

Money and the Doctrine of Necessities

10.1 Locke's Doctrine of Necessities

Thinking in terms of necessities of the nation in the context of the monetary system allowed Locke to introduce the public element that private money owners lacked.¹ The entire question of money moves thereby from a moral-theological system to a system of moral-natural philosophy. In all this philosophical and theoretical work, the notion of necessities becomes central. The celebrated argument by Joyce Appleby about Locke's conviction of the existence of a natural economic order on which mercantilism was advanced does not chime with Locke's corpuscularianism. Among other reasons, to a committed empiricist, a minimal articulation of any natural order would require lots of experiments. Nature had certainly an order, but there was very little about that order we could say in the present state of science. Instead, in his economic thinking, Locke endorsed the argument of human necessities: necessities of the (economy of the) state and concern for the public and the shaping role of public legislation.² But it was also Locke's theoretical premise of the disintegrative principle of corpuscularist atomism that demanded the certainty of the notion of necessities.

10.1.1 *A Changing Perspective: Corpuscularianism*

Human beings are back in the world in the philosophy of John Locke. We encounter them as beings *in nature*, in their dual capacity as rational

¹ Public debt in form of tallies and 'Exchequer orders' circulated extensively from one person to another between 1667 and 1672, until the King stopped payment in January 1672, the notorious 'Stop of the Exchequer', to start borrowing afresh. J. Keith Horsefield, *British Monetary Experiments 1650–1710* (London: G. Bell and Sons, 1960), pp. 1–10; C. D. Chandaman, *The English Public Revenue 1660–1688* (Oxford: Clarendon Press, 1975).

² Joyce Oldham Appleby, *Economic Thought and Ideology in Seventeenth Century England* (Princeton: Princeton University Press, 1978), pp. 242–279; Daniel Carey responded to this argument on Locke's naturalism with a sophisticated analysis on the recoinage controversy in Daniel Carey, 'Locke's Species: Money and Philosophy in the 1690s' 70 *Annals of Science* (2013). More about this later in the chapter.

explorers of elusive knowledge and as created natural beings endowed with powers and necessities. The following three chapters describe Locke's response, as an economist, a moral philosopher, an epistemologist and as a political philosopher, to the magnificent challenge that corpuscular philosophy posed in the English context. Following Boyle, Locke accepted atomism in natural sciences.³ The goal of making real science – that is empirical knowledge – of social endeavours appeared clear. But atomism was hardly helpful for making theory with social content that would confront Hobbes's individualist and atheist political science. I suggest that Locke's doctrine of necessities allowed corpuscularianism to be launched in natural sciences at full speed without discomposing all social institutions and ensure that social sciences could partake of the new science. Moral natural law was in that sense modernized. This chapter explores how Locke benefited from a generalized language of necessities in the context of a theory of money, government, natural law and knowledge. Furthermore, he imbued the political meaning of the concept of necessities with a specific theoretical content inspired partly by theology, economy and medicine.

English corpuscular philosophy held that the physical world could be explained without Aristotelian forms or substances. In this manner, teleological thinking in natural philosophy and ethics lost much of its meaning.⁴ Locke's rejection of Aristotelian reasoning on virtues, despite his own proposal of rational morality, may be put in the context of its incompatibility with corpuscular anti-teleological principles.⁵ As we saw in Chapter 7,

³ The study of the influence of Boyle in Locke's philosophy is still in an early stage. Matthew Priselac, Jan-Erik Jones and Hilarie Kochira have made a strong case with regard to the importance of corpuscularianism for Locke's discussions in *An Essay of Human Understanding*. Matthew Priselac, *Locke's Science of Knowledge* (New York and London: Routledge, 2017); Jan Erik-Jones refers in particular to *The Origin of Forms and Qualities* by Robert Boyle, for instance to the seventeenth-century philosophical debates on natural kinds – such as in biology, 'the species'. Jan Erik-Jones, 'Boyle's Natural Kind Realism' in Jan Erik Jones (ed.), *The Bloomsbury Companion to Robert Boyle* (2020). Locke knew that work so well that, according to Jan-Erik Jones, he was even able to detect and criticize its gaps of reasoning. Jan-Erik Jones, 'Locke vs. Boyle: The Real Essence of Corpuscular Species', 15 *British Journal for the History of Philosophy* (2007), pp. 659–684; Hylarie Kochiras, 'Locke's Philosophy of Science', *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), Edward N. Zalta (ed.), <https://plato.stanford.edu/archives/spr2020/entries/locke-philosophy-science/>.

⁴ I am considering here English corpuscularianism in its own right. The dependencies and continuities in mechanic Cartesianism to theological and teleological thinking have been discussed, for example, by Osler, *Divine Will and the Mechanical Philosophy*.

⁵ 'And, however Aristotle or Anacharsis, Confucius, or any one amongst us, shall name this or that action a virtue or a vice, their authorities are all of them alike, and they exercise but what power every one has, which is to show what complex ideas their words shall stand for:

corpuscularist authors considered it productive for science to narrow the scope of the philosophical approach to the physical world to a conception of a natural system held together through powers, qualities and forces. That is to say, the frame and course into which matter and motion were set in the beginning by God was the start of reasoning for the naturalist. Corpuscularianism is explained, for instance, masterfully in Robert Boyle's *The Origins of Forms and Qualities* in terms that the only thing in nature that possessed something distinct from matter was the human being, with an 'immaterial Form and a humane Body'.⁶ Next, in explaining particular natural phenomena of this 'great Automaton, the World', it was argued that the naturalist must pay attention only to the 'doctrine of qualities', meaning the qualities of matter: size, texture, shape and motion, or lack of motion. In Boyle's view, this understanding of material bodies as an aggregate of qualities gave an element of convention, of agreement, even of arbitrariness to other conceptions such as naturalists' classification of aspects of physical nature into species, or indeed into 'natures'.⁷ In effect, he was hinting at the fact that in view of the emerging corpuscularianism and its infinite possibilities in relation to knowledge, contemporary science still offered a poor and positivist conception of the natural world.⁸ Did scientists know

for without showing a law that commands or forbids them, moral goodness will be but an empty sound'. John Locke, 'On Ethics in General' in Peter King (ed.), *The Life of John Locke with extracts from his Correspondence, Journals, and Common-Place Books*, vol. II (London: Bentley, 1830), pp. 129–130.

⁶ Robert Boyle, *The Origin of Forms and Qualities (according to the Corpuscular Philosophy)* (Oxford: Pr. By H. Hall, Printer to the University, Davis, 1666), p. 157–158.

⁷ 'For the World being once constituted by the great Author of Things, as it now is, I look upon the *Phaenomena* of Nature to be caused by the Local Motion of one part of Matter hitting against another, and am not so fully convinced, that there is such a thing, as Natures designing to keep such a parcel of Matter in such a state, that is clothed with just such Accidents, rather than with any other. But I look upon many Bodies, especially fluid ones, as frequently changing their state, according as they happen to be more or lesse agitated, or otherwise wrought upon by the Sun, and other considerable Agents in Nature'; 'there is scarce any Natural Body, wherein the Form makes so strict, durable, and indissoluble an Union of the parts it consists of'. Boyle, *The Origin of Forms and Qualities*, p. 167; p. 183; p. 194. Locke uses this theory for instance in explaining 'substance', Locke, *An Essay Concerning Human Understanding*, II.23. §4–5, pp. 297–298.

⁸ 'Whatever Men talk in Theory of Substantial Forms, yet That, upon whose account they really distinguish any one Body from others, and refer it to this or that *Species* of Bodies, is nothing but a Aggregate or Convention of such Accidents, as most men do by a kind of Agreement, (for the Thing is more Arbitrary than we are aware of) think necessary or sufficient to make a Portion of the Universal Matter belong to this or that Determinate *Genus* or *Species* of Natural Bodies'. Boyle, *The Origin of Forms and Qualities*, pp. 61–62. See Richard H. Popkin, 'Preface' in Henry G. van Leeuwen, *The Problem of Certainty in English Thought 1630–1690* (The Hague: Martinus Nijhoff, 1963), p. ix.

the *necessary connections* between the qualities of bodies? In other words, did the assumption of a structure formed by qualities and powers in the world entail knowledge of it? Both Robert Boyle, as we saw in Chapter 7, and John Locke answered these questions by reference to the premise of weakness of knowledge and the deficient state of contemporary science.⁹ In true corpuscularian spirit, Locke wrote in *An Essay Concerning Human Understanding* that ‘our *Idea*, the word *Man* stands for, is only an imperfect Collection of some sensible Qualities and Powers in him’.¹⁰ Moreover, the acceptance of precariousness was the precondition for fostering the type of ambitious inquiry and greater knowledge that characterized the new science. Both philosophers assumed that there ought to be (some) necessary connections among atoms, and thus the necessary causality. However, unlike Hobbes, they did not presume to know when and how these operated.¹¹ Hence, the principle of necessary causality was dropped from natural and moral sciences in the extreme form defended by Hobbes.¹²

The second scientific assumption that Locke shared with Boyle was that an omnipotent God stood behind the design of that structure. After all, in Boyle’s view, God was the donor of each of the powers of nature. In this and other instances the stimulus of the Scientific Revolution was theological, which meant not merely religious beliefs, but doing science with the help of the notion of God as the omnipotent maker and infinite container.¹³ As

⁹ ‘I have here instanced in the corpuscularian Hypothesis, as that which is thought to go farthest in an intelligible Explication of the Qualities of Bodies; and I fear the Weakness of humane Understanding is scarce able to substitute another, which will afford us a fuller and clearer discovery of the necessary Connexion, and *Co-existence*, of the Powers, which are to be observed united in several sorts of them. This at least is certain, that which ever Hypothesis be clearest and truest, (for that it is not my business to determine,) our Knowledge concerning corporeal Substances, will be very little advanced by any of them, till we are made see, what Qualities and Powers of Bodies have a *necessary Connexion or Repugnancy* one with another; which in the present State of Philosophy, I think, we know but to a very small degree.’ Locke, *An Essay Concerning Human Understanding*, IV.3.16, p. 547. See the helpful explanation by Kochiras, ‘Locke’s Philosophy of Science’.

¹⁰ Locke, *An Essay Concerning Human Understanding*, IV, 6. §15, p. 590.

¹¹ Which is not the same than to affirm that they held a radical scepticism, but that their theories are richly complex, and arising from scepticism, try to overcome it. Some scholars argue about their extreme scepticism, for example, Stephen Buckle has described Locke as the most skeptic about natural knowledge of all seventeenth-century philosophers, denying the possibility of any insight into the constitution of the world, but opposed, in principle, to moral and religious skepticism. Stephen Buckle, ‘British Sceptical Realism: A Fresh Look at the British Tradition’ in Udo Thiel (ed.), *Locke: Epistemology and Metaphysics* (Darmouth: Ashgate, 2002), p. 17.

¹² See Chapter 2.

¹³ See for instance with regard to the argument of design, Wragge-Morley, *Aesthetic Science*.

