res nullo alio modo, neque alio ordine à Deo produci potuerunt, quàm productae sunt.' (ibid., p. 29).

⁶³⁾ The original reads: 'Ex necessitate divinae naturae, infinita infinitis modis (hoc est, omnia, quae sub intellectum infinitum cadere possunt) sequi debent.' (ibid., p. 16).

[f. 51^r] Si incautus Lector hic crederet, Spinozam arbitrari res esse necessarias eo statu {ac} sunt, quoniam Infinita Sapientia et Bonitas nunquam posset ponere res nisi in uno Optimo et Sapientissimo ordine, tum Lector deciperetur: nam talis necessitas non est naturalis, sed tantum moralis & consequens necessitas, et hinc directe opposita necessitati illi à Spinozâ posit{ae}. Praeterea si Lector iis verbis intelligat, Deum fuisse determinatum, non a necessitate Sapientiae et Bonitatis, sed a naturali necessitate, absque voluntate et arbitrio, ut faceret omnes res ita, prout nunc sunt; tum etiam sensum Spinozae non intelligeret. quia in his duabus explicationibus Deum intelligimus velut distinctum à materia, et ex quo materia; quod Spinoza negat, dicendo, esse unam modo substantiam. Et si quis crederet, omnes substantias, quae sunt in hoc Universo, esse tantum modificationes divinae Essentiae, nondum sensum Spinozae caperet: nam tum Deus adhuc supponi posset instar agentis, operantis in se, et manifestantis se diversis modis, prout ipse vellet, et hoc absolute negat Spinoza; nam

[f. 51^v] dicit prop: 32. Corol: i⁶⁴ et in Schol: ad prop: i7⁶⁵. Deum non operari ex Libertate voluntatis. adeoque sensus Spinozae, loquentis admodum obscure et ambigue; hic erit: Quia est absolute impossibile ut aliquid sit creatum vel productum ex alio; est absolute etiam impossibile Deum potuisse producere aliquid diversum ab eo quod nunc est; et ideo quodcunque existit, debet esse talis pars divinae substantiae, non veluti modificatio facta in eâdem per aliquam voluntatem vel arbitrium, vel sapientiam in eo; sed veluti absoluta necessitas in se ipsa, cum respectu ad modum existentiae cujusvis partis non minus, quam cum respectu Existentiae existentiae <sic>, omnium rerum. Audite enim propositiones Spinozae<.> hae confirmabunt haec omnia dicta. prop: 6. Una Substantia non potest produci ab aliâ substantia. prop: 33. Res nullo alio modo, neque alio ordine

prop: 33. Res nullo alio modo, neque alio ordine à Deo produci potuerunt, quam productae sunt.

prop: 14 Praeter Deum nulla dari neque concipi potest Substantia<.>prop: 32 corol: i Deum non operari ex Libertate voluntatis.

Adeoque tota Spinozae opinio manifeste h{o}c sonat modo: mundum corporeum et quamlibet in eo partem, simul cum

⁶⁴⁾ The original reads: 'Deum non operari ex libertate voluntatis.' (ibid., p. 29).

⁶⁵⁾ The scholium to Proposition 17, Part I, is to be found on ibid., pp. 17-19.

[f. 52^r] ordine & modo existentiae cujusvis partis, esse existentiam à se, sive Existentiam necessariam: Haec autem opinio tam multa absurda in se continet, quam ulla unquam: Si enim una substantia modo sit absolute necessaria; ergo erit contradictio plures concipere aut esse substantias; |{ec}quis vero vestrum invenit in se hanc contradictionem dum concipit, non est contradictio si concepta Linea mathematica, superficies, surdesolidum, ⁶⁶ quadrato quadratum⁶⁷ existeret, posset enim; sed actu existunt praeter Deum, corpora, spiritus, motus, ideae rerum, spatia, quae sunt diversissimae substantiae.|⁶⁸ Praeterea deberet esse contradictio concipere res hujus mundi in alio ordine quam nunc sunt, vel concipere plures homines, plantas, animalia, aut pauc{iores}, vel in aliis locis ac nunc sunt; ubi profecto nulla contradictio inest. {C}ogitur tertio, motum esse necessario à se supponere: adeoque erit mera contradictio in terminis supponere materiam esse in quiete: vel debet affirmare illud absurdissimum; motum esse rem dependentem, ab aeterno communicatam ab uno corpore in aliud, absque ulla causa

⁶⁶⁾ I.e., the fifth power of a number.

⁶⁷⁾ I.e., the fourth power of a number.

⁶⁸⁾ The abstruse syntax of the text between vertical lines makes it hard to understand its exact meaning. Here I will refrain from speculating on the matter.

[f. 52^v] originali vel in se vel extra se: et hanc absurditatem videtur fuisse amplex {us} in parte 2. prop: i3. Lemma 3⁶⁹. quando dicit corpus motum vel quiescens, ad motum vel quietem determinari debuit ab alio corpore, quod etiam ad motum vel quietem determinari debuit ab alio, et illud iterum ab alio, et sic in infinitum. Quod profecto est tam absurdum, ut se ipsum refutet; nam fieri nequit, ut quod nunc finitum est, unquam sit vel fuerit absolute Infinitum, sed semper ad primum {a}liquod recurrit, in quo definit necessario: et an ex his verbis non manifesto sequit{ur} motum poni ortum ex se ipso? cum igitur vidimus totum hoc universum non posse esse ab Aeterno, restat id tantum, ut sit à Deo, à causâ prima creante illum, cum omnibus quae sunt in Mundo: et qui solus Deus est causa Aeterna absque origine et fine, quia capit omnes perfectiones in se, et nunquam major, minorve est, sed semper idem absque ulla umbra mutationis, uti optime in Sacris expressum de Deo.

⁶⁹⁾ The original reads: 'Corpus motum, vel quiescens ad motum, vel quietem determinari debuit ab alio corpore, quod etiam ad motum, vel quietem determinatum fuit ab alio, & illud iterùm ab alio, & sic in infinitum.' (B. d. S., Opera posthuma, p. 54).