Aquinas had put it in *On the Power of God* (*De potentia Dei*), as ‘founder and designer of nature’ (*conditor et ordinator naturae*), what God did was nature.¹⁴ God was moreover superior to nature and therefore not limited by nature – a superior power does not depend on an inferior one.¹⁵ According to Cornelio Fabro, Aquinas’s understanding of power was novel, implying Aristotelian concepts of form, essence and action contained in the same notion of ‘powers’ participating of God’s order. A new and more complex metaphysical conception of the world than Aristotelian nature would then transpire from Aquinas’s ‘On the Power of God’.¹⁶ Locke’s lengthy chapter XXI, ‘Of Power’, in the second book of *An Essay Concerning Human Understanding*, starts similarly with the premise (‘I confess’) that power is ‘a relation to Action or Change’. Later in the chapter, he notes that ‘God, is only active [power]’.¹⁷ Aquinas’s ambition to explain everything through the notion of God’s power had been breathtaking. For example, the issues discussed in *On the Power of God*, in a very rich question five include the following: movement in order, the preservation of God’s free will, the uniqueness of each individual, the maintenance of creatures in existence through participation, the fact that human beings naturally do not only care for themselves individually but for the whole city and even for the entire world. The theologian’s underlying argument in that text was that by *being power*, God is action and goodness.¹⁸

Boyle endorsed Aquinas’s cosmology of *power* and *powers*, but as we also saw in Chapter 7, he wanted to distil the theologian’s notion of nature and purify it of Aristotelian forms, or as he put it, of ‘the lazy Aristotelian

¹⁴ ‘Ad primum ergo dicendum, quod verbum Augustini in Glossa illa non est intelligendum quod Deus non possit facere aliter quam natura faciat, cum ipse frequenter faciat contra consuetum cursum naturae; sed quia quidquid in rebus facit, non est contra naturam, sed est eis natura, eo quod ipse est conditor et ordinator naturae’. *De potentia Dei*, q.1.arg.3.ad.1; ‘Hoc autem agens incorporeum, a quo omnia creantur, et corporalia et incorporea, Deus est, sicut in alia quaestione ostensum est, a quo non solum sunt formae rerum, sed etiam materiae. Et quantum ad propositum non differt utrum immediate, vel quodam ordine, ut quidam philosophi posuerunt. Unde sequitur quod divina operatione cessante, omnes res eodem momento in nihilum deciderent, sicut auctoritatibus est probatum in argumentis sed contra’. Aquinas, *De potentia Dei*, q. 5 al.co.

¹⁵ *De potentia Dei*. q.6 al. s.c.2.

¹⁶ Fabro, *La nozione metafisica di partecipazione secondo San Tommaso d’Aquino*, p. 329.

¹⁷ Locke, *An Essay Concerning Human Understanding*, II. 21. §3, p. 234; 23. §28, p. 312.

¹⁸ See for instance in *De potentia Dei*, question 5 of q.5.al.co; q. 5. al.ad.1; q. 5a3.ad.8; q. 5. arg. 6 ad.3. ‘Ad tertium dicendum, quod homo naturaliter non solum de se ipso sollicitatur, sed etiam de statu communitatis cuius est pars, sicut vel domus vel civitatis, aut etiam totius orbis; et ideo utrumque fuit necessarium ad hominis cautelam occultari, et finem propriae vitae, et finem totius mundi’.

way of Philosophizing'.¹⁹ Arguably, Boyle also rejected the Neoplatonist giver of forms as incompatible with the species of atomism that he favoured, and possibly with Christianity. Corpuscular philosophers seemingly sought to overcome the earlier Neoplatonist dualism. Similarly to Aquinas, they employed the idea of God as a Necessary Existence, as described in Chapter 2, but they did not reduce the conception of God solely to this.²⁰ I contend that Boyle's new philosophy of nature, and that of the group of philosophers he was in conversation with, undertook such a radical and imaginative break with Aristotelianism and Neoplatonism that beyond single areas of study it engendered a new cosmology that influenced future conceptions of natural law.

John Locke encountered this constellation of ideas in Oxford as a young protégé of Robert Boyle. Without denying his own intellectual originality, Locke's evolution as a natural lawyer must be placed in this context.²¹ In combination with his profound interest and knowledge of scholastic theology and his expertise in medical works, corpuscularianism provided Locke with a change of perspective on both old and new moral, economic, political and epistemological themes. While there existed a physical system to which human beings related as bodies and thinking beings, they could

¹⁹ Boyle, *The Origin of Forms and Qualities*, p. 270. That Locke also follows Aquinas in the adoption of a cosmology of powers appears both in the *Two Treatises* and *An Essay*. In the response to Mr. Norris's critique to *An Essay*, Locke exposed his understanding of it for natural sciences: 'For I hope they will not deny God the privilege to give such a power to motion, if he pleases. Yes, say they, they be the occasional, but not the efficient cause; for that they cannot be because that is in effect to say, he has given this motion in the optic nerve a power to operate on himself, but cannot give it a power to operate in the mind of man; it may by this appointment operate on himself, the impassible infinite spirit, and put him in mind when he is to operate on the mind of man, and exhibit to it the idea which is in himself of any colour. The infinite eternal God is certainly the cause of all things, the fountain of all being and power. But, because all being was from him, can there be nothing but God himself? or, because all power was originally in him, can there be nothing of it communicated to his creatures? This is to set very narrow bounds to the power of God, and, by pretending to extend it, takes it away. For which (I beseech you, as we can comprehend) is the perfectest power; to make a machine, a watch, for example, that when the watchmaker has withdrawn his hands, shall go and strike by the fit contrivance of the parts; or else requires that whenever the hand, by pointing to the hours, minds him of it, he should strike twelve upon the bell?' John Locke, 'Remarks upon Some of Mr. Norris's Books. Wherein he asserts P. Malebranche's Opinion of our seeing all Things in God' (1693) in *The Works of John Locke in Ten Volumes*, X (London: Thomas Tegg and Co., 1823), p. 254.

²⁰ Locke, 'Deus- Descartes's Proof of a God from the Idea of a Necessary Existence, examined', pp. 133–139; using the idea, see for instance, in Locke, *An Essay*, II. 17. §5. p. 212; §20. p. 221.

²¹ On Locke and corpuscularianism see also, Locke, *An Essay on Human Understanding*, II.2. §2, p. 120; II.8. §8, 134; II.8. §21, p. 139.

also perceive the actual material world with which they interacted daily. In a sense, the corpuscular theory established the ambitious framework and goal for the future of science, including knowledge about God the Designer of nature. On the other hand, Locke's realism – which described a capacity for perception through the senses of a kind not radically unlike that which proceeded from Aristotelian-Thomism – considered human beings to be equipped with the capacities to interact with that world.²²

10.1.2 *Necessities*

Locke's economic thinking benefits from the new perspective of the physical world as an interdependent system, a 'self-moving Engine' that works through motion. Chapter 7 described how the concept of 'Nature' was rendered superfluous in Boyle's philosophy. Instead, he regarded the physical world as an *oeconomy*. In the work of Locke – possibly Boyle's most brilliant student – signs of a rapprochement between the *oeconomy* of nature and the *oeconomy* of the nation started to appear early on.²³ Locke regarded investment of money in the form of capital as being the natural way for the system or economy of a nation to function.²⁴ Crucially, he described the cycle of trade as a quasi-natural phenomenon, similarly to Boyle's description of the natural system as quasi-artificial.

For money, as necessary to trade, may be doubly considered – 1^o As in his hands that payes the labourer and Landholder, (for here its motion terminats, and through whose hands soever it passes between these he is but a Broker) and if this man want money (as for Example the Clothier) the

²² On Locke's perception realism see John W. Yolton, *Locke and the Compass of Human Understanding: A Selective Commentary on the 'Essay'* (Cambridge: Cambridge University Press, 1970), pp. 118–138.

²³ With reference to what he read of Boyle, there are sixty-two of Boyle's works listed in Locke's library. Harrison and Laslett, *The Library of John Locke*.

²⁴ The economist William Petty (1623–1685), another illustrious member of the Hartlib circle, Reformer in Ireland, scientist, friend of Hobbes and Hobbesian, promoted the adoption of statistics to regulate taxes in order to improve trade in his groundbreaking and witty *A Treatise of Taxes*. Between him and Locke exists certainly a family resemblance in the intelligent use of the notion of the necessities of nature and the stress on labour. For instance, when composing the price of commodities Petty includes the labour required to obtain the 'necessaries': 'That Natural dearness and cheapness depends upon the few or more hands requisite to the Necessaries of nature'; or he defines taxes on consumption with it: 'the very perfect Idea of making a Leavy upon Consumptions, is to rate every particular Necessary, just when it is ripe for Consumption', William Petty, *A Treatise of Taxes*, in C. H. Hull (ed.), *The Economic Writings of Sir William Petty*, vol 1. (Cambridge: Cambridge University Press, 1899 [1662] Online Library of Liberty), p. 109; p. 111.

Manifactory is not made, and so the Trade stops and is lost – 2 ° as in the Merchants hands who buys the Commodity when made and if he want money the value of the Commodity when made is lessened and soe the Kingdome looses in the price.²⁵

Money thus *moved* within a system of trade in which it was necessary. Moreover, without money the system would stop. Locke's originality in his unpublished writings on money (1668–1674) lay in showing that lending money at interest was not a question of moral theology, but about 'necessity' and 'necessaries' for the individual and for the nation, or for trade (the economy). Locke's *Essays of the Law of Nature*, we might recall, left open the question of how to flesh out the seemingly impossible equation as between the primacy of individuals and the primacy of the public. I will argue that the means of aligning private and public interests appear for the first time in his remarkable studies on money. These show that the commonality of citizens has a common economic project as a nation, which he could demonstrate scientifically. The texts were one important intervention in engineering 'people's zeal for the public, by a prospect of private advantage'.²⁶ There was a pressing need to adapt values to the process of commercialization that was radically transforming the country.²⁷ These new values had at their core the aim of encouraging citizens of every status – men and women alike – to become active participants in the financial life of the nation, particularly to help finance the public debt. The activity of lending money at interest as Locke theorized provided the common roots for citizens' participation in the economy. This was achieved through citizens acting as agents in oiling the wheels of trade with money and thus directly contributing to raising credit for the government and for trade, and in a word, contributing to building the public space, while at the same time guaranteeing their own preservation.

Writing in the 1690s against the devaluation of money as being harmful to investors and to private banks, Locke lumped together a variety of techniques, that had all been helpful at a moment of pressing need and impending 'necessities' – including stock market speculation and lottery loans

²⁵ John Locke, 'Some of the Consequence that Are Like to Follow Upon Lessening of Interest to 4 per Cent' (1668) in Patrick Hyde Kelly (ed.), *Locke on Money*, v. I (Oxford: Clarendon Press, 1991), p. 169.

²⁶ This was written in praise of the state lotteries, anonymous author quoted in Lee Krim Davison, *Public Policy in an Age of Economic Expansion: The Search for Commercial Accountability in England, 1690–1750* (PhD Harvard University, 1990), p. 97.

²⁷ Wriggson, *Earthly Necessities, Economic Lives in Early Modern Britain, 1470–1750*, p. 455; Muldrew, *The Economy of Obligation*.

in which investors have the chance to win a prize the size of which was determined by a draw.²⁸ Locke wrote that reducing the content of precious metal in a coin without changing its denomination,

will weaken, if not totally destroy the publick Faith, when all that have trusted the Publick, and assisted our present necessities, upon Acts of Parliament, in the *Million Lottery*, *Bank Act*, and other *Loans*, shall be defrauded of 20 per Cent. of what those Acts of Parliament were security for.²⁹

The necessities that these new financial schemes remedied were public necessities – public debt that constituted revenue for the country by raising credit through public or parliamentary legislation, and all those pitching in were supposed to receive benefit as well. National legislation guaranteed their contribution. Crucially, these contributors had *trusted* that there was some common project in England which they were supporting. Locke sought to stress on a continuous basis that the new financial system belonged to a structure of national necessity with regard to a fundamental triad of publicness, nature and truth. His diatribes against greed and luxury show less interest in stressing scarcity (as that was a fact of life) than in pointing out what he considered, in the tradition of the Reformers studied in chapter 4, the true normativity of moral natural law: human beings' necessities.³⁰ He took the view that meeting the necessities of the public clearly belonged to the moral sphere of acts and deeds that demanded performance. As this chapter will show, for all intents and purposes Locke employed the notion of 'necessities' politically. This is visible in a sort of conflict of homonyms across all his writings that revolve around the notion of the 'necessary'.³¹ In Locke's *œuvre* 'necessity' and the 'necessary' often denote an epistemological claim about truth, standing between chance and interest or, if you will, between *fortuna* and *virtue*.³²

'Necessity' may also indicate the entirety of a metaphysical structure or constitution of the world or of a certain domain within it, as we saw in the case of Hobbes and the ensuing Cudworth's critique in relation to freedom. However, 'necessity' also refers to a mere contingent economic human need, or indeed a need of the state. Locke played with all these

²⁸ The Million Lottery of 1694 was the first very successful lottery loan in England.

²⁹ John Locke 'Further Considerations Concerning Raising the Value of Money', in Patrick Hyde Kelly (ed.), *Locke on Money* (1696), vol. II, p. 417.

³⁰ Cfr. John O'Brien, 'John Locke, Desire, and the Epistemology of Money' in 15 *British Journal for the History of Philosophy* (2007).

³¹ 'Homonyms are two or more words of different origin and different meaning that are spelled the same or sound the same.' Cambridge Dictionary.

³² Pocock, *The Machiavellian Moment*.

meanings in developing his political philosophy, pointing to laws of nature for areas in which he saw that certainty and predictability was needed, or where he aimed, wisely, at reinforced a theme of tradition. His emphasis in *An Essay Concerning Human Understanding* on ‘human beings’ necessary search for happiness’ is a case in point. Nowhere did Locke engage in a discussion or theoretical description of what exactly he meant by his concept of natural necessities.³³ Nevertheless ‘natural necessities’ are his bottom-line working tool in each text in which he puts forward a theoretical argument about politics, morality, philosophy, economics or epistemology, crucially so in the law of nature and theory of government set out in his masterpiece, the *Two Treatises of Government*. This suggests that he took for granted the notion’s capacity to transmit meaning and that it was common currency – in a similar way to the equally powerful notion of self-interest, against which, I argue, Locke was competing.

The language of necessities was indeed ubiquitous in the period in question.³⁴ Often, as in Locke’s work, it appears to be employed to distinguish the right course of action from one characterized by vice or superfluity. Lee Krim Davison’s study on public policy at the end of the seventeenth century offers one among many possible examples that show how necessity was equated with the category of moral right. In the course of the rise of speculation for big and small money from the 1690s onwards, derivatives appeared, including the *renting* of national lottery tickets for short periods. The slang for this was ‘hiring a horse’, while the paradoxically named ‘lottery insurance’ was another available instrument.³⁵ In the case of the former, there was the chance that the holder of a rented lottery ticket would win a prize during the rent time. The moralist writing for a weekly publication noted the difficulty of resisting the chance this represented, since ‘the Avaritious and Necessitous are alike drawn in, and fixing their Eyes upon the gilded Bait, the Twenty Thousand, it hinders them from

³³ As we saw in Chapter 8, he briefly explains the meaning of ‘the necessary’ in the English Tract.

³⁴ But interestingly the very similar language on necessities employed by James Tyrrell in *Patriarcha non Monarcha* is attributed by Richard Tuck to conversations with his friend John Locke, see Tuck, *Natural Rights Theories*, p. 169; also see Peter Laslett comment in Locke, *Two Treatises of Government*, p. 287.

³⁵ On ‘Lottery insurance’ and valuable statistics to understand the impact of lottery loans, see François R. Velde, ‘Lottery Loans in the Eighteenth century’, *Working Paper, No. 2018-07, Federal Reserve Bank of Chicago, Chicago, IL* (2018) <http://dx.doi.org/10.21033/wp-2018-07>, p. 19. On the historical importance of lottery loans for public finance in England and the Low Countries, in Belgium also in the twentieth century see, the same and Davison, *Public Policy in an Age of Economic Expansion*.

regarding the Immensity of Odds, and the Improbability of Success'.³⁶ The ethical concern in this case was that despite the obvious risk and very low prospects of achieving a return inherent in these financial instruments, both the greedy and those in need were equally transfixed by what the author considered a ruse.

Viewing the system of public debt and investments as an aspect of patriotism was a relatively new approach in the 1690s. Anne Murphy mentions the moral dilemma and troubles of conscience of an investor – an experienced moneylender – in deciding whether to invest in the Million Lottery in 1694.³⁷ However, in the 1660s the idea that investing and lending money at interest amounted to an objective *necessity* was at once observed as a fact by everyone knowledgeable about politics and as an impossibility from a traditional moral perspective. This and the next chapter focus on the context and content of Locke's ideas on money to show their novel departure from moral natural law and how they belonged to the sphere of an emerging science of economics.³⁸ In this perspective economic matters were no longer treated as issues in which the main agents were human beings interacting morally and socially and seeking to be virtuous. Instead, in Locke's early writings on money, the key issue concerns economic phenomena that belong to an interdependent scientific system. This is not to say that previous authors had not observed the economic connections involved in the use of money. However, Locke *only* observed the systemic connections of the economy – primarily the national economy – from the perspective of purely economic phenomena; and 'necessities' is the main instrument through which he described the phenomena of the emerging monetary economy. As William Letwin put it in a chapter on Locke's scientific economic thinking, the English philosopher offered the 'economist's view of the world, which the public cannot yet (!) comfortably stomach'. In a somewhat incoherent manner, Letwin rejected any suggestion of a natural science influence in Locke and attributed his remarkable novelty in economic scientific thinking to his

³⁶ The story and the quote from Davison, *Public Policy in an Age of Economic Expansion*, p. 102.

³⁷ 'He consulted two works on the subject, "Gataker's book of the Nature & Use of Lotts" and Dr Ames's "Marrow of Divinity & Cases of Conscience," before declaring himself to be willing to invest in the Million Adventure but remaining "an utter Enemy" to other forms of lottery.' Anne L. Murphy, 'Dealing with Uncertainty: Managing Personal Investment in Early English Debt' 91 *History* (2006), p. 208.

³⁸ Exposing currently a certain stagnation on the historiography of economics and wondering 'who gets to determine what economics was?' see Ian Kumeakawa, 'Reconsidering the History of Political Economy. Review Essay' *Modern Intellectual History* (2022) 1–11. doi:10.1017/S147924432200049X

studies of natural law.³⁹ However, Letwin's description of Locke's natural law as a 'fusion of scientific principle and moral standard' and his noting of the similarities between Locke's laws of nature and those of Boyle and Newton and their assumption of physical necessities makes it clear that it was the notion of natural laws that had undergone substantial change. Interestingly, Letwin added that 'Locke implicitly assumed that economic relations are akin to the facts of nature'.⁴⁰

Whether Locke in fact made that assumption or not, it is not crucial in observing that the issue of necessities is a novel thread in his thinking – which is partly theological and moral, partly medical and philosophical and above all drawn from the natural sciences – and concerns the strict sense of belonging to the physical body. I argue in chapter 12 that far beyond Locke's capacity to synthesize earlier natural rights theories with great clarity, as scholars have previously argued – notwithstanding the exceptional nature of that ability – the focus in *Two Treatises of Government* and *An Essay Concerning Human Understanding* on 'necessities' rather than on 'rights' shows Locke's originality with respect to previous thinkers.⁴¹ His theory concerning 'the necessities' and 'necessities' rather than 'rights' gives systematic coherence not only to his economic writings, but to his entire philosophical theory. This novel approach is what made it possible for him to develop the theory of the public good with which he attempted to turn the foundation of capitalism on self-interest.

10.1.3 *The (Sometimes Dark) Politics of Necessities*

Locke, we are told, wrote the *Two Treatises of Government* during the *Restoration* period, to provide a theoretical foundation for resistance against

³⁹ As we will see below, Locke only adopted a strong moral attitude in his economic writings in the polemic against coin debasement in the mid-1690s.

⁴⁰ 'His interest in science left no discernible trace in Locke's economic writings'. Arguably Letwin's argument arises from the outlook of his own epistemic community that did not perceive themselves to be borrowing from natural sciences. Letwin's discussion of *laissez-faire* and nature introduces very aptly the political aspect of the naturalist methodology. Letwin, *Origins of Scientific Economics*, p. 148; p. 155; p. 176; p. 178. Also, on the influence of natural sciences, in what is probably the sole monograph on Locke as an economist, Vaughn, *John Locke: Economist and Social Scientist*, p. 29.

⁴¹ Locke's 'clearsightedness' as the mark of his work on natural rights in Tuck, *Natural Rights Theories*, p. 171. On Locke's theory of natural rights, see A. John Simmons, *The Lockean Theory of Rights* (Princeton: Princeton University Press, 1992); Gordon Schochet review notes that 'the closer he [Simmons] comes to a "theory," I would argue, the further he is from Locke', Schochet, "'Guards and Fences": Property and Obligation in Locke's Political Thought', p. 380.

the absolutist encroachments of an undesired dynasty.⁴² However, it was published, without substantial change, in radically different circumstances, after the triumphant moment of the 1688 Glorious Revolution. This shows that Locke's project in the book went beyond Jacobite opposition. John Dunn, James Tully, Mark Goldie, Ian Harris, Timothy Stanton and Paul Bou-Habib⁴³, among others, have proposed a theological and specifically a New Testament interpretation of Locke's natural law that is hard to deny when one looks at his entire *œuvre*.⁴⁴ What is less obvious is the manner in which Locke's ambiguity may be explained.⁴⁵ Locke's natural law theory in the *Two Treatises of Government* supports capital and labour, public and private interest, natural rights for everyone and the accumulation of money, confirms his dread of covetousness and hoarding, and yet sanctions it.⁴⁶ In short, Locke simultaneously works with a theology of equality and natural law,⁴⁷ and with a history of political theory and a political economy that are designed to undermine that theology. Together with a reconsideration of the place of natural rights in Locke's natural law theory, the second aim of the three chapters on Locke in this book is to *disambiguate* this aspect of Locke. It does so by pinpointing the centrality of the concept of 'human necessities', and the relevant role of the 'nation' in *Two Treatises of Government*.

The paradox seems clear from the outset. The nation needs the wealth that comes through the accumulation of money and lands by the very rich, and natural law commands the provision of necessities and the preservation of every human being, something which the very rich seem to prevent with their egoistic tendencies. This, however, Locke corrects through the role of the nation. The authority of the nation is the invisible but fundamental element in the design of Locke's natural law theory and in his life-long political project. He regards the nation as probably the outcome of

⁴² Laslett, 'Introduction' in Locke, *Two Treatises of Government*; James Farr and Clayton Robert, 'John Locke on the Glorious Revolution: A Rediscovered Document' 28 *The Historical Journal* (1985); Mark Goldie, 'John Locke on the Glorious Revolution: A New Document' 42 *History of Political Thought* (2021).

⁴³ Dunn, *The Political Thought of John Locke*; Tully, *A Discourse on Property*; Harris, *The Mind of John Locke*; Stanton, 'John Locke and the Fable of Liberalism'; Bou-Habib, 'Locke, Natural Law and Civil Peace'; Mark Goldie, in 2021 *The Carlyle Lectures: John Locke and Empire*.

⁴⁴ Lisa T. Sarasohn, who by reading Locke through Gassendi, gives him a too hedonistic tone, seems less persuasive, Sarasohn, *Gassendi's Ethics*, p. 168–197.

⁴⁵ An ambiguity that has gained him enemies, such as Strauss Leo, *Natural Right and History*.

⁴⁶ Also exposing how to educate in liberality in John Locke, 'Some Thoughts concerning Education' in *The Works of John Locke* (London: Rivington, 1824, 12th ed.; Indianapolis: Liberty Fund).

⁴⁷ 'What he is attacking is the exploitation of a huge majority by a small minority.' Dunn, *The Political Thought of John Locke*, p. 171.

original sin, or at any rate of 'the corruption, and viciousness of degenerate Men'. In the beginning it was not like that. By 'the Law of Nature' a human being 'and the rest of Mankind are on Community' and were it not for the existence of evil individuals 'there would be no need of any other; no necessity that Men should separate from this great and natural Community'.⁴⁸ Now, however, the nation was necessary.

M. J. Silverthorne has noted that in the late seventeenth century the term 'the nation' acquired a political and ideological connotation that it did not have before.⁴⁹ The idea of a 'nation' was pressed at the time even in terms of urging a change in parliamentary vocabulary. For instance, on the occasion of a parliamentary motion on 27 November 1697 to resolve the 'Grievances of the Kingdom', an amendment to omit that expression and replace it with a motion that the entire House of Commons would form itself into a Committee to consider 'the State of the Nation' was passed.⁵⁰ Leo Strauss and, more recently, Ian Hunter have tended to describe Locke's theory of natural law as if designed to craft a minimal government. Locke would have understood government negatively, meaning that governance in relation to the individual should be as liberal as possible. Hence, the single motive for individuals in Locke's state of nature to establish a common authority would be that of continuing their rational self-governance and protecting the rights that flowed from it – particularly in relation to property – with the 'unparalleled capacity' for that purpose offered by political authority.⁵¹ From the outset the theme of minimal government is at odds with Gordon Schochet's statistical analysis of the frequency of use of the expressions 'common good', 'public good' and 'good of the society' in *Two Treatises of Government*, which appear more than 60 times in the text. Schochet concluded that the significance of the public good was, though indeterminate, 'self-evident'.⁵² A government must offer a remedy for the inconveniences of the state of nature, albeit that

⁴⁸ Locke, *Two Treatises of Government*, II §128.

⁴⁹ In England 'commonwealth' and 'political' and 'civil society' seemed to be the most usual terms for *civitas* and in extremely rare cases, 'state' see M. J. Silverthorne, 'Civil Society and State, Law and Rights: Some Latin Terms and Their Translation in the Natural Jurisprudence Tradition' in *Acta Conventus Neo-Latini Torontonensis* (Medieval and Renaissance Texts and Studies) (Binghamton, 1991).

⁵⁰ 'House of Commons Journal Volume II: 10 March 1697', in *Journal of the House of Commons: Volume II, 1693–1697* (London, 1803), pp. 734–735.

⁵¹ This is, for example in Hunter, 'Natural Law as Political Philosophy', p. 485.

⁵² Schochet, "Guards and Fences": Property and Obligation in Locke's Political Thought', p. 386. A good example of this is: 'For hereby he (any Man) authorizes the Society, or which is all one, the Legislative thereof to make Laws for him as the publick good of the Society shall require; to the Execution whereof, his own assistance (as to his own Decree) is due.' Locke, *Two Treatises of Government*, Book II, §89. 8.

not just *any* government is equipped to do this.⁵³ Although it makes sense in relation to the dettament of government from theological questions, against the theory of the minimal government, my argument is that Locke's studies of philosophy, money and medicine produced a novel form of natural law that focuses on the necessities of humanity and of the nation's and promotes vigorous governments and richly complex civil societies.

Furthermore, the universality of natural rights appears to be achieved through the nation. Locke's politics assume that legal and political measures taken by the government should act as a restraint upon monied men and curb their excesses. The common good, comprising both the nation and the individual, incorporates the new economic thinking through necessities. Working selfishly against the provision of necessities of other human beings, provision of which are sanctioned by God and reason, also means acting against the nation. The *Two Treatises of Government* repeatedly elaborate on the preservation of the individual and of mankind, usually together, thus underlining the importance of a common social project of subsistence. Therefore, in Locke's work natural rights are not imbued with a sense of individualist rights. As John Dunn and James Tully have written, Locke always considers people in terms of their relations with God and other human beings, not as atomized individuals.⁵⁴ In the absence of an abstract, political humankind in reality it is in the nation where all these relationships occur. The origins of commonwealths were virtuous but poor, while the future seems to promise richness and insincerity.⁵⁵ Therefore, the government of the nation ought to keep in check the excesses and immorality of materialism. Further, the nation – any nation – needs wealth, virtuous individuals and labourers.⁵⁶

My argument that Locke was putting forward the idea of a nation whose governance in respect of natural necessities stemmed from universalist obligations is partly biographically and partly textually based. Locke was from the beginning of his career a professional philosopher and a natural lawyer.⁵⁷ However, in his early thirties, he became a public servant, a fact that tempered the troubled universalism of his early natural law. As became

⁵³ Locke, *Two Treatises of Government*, Book II, §13.

⁵⁴ Tully, *A Discourse on Property*, p. 11. Dunn, *The Political Thought of John Locke*, pp. 229–241.

⁵⁵ 'That poor but vertuous Age' when commonwealths originated. Locke, *Two Treatises of Government*, II. §110.

⁵⁶ Compare Vaughn, *John Locke: Economist and Social Scientist*, p. 76.

⁵⁷ However, perhaps to highlight his work as a political theorist, Laslett stated that 'at Oxford he was never a philosopher at all' and that Locke 'was never to get much further as a Natural Law theorist', a view that is indefensible. Peter Laslett, 'Introduction', p. 19; p. 22.

clear to him in the 1660s, the English nation required capital and labour for the unemployed and the poor. It was also the nation that would make real the will of God on earth for every human being. The nation would ensure that private interests thrived but did not take precedence over everything else. In this sense, Locke followed, in terms of fundamentals, the principles of the Protestant Reformers of the Long Parliament, and in particular of the Hartlib circle. He shared their cult of science and empiricism, their piety, their interest in the public good and in achieving general economic prosperity, and their expertise in and obsession with money and trade. He was personally acquainted with many of the main political, economic and scientific figures of this movement, often worked with them and learned from them. However, in all his writings the English philosopher eschewed the naïveté of their theoretical approach and of some of their beliefs and idealism, and was more brilliant, cautious and pragmatic in pursue of the same goals – his experience of real politicians, starting with Lord Ashley, Anthony Ashley Cooper, later 1st Earl of Shaftesbury (1621–1683) – may have had a significant impact on his philosophical style.⁵⁸ It is also true that, put simply, Locke took a commonsense approach to many of their wild financial, philosophical and other schemes (some of which were discussed in Chapter 4), curbing their excesses and enthusiasms in his own way. It also appears that the question of money rather than trade held more attraction for Locke in terms of service to the English nation and its necessities. This is clear not only from the centrality of money in his writings but also evidenced by his wish to be appointed to the position of ‘Comptroller of the Mint’ in 1695. This post went instead to the scientist Isaac Newton who had already been recommended for it. I. K. Steele writes that Locke’s participation in the activities of the Board of Trade was initially desired by the government, rather than being something either Locke or Sir John Somers (Lord Keeper and Locke’s patron) (1651–1716) had sought.⁵⁹

‘Necessities’ seemed to have taken its most evil turn in the political context of the empire generally, and in a manner that at least tarnish Locke’s fame when they referred to human beings under slavery.⁶⁰ Barbara Arneil and David Armitage have read Locke’s legal and political theory as either a

⁵⁸ Peter H. Nidditch, ‘Introduction’ in John Locke, *An Essay Concerning Human Understanding*, p. xii.

⁵⁹ I. K. Steele, *Politics of Colonial Policy: The Board of Trade in Colonial Administration* (Oxford: Clarendon Press, 1968), pp. 178.

⁶⁰ Jennifer Welchmann, ‘Locke on Slavery and Inalienable Rights’ 25 *Canadian Journal of Philosophy* (1995); the review on the question of Locke and slavery by Jeremy Waldron is helpful, Waldron, *God, Locke and Equality*, p. 197. John Dunn notes that Locke sheepishly

defence or at least in ‘complicity’ with English colonialism.⁶¹ Hence, it was argued that in late seventeenth-century England the natural appropriation of land through labour defended by Locke in the *Two Treatises* justified the appropriation of America’s soil. It is useful therefore to look at Locke’s activities before the publication of the *Two Treatises of Government*. Locke started his collaboration with Lord Ashley as doctor and advisor in 1667. He later became Lord Ashley’s principal secretary, between 1672 and 1675, helping him in his official responsibilities as a colonial and business administrator.⁶² It was thanks to Ashley that the obscure Oxford academic became known to the world. The beginnings of their relationship were very propitious. Locke was 34 years old when he played a key role in a complicated surgery suffered by Lord Ashley Cooper and in his convalescence, both very hazardous at the time.⁶³ In return, Lord Ashley aided Locke’s transformation from a scholar into a civil servant working in the public administration of the English nation and empire. Peter H. Nidditch opines that Lord Ashley probably added an ‘economic dimension’ to Locke’s developing liberal ideas.⁶⁴ And, as I will argue, Robert Boyle also contributed on this issue. Ashley had been already active in colonial policy. He invested in and was a public administrator of some of the biggest companies in existence at the time, including the Royal African Company and the Hudson Bay Company, and was one of the eight Lords Proprietor of Carolina. In 1670, he became Commissioner of the Treasury and member of the inner Cabinet, and in 1672 Lord Chancellor and President of the Council for Trade and Foreign Plantations.⁶⁵

glossed over his own involvement with investments in the Royal African Company or Barbados, in order to construct a coherent scientific work, Dunn, *The Political Thought of John Locke*, p. 255.

⁶¹ Barbara Arneil, *John Locke and America: The Defence of English Colonialism* (Oxford: Clarendon Press, 1996); Armitage, *Foundations of Modern International Thought*, pp. 90–113; p. 112.

⁶² Laslett, ‘Introduction’ in John Locke, *Two Treatises of Government*; Kelly ‘General Introduction: Locke on Money’ in the same ed. *Locke on Money*; Leng, ‘Shaftesbury’s Aristocratic Empire’.

⁶³ The extraordinary narration of Lord Ashley’s case and his recovery and Locke’s intervention in it, with Locke’s own report on the case, in Peter R. Anstey and Lawrence M. Principe, ‘John Locke and the Case of Anthony Ashley Cooper’ 16 *Early Science and Medicine* (2011). Locke writes there about the ‘animal oeconomy’.

⁶⁴ Peter H. Nidditch, ‘Introduction’ John Locke, *An Essay Concerning Human Understanding*, p. xii.

⁶⁵ Kelly ‘General Introduction: Locke on Money’; Leng, ‘Shaftesbury’s Aristocratic Empire’; J. R. Milton, ‘The Unscholastic Statesman: Locke and the Earl of Shaftesbury’, in John Spurr (ed.), *Anthony Ashley Cooper, First Earl of Shaftesbury 1621–1683* (Surrey, Burlington: Ashgate, 2011).

Lord Ashley oversaw improving the disastrous management of the colonies and promoting trade with them and introduced the inexperienced but very sharp Locke to contemporary thinking on trade and money for political and imperial purposes. During this period Ashley had a great deal of power, as can be seen from records of his dealings, in relation to seeking to make the 'Southern Plantations' (e.g. in Barbados and Carolina) flourish.⁶⁶ His *protégé* learned at first hand the aristocrat's early attempts to create a situation of mutual benefit as between landed proprietors and investors and the empire at large. Through his collaboration with Lord Ashley, Locke the civil servant was in a key position, able to witness important events and learn from them, while also initiating development of the constitutional framework for the common prosperity of the colonies and the nation. Famously, Locke was involved in the drafting of the Constitution of Carolina, which, despite the contemporary disregard of the settlers, are now assessed as amounting to ingenious legal drafting that greatly contributed to the stability of the life of the colony.⁶⁷ Lord Ashley invested hope above all in well-managed plantations with abundant crops that could be traded successfully. As Thomas Leng writes, the implementation of this vision lay in his 'aristocratic' understanding of empire as amounting to the burden and privilege of landed proprietors.⁶⁸ Locke's substantial involvement in the amendment of the provisions of the *Fundamental Constitutions of Carolina*, which reinforced the settlers' power of life and death over African slaves over the years, is a historical fact.⁶⁹ Nevertheless, that pragmatic support of slavery is irreconcilable with Locke's philosophical and theological thinking. He fundamentally opposed the notion that God had given one human being dominion over another.⁷⁰ The perspective that the greater dream of production and riches for the economy of the empire took priority above almost every other political consideration is one way in which to rationalize his involvement in drafting the consent to these powers. Other ideas about the 'necessaries' for the colony seem to be derived from that clear set of goals. Thus, in a letter to a merchant who transported settlers to Carolina, Ashley instructed him as follows:

⁶⁶ Leng, 'Shaftesbury's Aristocratic Empire'.

⁶⁷ Leng, 'Shaftesbury's Aristocratic Empire'.

⁶⁸ Leng, 'Shaftesbury's Aristocratic Empire'.

⁶⁹ Armitage, *Foundations of Modern International Thought*, ch. 6.

⁷⁰ So his most famous political work starts: 'Slavery is so vile and miserable an Estate of Man, and so directly opposite to the generous Temper and Courage of our Nation; that 'tis hardly to be conceived, that an *Englishman*, much less a *Gentleman*, should plead for't.' Locke, *Two Treatises of Government*, I. §1; §26; §27; §28;

forbears to invite the poorer sort yet a while ... it being substantiall men and their Families, that must make the Plantation which will stock the country with Negroes, Cattle and other Necessarys, whereas others relye and eate upon us.⁷¹

The meaning of 'necessaries', referring to enslaved human beings, was here an aspect of the management of a wider colonial economic policy that probably derived more from Ashley than Locke, who was at all times a subordinate of a very shrewd statesman.⁷² Since also Lord Ashley appears to have personally abhorred slavery, his view on this matter reflects the concept of economy as a reason of state, which was becoming sadly general during the period in question.⁷³ This approach has similarities to Boyle's imperial dreams in relation to the utility of science as discussed in Chapter 6. Lord Ashley's economic thinking was undoubtedly influenced by the Reformers' scientific views and specifically by another of his protégés, Benjamin Worsley, whom we have met already. The self-described author of the Navigation Acts, Worsley depicted the colonies as a happy and rare instance in which the nation could gain territory and trade at the same time. To those one may add, capital, since Ashley was determined to further enrich himself in the process, seemingly without embarrassment. On the contrary, he viewed capital increase as the mark of the success of the imperial enterprise – while the Reformers and probably also Locke cared more for the 'happy levelling' of rich and poor.⁷⁴

It is also remarkable that Locke's rise in influence and power coincides with Lord Ashley's fall from grace: he was dismissed from his post of Lord Chancellor in 1674, was removed from his position in the Privy Council the following year and later became dangerously unstable. He was the prime mover in the conspiracy against the King in 1682 and perhaps in the plan to assassinate Charles II and the Duke of York in March 1683, in what came to be known as 'the Rye House Plot'; he died in exile in Holland in January

⁷¹ Leng, 'Shaftesbury's Aristocratic Empire', p. 109. The schemes to inhabit Jamaica with 'Vagabond and condemned Persons and such as are here useless' and 'enslaved African men and women' in Kate Luce Mulry, *An Empire Transformed: Remolding Bodies and Landscapes in the Restoration Atlantic* (New York: New York University Press, 2021), pp. 293–294.

⁷² Milton, 'The Unscholastic Statesman: Locke and the Earl of Shaftesbury'.

⁷³ In the words of Damaris Masham's account of what Locke thought about Shaftesbury: 'Everything in him (Shaftesbury) was natural, and had a noble air of freedom, expressive of the character of a mind that abhorred slavery, not because he could not be the master, but because he could not suffer such an indignity to human nature.' Cranston, *A Biography*, p. 225.

⁷⁴ Leng, 'A Potent Plantation Well Armed and Policed', p. 190; Leng, 'Shaftesbury's Aristocratic Empire'.

1683, before the events in question took place.⁷⁵ The prudent Locke had already established some distance from Ashley, in view of these matters, spending the period from 1675 to 1678 in France. However, he was tainted by his proximity to the late lord and had to fight to prove his innocence.⁷⁶ He travelled to Holland in August 1683 and did not return until 1689, during which period he wrote *An Essay Concerning Human Understanding*. According to his biographers, and despite his strenuous denial of the fact at the time, it appears that he was also involved in revolutionary politics during his time in Holland.⁷⁷ When William and Mary acceded to the throne after the Glorious Revolution, Locke was appointed Commissioner of Excise Appeals in 1689. From 1696 to 1700 he was a member of the newly established Board of Trade and Plantations, which seems to have been the first 'really weighty body of expert opinion on political and economic matters' in England. He sat on the Board as an expert in a matter that he had certainly mastered thanks to the training received with his early patron.⁷⁸

Locke's writings show varying perspectives on the same theme – that is, how to preserve human nature and the nation – and the necessities of human nature were of key importance in the development of his theories in each of his main philosophical works. The unity of his thought is thus facilitated by the notion of necessities as (a) being instruments of sense and reason by

⁷⁵ Milton, 'John Locke and the Rye House Plot', p. 653.

⁷⁶ 'Some of my friends, when they considered how small an advancement of my fortune I had made in so long an attendance (of Shaftesbury) have thought I had no great reason to brag of the effects of that kindness. I say not this to complain of my dead master, it would be in no way decent in me. But in this extremity I cannot but complain of it as a hard case: that having reaped so little advantage from my service to him whilst living I should suffer so much on that account now he is dead.' Locke's letter to Lord Pembroke, dated 8 December 1684, quoted in Craston, *A Biography*, p. 247.

⁷⁷ Richard Ashcraft, 'Revolutionary Politics and Locke's *Two Treatises of Government*: Radicalism and Lockean Political Theory' 8 *Political Theory* (1980); Craston, *A Biography*; Milton shows the mental instability of Shaftesbury in the later period, which undermines, in a sense, Locke's radicalism. Milton, 'John Locke and the Rye House Plot'. Arguably, the only mystery in Locke's life is why he did not marry Damaris Cudworth when both were still single. With a proverbial control of his passions, Locke guarded his heart well. Although he had several female correspondents that displayed their affection in their letters, he never married. The one woman with him in his correspondence he appeared to be most intimate with, in fact, in romantic terms, Damaris Cudworth got married with Sir Francis Masham, a widower father of nine children, while Locke was in Holland. Nevertheless, they remained close. An arrangement was accepted in which Locke, for whose health London air was very detrimental, literally he could not breath, went to live with the Mashams. About his life in Oates with the Mashams, see Harrison and Laslett, *The Library of John Locke*, p. 7; and Knights, 'Sir Francis Masham, 3rd Bt.'

⁷⁸ Laslett, 'John Locke, the Great Recoinage, and the Origins of the Board of trade: 1695–1698', p. 372.

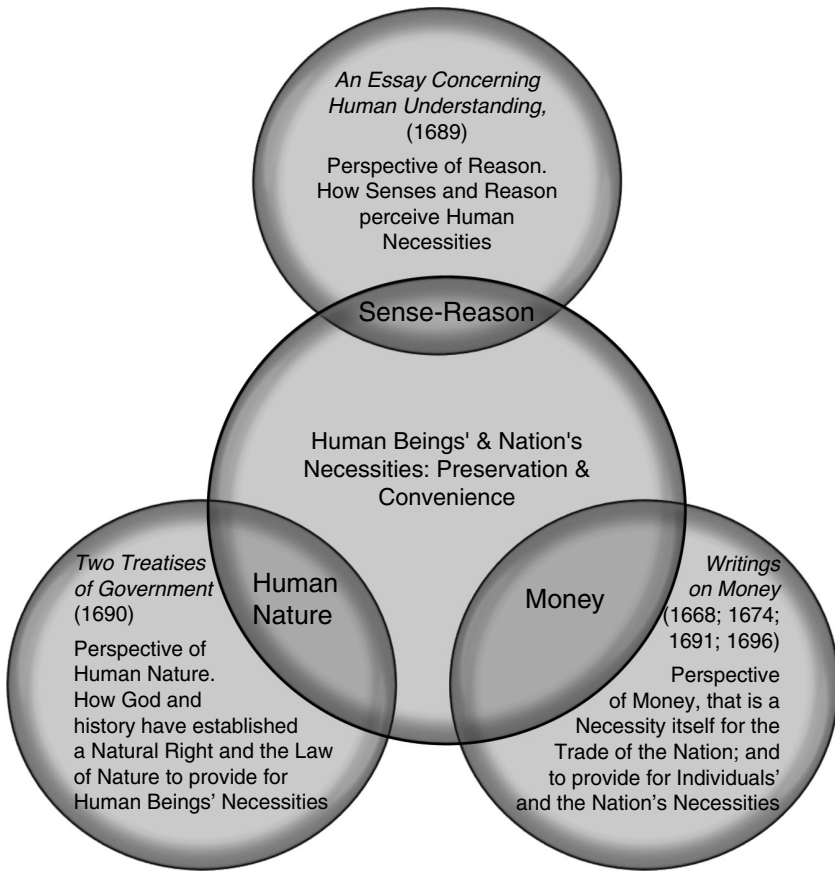


Figure 10.1 Locke's Doctrine of Necessities

which to perceive the world around us, (b) constituting the content of the natural law that seeks to preserve human nature, and (c) being a core economic notion that also explains the circle of trade through money. Through the doctrine of necessities it is explained how Locke modified moral natural law and established human necessities at its heart. Figure 10.1 shows that 'necessities' is a shared foundational concept in Locke's main works.

10.2 Usury, Interest and Science

In mid-seventeenth century, England monetary interest remained an acutely religious and moral issue. This fact highlights the originality and boldness of Locke's 1668 proposal to allow interest on money to fluctuate

freely with the market. The traditional trouble did not of course lie with money lending per se: all laws permitted it and divine and natural law, in particular, encouraged it. What divine law, the laws of charity and Aristotelian philosophical tradition censured was lending at interest, especially onerous rates of interest.⁷⁹ However, in a country 'without mines' as contemporaries put it, whose goal was to participate in burgeoning international trade, and which experienced a remarkable growth in domestic consumption of goods, the lack of monetary institutions and monetary policy had become a burden.⁸⁰ Voicing the opinion of some, in the early seventeenth century, the learned Francis Bacon had noted that the disappearance of usury belonged in Utopia. Bacon did not encourage the relentless pursuit of lending but, as a necessary evil, he recommended its toleration.⁸¹

Apart from Bacon's short, though influential essay 'On Usury' (1612), several canonical authors are usually regarded as having led the movement towards opening up the reformed world to usury. These include the Protestant civil lawyer Charles du Moulin (1500–1566), the theologian Calvin (1509–1564) and the Dutch Calvinist Claude Saumaise (Salmasius) (1588–1653). Furthermore, the very popular *Consuetudo, vel lex mercatoria* by Gerard Malynes (1586–1641), published in London in 1622 and written by a merchant who had a thorough knowledge of his subject, shows how this issue was being handled in practice in England. Du Moulin and Calvin argued that usury was in causing damage and fraud to our neighbours, and not in extracting utility of them. The French jurist's essentially anti-Aristotelian position wrote that 'conscience does not bind when nature does not oblige' (*Conscientia non ligat quos natura non obligat*).⁸²

⁷⁹ Some historical laws *tolerating* usury appear in Gerard Malynes, *Consuetudo, vel lex mercatoria, or The ancient law-merchant Diuided into three parts: according to the essentiall parts of trafficke* (London: Adam Islip, 1622) Early English Books Online Text Creation Partnership, 2011, <http://name.umd.umich.edu/A06786.0001.001>, pp. 331–332. About Malynes see Perry Gauci, (4.10.2008) 'Malynes [Malines, de Malines], Gerard [Garrett, Gerald] (fl. 1585–1641), Merchant and Writer on Economics,' *Oxford Dictionary of National Biography*; about his economic doctrine, E. A. J. Johnson, 'Gerard de Malynes and the Theory of the Foreign Exchanges' 23 *The American Economic Review* (1933).

⁸⁰ William Robert Scott, *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720* (Cambridge: Cambridge University Press, 1912) vol. I. *The General Development of the Joint-Stock System Up to 1720*; Muldrew, *The Economy of Obligation*.

⁸¹ Francis Bacon, 'On Usury' in *Bacon's Essays and Wisdom of the Ancients*, with a biography by A. Spiers and preface by B. Montagu, with notes by different writers, (Boston: Little Brown and Co., 1884), pp. 231–236.

⁸² Carolus Molinaeus, *Tractatus commerciorum, et usurarum, reddituum*, (Pariis, apud Ioannem Lodoicum Tiletanum, 1546), p. 5. On Calvin see, Matthias Schmoeckel, *Das Recht der Reformation. Die epistemologische Revolution der Wissenschaft und die Spaltung der*

Salmasius was more aggressive, approving of moneylenders that derived their profits from the poor. In his magisterial history of the practice, Eugen von Böhm-Bawerk, would, as a neoclassical economist, censure the condemnation of usury, and not the practice itself.⁸³

10.2.1 Fraternal Love versus Love of Money

The evils arising from generalised usury were grave and were felt immediately. Its social consequences included increased covetousness, extortion and damage to fraternal love. In the context of Christian theology, its worse effect was a threat to each individual's relationship with God. In Aquinas's phrase, the correct use of material goods depends on a good will, meaning a will that naturally loves God more than oneself.⁸⁴ Love of money posed a great impediment to the attitude that the Christian God demanded. Usury first devoured the souls of those practising it and then destroyed the community. As is well known, that was not an exclusively Christian standpoint. The communitarian Aristotelian position stated that in a society of friends, of virtuous, liberal individuals, money would flow freely and cash transfers for those in need would be the outcome of virtue. Albert the Great's

Rechtsordnung in der Frühen Neuzeit (Tübingen: Mohr Siebeck), pp. 250–252. About the canonical figures and the situation in England see Jones, *God and the Moneylenders: Usury and Law in Early Modern England*; R. H. Tawney, 'Introduction' to Thomas Wilson, *A Discourse Upon Usury* (London: G. Bell and Sons, Ltd., 1925). An overview of the evolution of the Catholic doctrine on usury in John T. Noonan Jr., *The Scholastic Analysis of Usury* (Cambridge: Harvard University Press, 1957) and the comprehensive study of scholastic economic thought touching also upon the doctrine of usury in the classic, Odd Langholm, *Economics in the Medieval Schools. Wealth, Exchange, Value, Money and Usury according to the Paris Theological Tradition, 1200–1350* (Leiden, New York, Köln: Brill, 1992). See also defending that neither Calvinism, nor Protestantism for that matter, was particularly important in approving usury, which if the connection is taken to be straightforward makes some sense, Charles H. George, 'English Calvinist Opinion on Usury, 1600–1640' 18 *Journal of the History of Ideas* (1957). Arguing for Luther's rejection of practices that entailed hoarding of money, Philipp Rössner, 'Burying Money? Monetary Origins and Afterlives of Luther's Reformation' 48 *History of Political Economy* (2016). Also a helpful study of the anti-usury campaigns of the Church and its economic impact by John H. Munro, 'The Usury Doctrine and Urban Public Finances in Late-Medieval Flanders: Annuities, Excise Taxes, and Income Transfer from the Poor to the Rich' *University of Toronto Working Paper*, (11 June 2007)

⁸³ Eugen von Böhm-Bawerk, *Capital and Interest. A Critical History of Economical Theory*, trans. with and Introduction by William Smart (London: MacMillan and Co. 1890).

⁸⁴ *Summa theologiae*, I pars, q. 48, a. 6. co; q. 60. a 5. co. Aquinas deals with usury in passim in several places, and specifically in *Summa theologiae* II-II, q. 78, where he considered it to be against natural law and a sin, but also sometimes, a necessary evil in the commonwealth.

description of usurers and merchants (in the thirteenth century) was that they were 'illiberal', whereas 'the liberal uses moneys well'.⁸⁵

In a nutshell, the classic theory against usury, though not strictly monolithic, possessed an important core.⁸⁶ It was not in the nature of money to yield fruits. Money was consumed through transference (*per translationem*). The theologian and finance expert Henry of Ghent wrote that in relation to money it was impossible to allocate separate prices in respect of 'substance' and 'use' and that therefore no profit could be derived from its use.⁸⁷ The argument concerned respecting the nature of the thing – in this case, money. Odd Langholm points to Aquinas's very similar negative argument against usury:

The principal use of silver plate is not in its consumption; and therefore one can licitly sell its use retaining the dominion of the thing. The primary use of silver coin, however, is its disbursement in commercial transactions. It is, therefore, not legitimate both to make a charge for its use and to expect the money lent to be restored.⁸⁸

Consequently, Aquinas and, later, Henry regarded the divided dominion of money (between principal dominion and its use) as sinful. In view of the nature of money, changes in time and place did not entitle a person to obtain more than an amount reflecting its substance or quantity.⁸⁹ As is

⁸⁵ Among the illiberal Albert names the gamblers, always in need of money, and all who for love of money enrich themselves in shameful though licit ways, like beggars or illicit, like the seducers of prostitutes and the usurers. They have in common the dishonorable enrichment. Other illiberal, are those who enrich themselves from friends but spare no one, and also are illiberal the 'merchants', who travel across the seas in misery and endure great dangers for the charm of gain ('et hi, idest alii illiberales sicut mercatores, sustinent magna pericula gratia lucri; unde dicit Horatius: "Per mare pauperiem fugiens, per saxa, per ignes"). Money signifies everything which is given or exchanged (*communicantur*) by money. *Super Ethica commentum et quaestiones*, I-V, ed. W. Kübel, *Alberti Magni opera omnia*, XIV/1 (Münster 1968–1972), p. 221, 43; 87; p. 236, l. 78; p. 241, 30. For commerce as a 'necessary evil' in Aquinas see, Langholm, *Economics in the Medieval Schools*, pp. 221–222.

⁸⁶ The argument of Odd Langholm is partly that there was not one single approach of theology to trade, and, similarly to matters purely theological, theologians followed different theoretical avenues, Langholm, *Economics in the Medieval Schools*, pp. 221–248.

⁸⁷ Henry of Ghent, *Quodlibet* I, q. 39, 1. *Henrici de Gandavo, Opera Omnia*, R. Macken (ed.), vol. V.

⁸⁸ *Summa theologia*, II-II, q. 78, 1, ad 6. The Dominican Fathers translate 'sell the right to use'. Aquinas did not employ that expression of 'right to use' but simply 'use': 'usus eorum potest vendi licite servato dominio rei', 238–239; Langholm, *Economics in the Medieval Schools*, p. 243.

⁸⁹ 'pro nummi locatione nihil potest iuste ultra substantiam eius recipi'; 'si autem uti ea vis, necesse est ut eam transferas, nec plus quam pretium et valorem eius pro ea recipias.' *Quodlibet* I, q. 39, 1. For Henry, the theologian is the main authority to judge on the

well known, Aristotle had deeply influenced theologians on this issue. The famous passage of the first book of *Politics* stating that profiting from something naturally sterile like money went against nature is worth quoting:⁹⁰

The most hated sort (of money-making), and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural use of it. For money was intended to be used in exchange, but not to increase at interest. And this term usury, which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Whereof of all modes of making money this is the most unnatural.⁹¹

These efforts to establish a bulwark against the practice of usury in the Western philosophical and theological traditions alike had exploded by the mid-sixteenth century, giving rise to a shift from the condemnation of usury per se towards more or less general censure and regulation of fraudulent practices in the context of usury, similar to the positive regulation that exists today.⁹² However, it took some time before there was general acceptance of the rightness of this approach, in respect of which von Böhm-Bawerk stated that the ‘Church, the law and the learned world had condemned [usury] with one voice and opposed [it] with arguments drawn from all sources’.⁹³ So much so, that the historian Richard Henry Tawney, writing in the twentieth century, viewed the question of usury and money as one of the main economic controversies of sixteenth-century England.⁹⁴ The intermittent social, religious and theological chaos characteristic of the period surely did not help. Robert Ingram’s argument that in the eighteenth century the English long Reformation was still underway is a plausible estimate of its duration.⁹⁵ With that in mind, we may only imagine

economic matters of secular society, see on this question Marialucrezia Leone, ‘The Theologian and the Contracts: Henry of Ghent and the *Emptio-Venditio Reddituum*’ in 75 *Recherches de théologie et philosophie médiévales* (2008), p. 151.

⁹⁰ See a comment in Odd Langholm, *The Aristotelian Analysis of Usury* (Bergen: Universitetsforlaget, 1984); Noonan, *Scholastic Analysis of Usury*.

⁹¹ Aristotle, *Politics*, I.10, 1258b.

⁹² A short analysis of the extreme liberal position of Jeremy Bentham challenging Adam Smith’s state-imposed caps on the rate of interest, slightly above the lowest price of money in the market is Joseph Persky’s study, which suggests that the latter’s standpoint is the general position today, Joseph Persky, ‘From Usury to Interest’ 21 *The Journal of Economic Perspectives* (2007).

⁹³ v. Böhm-Bawerk, *Capital and Interest*, p. 32.

⁹⁴ Tawney, ‘Introduction’ to Thomas Wilson, *A Discourse Upon Usury*.

⁹⁵ Ingram’s argument is, with John Neville Figgis, that the Reformation has not yet ended. Robert G. Ingram, *Reformation Without End: Religions, Politics and the Past in Post-Revolutionary England* (Manchester: Manchester University Press, 2018).

what the situation was like in the late sixteenth and seventeenth centuries. In summary, the situation was confusing, and doctrinal positions as to theology and the law were extremely uncertain and sharply divided.

10.2.2 *The Acts against Usury*

An overview of the discussions in Parliament from 1614 to 1660 for and against the abatement of usury shows not only economic reasons – such as fluctuations in the price of land, the problem of the hoarding of money and the fact that usurers would send their money abroad if interest rates were lower at home – but also an element of religious scandal. The legislative evolution that took place in the 1640s was culturally very relevant. What Vera Keller has referred to more broadly as ‘the Interregnum Christianizing of Interest’ occurred literally in the House of Commons.⁹⁶ It started in 1648 with the consultation of ‘the Divines’ on the notion of ‘Usury’:

Ordered, That as to the Word ‘Usury’, in the Paragraph of the Large Catechism, be re-committed to the Assembly of Divines: And it is referred to the Assembly of Divines, to explain what they mean by the Word ‘Usury’, in that Place; and to return their Opinions to the House.⁹⁷

This was followed in 1651 by new neutral language about ‘Interest of money’ and legislation ordering at once a reduction of the interest rate to 6 per cent and the removal of the word ‘usury’:

The Question being put, That the House doth agree with the Committee, that this Proviso, ‘Provided That no Words in this Law contained shall be construed or expounded to allow the Practice of Usury, in point of Religion or Conscience’, be left out.⁹⁸

With the Restoration, this concept was stoutly revived, and thus we read in the records that in the summer of 1660, in discussing the reduction of the interest rate to 6 per cent, the House ‘*Resolved*, That the Title of the said Bill be, An Act for Restraining the Taking of excessive Usury’.⁹⁹

⁹⁶ Keller, *Knowledge and the Public Interest, 1575–1725*, p. 377.

⁹⁷ ‘House of Commons Journal Volume 5: 24 July 1648’, in *Journal of the House of Commons: Volume 5, 1646–1648* (London, 1802), pp. 644–646. *British History Online* www.british-history.ac.uk/commons-jrnl/vol5/pp644-646 (accessed 21 January 2021).

⁹⁸ ‘House of Commons Journal Volume 6: 20 May 1651’, in *Journal of the House of Commons: Volume 6, 1648–1651* (London, 1802), pp. 575–576. *British History Online* www.british-history.ac.uk/commons-jrnl/vol6/pp575-576 (accessed 21 January 2021).

⁹⁹ ‘House of Commons Journal Volume 8: 22 August 1660’, in *Journal of the House of Commons: Volume 8, 1660–1667* (London, 1802), pp. 130–131. *British History Online* www.british-history.ac.uk/commons-jrnl/vol8/pp130-131 (accessed 21 January 2021).

In *God and the Money Lenders*, Norman Jones relates the history of the Acts against usury and the indignities that the spread of usury caused in late sixteenth-century English society.¹⁰⁰ These included the imposition of interest rates of up to 25 per cent or more, the appearance of professional middlemen, and so-called 'brokers' squeezing the borrower to the extreme, especially the poor. In 1570 preachers decried the universality of the vice of usury in England, in which everyone 'was involved'.¹⁰¹ After a more lenient prohibition by Henry VIII in 1545, and a drastic one by Edward VI in 1552, the 1571 Act Against Usury was enacted. In his phenomenal though occasionally Whiggish, early history of joint-stock companies in England, Ireland and Scotland, William Scott points to two positions in the parliamentary discussions of April 1571, prior to passing the act.¹⁰² There was one group of moderates as well as another, which 'relying on Scripture, Aristotle, Canon Law and other authorities' was wary of the danger to young gentry of falling into the traps set by usurers and to the Queen's Custom if people put their money into usury attracted by high interest, rather than into trade.¹⁰³ A study of the parliamentary discussions of that day, however, reveals that those against usury did not merely employ the scriptural and 'Praeter Naturam' argument against lending money at interest, but also quoted the 'most ancient laws of this realm'.¹⁰⁴ The antiquarian Sir William Fleetwood (1525–1594) noted that many laws and inquiries against 'Christian usury' appeared in the records.¹⁰⁵ Soon to be Recorder of

¹⁰⁰ Jones, *God and the Moneylenders*; see for the seventeenth-century Acts 'House of Commons Journal' Volumes 1–8 (1621–1661), *British History Online* www.british-history.ac.uk; another overview of the general practice also in Tawney, 'Introduction' to Thomas Wilson, *A Discourse Upon Usury*; an example is the generalized practice of usury in the city of Leicester, not as a trade, but as 'the sideline of the business, and the stand-by of retired traders and moneyed widows'. It produced 'very high interest rates' and 'a large amount of desperate debts', in R. A. McKinley 'The City of Leicester: Social and Economic History, 1506–1660', in R. A. McKinley (ed.), *A History of the County of Leicester: Volume 4, the City of Leicester* (Victoria County History, London, 1958), pp. 76–109.

¹⁰¹ Jones, *God and the Moneylenders*, p. 67.

¹⁰² William Robert Scott, *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720* (Cambridge: Cambridge University Press, 1912) vol. I. *The General Development of the Joint-Stock System Up to 1720*.

¹⁰³ Scott, *The Constitution and Finance of English, Scottish and Irish Joint-Stock Companies to 1720*, p. 54.

¹⁰⁴ Simonds d'Ewes, 'Journal of the House of Commons: April 1571', in *The Journals of All the Parliaments During the Reign of Queen Elizabeth* (Shannon, Ire, 1682), pp. 155–180. *British History Online* www.british-history.ac.uk/no-series/jrnl-parliament-elizl/pp155-180 (accessed 19 January 2021).

¹⁰⁵ 'So do the Laws made in *Lucious* his time, and those of *Athelred*; whereby it was ordained, that Witches and Usurers should be banished. King *Edward* the Saint

London, a legal office of conservator of the peace and supreme judge in the city, and valued by the Queen in that position, Fleetwood knew the ancient laws and manuscripts well.¹⁰⁶ Hence, he declared

that Usury was *malum in se*, for that of some other transgressions, her Majesty may dispence afore with; but for Usury, or to grant that Usury may be used, she possibly cannot.¹⁰⁷

A notorious anti-papist and priest hunter, who ended up in jail after breaking into the Portuguese Ambassador's residence in search of English Catholics participating in the Mass, Fleetwood was, probably due to that zeal, dubbed the Earl of Leicester's 'mad Recorder' in *Leicester's Commonwealth*, a libellous text written against Robert Dudley, Elizabeth's favourite and a leading political figure at the time.¹⁰⁸ Fleetwood has been rescued from obscurity on account of his having been a very knowledgeable antiquarian both of the history of England and of more contemporary authors such as Macchiavelli and Bodin.¹⁰⁹ That in opposition of those advising to concentrate the prohibition on the degree of usury, that is, the modern position, Fleetwood had such an uncompromising standpoint against the entire practice, is remarkable as a proof of the strong prohibition against usury in traditional English law and the conflicting feelings that this fact provoked at the time.

referreth and appointeth the Offenders herein to suffer *ordalium*. Then was there a great kind of Usury known, which was called *Torus*, and a lesser known by the name of *Glanville*, in the Book *de legibus antiquis*, maketh mention of an inquiry of Christian Usurers.' Fleetwood's speech is summarised in d'Ewes, 'Journal of the House of Commons: April 1571'.

¹⁰⁶ P. R. Harris, 'William Fleetwood, Recorder of the City, and Catholicism in Elisabethan England' 7 *Recusant History* (1963), pp. 109–118; J. D. Alsop, 'William Fleetwood and Elisabethan Historical Scholarship' 25 *The Sixteenth Century Journal* (1994), pp. 155–176; Christopher W. Books, 'Fleetwood, William' (c. 1525–1594) *Oxford National Biography*, 23.9.2004, <https://doi.org/10.1093/ref:odnb/9690>

¹⁰⁷ Fleetwood in d'Ewes, 'Journal of the House of Commons: April 1571'. This was the position of Aquinas: 'Respondeo. Dicendum quod dare pecuniam mutuo ad usuram est peccatum mortale. Nec ideo est peccatum quia est prohibitum; sed potius ideo est prohibitum, quia est secundum se peccatum; est enim contra iustitiam naturalem'. *De malo*, q. 13 a. 4 co. www.corpusthomicum.org/qdm08.html#63279; for a discussion, Langholm, *Economics in the Medieval Schools*, p. 238.

¹⁰⁸ Anonymous, *Leicester's Commonwealth: The Copy of a Letter Written by a Master of Art of Cambridge (1584) and Related Documents*, D. C. Peck (ed.) (Athens: Ohio University Press, 1985). On the authorship of the libel *Leicester's Commonwealth* see, Peter Holmes 'The Authorship of 'Leicester's Commonwealth' 33 *The Journal of Ecclesiastical History* (1982), pp. 424–430.

¹⁰⁹ Also, 'William Fleetwood and Elisabethan Historical Scholarship'.

The new Act of 1571 tolerated usury and prohibited interest rates above 10 per cent. It also recognized some charitable forms of lending money at interest, as in the case of orphans' and widows' states. Despite the command to limit the rate, lending at interest on a large scale generalized at any rate of interest that could be got. Hence, the issue of public policy became the manner in which to secure enforcement of the law through informants. Jones links the transformation of attitudes towards usury at the end of the sixteenth century to broader theological issues concerning grace and good works. The dangers of covetousness and idolatry in relation to money were glossed over and the divines now began to refer to lending with purity of heart and good intentions. Since only God knows what is in one's heart, so this argument went, the important thing was to keep a pure conscience. Jones takes the view that this perspective lay at the heart of the 1624 Act against usury that allowed lending at 8 per cent and reminded lenders of the need to maintain a pure conscience.¹¹⁰ The merchant scholar Gerard Malynes stated that position clearly in 1622. Usury was more subjective, than objective. A loan in which the interest compensated for loss (*ex damno habito*) or loss of profit (*lucro cessante*) was not usury. The circumstances justifying the application of interest to a loan included the profits that the borrower may acquire through use of the loan, whether he or she is in real need, the rate of interest and so on. A person granting loans would of course react to economic events but should do so with mercy for those in need and with each particular borrower in mind.¹¹¹ As studies of English economy up to the end of the seventeenth century make clear, in a deeply experimental and disorganized economy the issue of the rate of interest to be applied to money was interlocked with other measures designed to stimulate economic growth. These measures remained underexplored and not fully understood. In particular the scarcity of money in specie (bullion coins) remained an unexplained curse at the time.¹¹² In the early 1620s, Sir Thomas Culpeper (1578–1662) declared that high interest rates on money discouraged trade in favour of the business of lending and chilled communal attitudes in society by a 'care upon one another with usury'.¹¹³

¹¹⁰ Jones, *God and the Moneylenders*.

¹¹¹ 'So that your conscience is stil the surest guide to direct you with prudence, as the load-stone doth the variation of the Pole.' Malynes, *Consuetudo, vel lex mercatoria*, p. 331.

¹¹² Kelly, 'General Introduction: Locke on Money'; on the disorganisation of the state see Muldrew, *The Economy of Obligation*, p. 182; on money experiments in the end of the seventeenth century, Richard A. Kleer, *Money, Politics and Power. Banking and Public Finance in Wartime England 1694–96* (Abingdon, New York: Routledge, 2017).

¹¹³ Sir Thomas Culpeper, *A Tract Against Usurie Presented to the High Court of Parliament* (London: William Iaggard, 1621), Early English Books Online Text Creation Partnership, <http://name.umd.umich.edu/A19689.0001.001> (accessed 8 June 2022).

10.2.3 *The Concerns of Gerard Malynes*

Malynes's voluminous *Consuetudo, vel lex mercatoria* of 1622 offers probably the most thorough and informed contemporary account about interest on money from a merchant's perspective and was rightly praised by Hartlib.¹¹⁴ According to his biographer, Malynes had a long career of disasters and mischiefs as a merchant, but managed to stay consistently close to the upper echelons of government. He seems to have redeemed himself by this learned work, six chapters of which are devoted to usury.¹¹⁵ In Baconian spirit Malynes expressed the need for usury for 'traffick', while he rather opted for not allowing very high rates of interest, apparently agreeing with Sir Thomas Culpeper. Still a Renaissance man, Malynes was all for order and harmony, and thus for contemplating different interest rates for different groups of people, merchants, humble householders and the poor. But where Malynes appears more original was in his call to address the 'Usurie politike', in relation to which, in a country without banks or similar institutions, he urged the government to intervene by means of economic policies to promote the common good on a large scale.¹¹⁶ Craig Muldrew's study on the expansion of credit makes it clear that Malynes was right to point to the problems that resulted from lack of governmental intervention. Societal interpersonal relations were carrying the burden of the rapid development of the market, and legislation allowing usury for everyone only increased that pressure. Malynes realistically depicted the widespread practice of usury and its main effects on the humblest workers, 'the mechanick' men and women, who were often tricked into receiving loans for very short time periods, resulting in having to pay interest of up to '400 percent in the hundred' per year – while the law allowed 10 per cent. Malynes critically applied the ubiquitous seventeenth-century metaphor of the clock in *Consuetudo*,

¹¹⁴ Hartlib called it a 'great book', Samuel Hartlib, *The Reformed Common-Wealth of Bees* (Londong, Printed for Giles Calbert, 1655), Early English Books Online Text Creation Partnership, <http://name.umdl.umich.edu/A45759.0001.001> (accessed 8 June 2022), p. 159.

¹¹⁵ Gauci, (4.10.2008) 'Malynes [Malines, de Malines], Gerard [Garrett, Gerald] (fl. 1585–1641), Merchant and Writer on economics.'

¹¹⁶ Other important economic questions that had been debated in recent times were the elimination of monopolies in the beginning of the seventeenth century, for instance, by Sir Edwin Sandys, who would ironically promote himself in the 1620s the monopoly of tobacco of the Virginia Company. See Sandys's "Instructions touching the Bill for free Trade", in 'House of Commons Journal Volume 1: 19 May 1604', in *Journal of the House of Commons: Volume 1, 1547–1629* (London, 1802), pp. 214–215. *British History Online* www.british-history.ac.uk/commons-jrnl/vol1/pp214-215 (accessed 21 January 2021). On Edwin Sandys see T. Rabb (23 September 2004). Sandys, Sir Edwin (1561–1629), politician and colonial entrepreneur. *Oxford Dictionary of National Biography*.

vel lex mercatoria. He wanted to show how the wheels of crime were all connected, like in a clock, since the ‘brokers’ who extort money from the people ‘have their money masters, to whom they pay twentieth in the hundredth’. He took the view that the lack of governmental policy in this area was the chief cause of the abuses and accordingly recommended ‘a godly work’ that would be equivalent to ‘the Bridges’ in the Low Countries or ‘the *Montes pietatis*’ (‘Banks of Charity’) in Italy where people in need could pawn things or receive loans without interest. Malynes mentioned a list of 1500 charitable persons he had prepared that would be willing to donate money to that enterprise. However, he added, nothing had come of it due to the intrigues of a person in whom he had placed trust.¹¹⁷

In effect, the merchant scholar was all for the money business. However, he also reflected on the need for some sort of institutional effort for the common good of the people – for a policy that would go beyond the current legislation that merely allowed usury. That collective effort would afford every decent person that wished to do so an opportunity to participate in the economic life of the nation, without danger of falling into the hands of usurers. This would have the added advantage of getting rid of criminals, since ‘according to the Prouerbe, *If there were no receiuers, there would be few theeues*’.¹¹⁸ Hence the significance of Malynes’s pioneering ‘Usurie politike’ lay in its advising political control over the new financial life of the nation in a manner that would stimulate and multiply citizens’ economic transactions while also preventing organized crime and observing the rules of charity.

For all the widespread practice of usury and the legislation encouraging the application of up to 10 per cent of interest for money, the moral issue relating to this practice continued to be a subject of hot debate for decades. In *The English Usurer or Usury Condemned*, John Blaxton showed that doubts over the morality of usury were not put to rest with the new legislation. There was a difference, he suggested, between the legislation and what a pious Anglican would do. The legality of usury, Blaxton wrote, could not ‘excuse the usurer in the court of conscience’.¹¹⁹

10.2.4 *The Scholars’ Discussion*

Responding to a collective of divines and despite a more scientific bent in some of its parts, Robert Filmer’s tract *A Discourse Whether it May be*

¹¹⁷ Malynes, *Consuetudo, vel lex mercatoria*, ch. 13.

¹¹⁸ Malynes, *Consuetudo, vel lex mercatoria*, p. 337.

¹¹⁹ John Blaxton, *The English Usurer, or Usury Condemned: By the Most Learned and Famous Divines of the Church of England* (London: John Norton, 1634), p. 60.

Lawful to Take Use for Money argued in favour of the morality of usury, largely as a response to Roger Fenton's *A Treatise of Usury Divided into Three Books* of 1611.¹²⁰ Filmer's text on usury is altogether Biblical, advising, nevertheless in the style of the new science to use 'the light of Nature' and 'reason or sense'. Following revision of the various laws, Filmer concluded that 'the law of God no where in plain terms forbids the increase of Mony'.¹²¹ Overall Filmer proved again, as he did in *Patriarcha*, that he was a tough man of innovative but obscure theological credentials. He was influential though, and it is remarkable and indicative of his impact that, though probably written in the 1630s, *A Discourse* was first published in 1653, the year of Filmer's death.¹²² Peter Laslett's appraisal that *Patriarcha* reflects 'conventional theology' is nowadays discredited.¹²³ Johann P. Sommerville has shown that it is untenable to pin Filmer as the orthodox Anglican against Locke, the secular libertarian. In fact, the two authors' ideas share the same roots, with Filmer being, interestingly, the more radical in theological terms.¹²⁴ For example, *Patriarcha* contains a number of departures from the Bible. In noting that Jewish Law prohibits practising usury on the poor, Filmer stated as follows: 'But with us it is otherwise; if by any other meanes we do sufficiently relieve the poor, then even the taking of Usury of them is no sin, nor oppression.'¹²⁵ Filmer did not fail to mention the question of usury again in his well-known 'Observations

¹²⁰ See on Fenton's critique to the idea that usury was a necessity of trade, and generally her chapter on the retreat of moral economy during the period examined here, Appleby, *Economic Thought and Ideology in Seventeenth-Century England*, pp. 52–71; p. 66.

¹²¹ Robert Filmer, *A Discourse Whether it may be Lawful to take Use for Money*, (London: Printed for Will Crook, 1678), Early English Books Online Text Creation Partnership, 2011, <http://name.umdl.umich.edu/A41301.0001.001> (accessed 8 June 2022), p. 97.

¹²² The date of 1653 in Peter Laslett, 'Concise Bibliography of the Works of Sir Robert Filmer' in Sir Robert Filmer, *Patriarcha and Other Writings*, pp. liv–lv; the later date of 1678 in Johann P. Sommerville 'Sir Robert Filmer, Usury and the Ideology of Order', in Daniel Carey (ed.), *Money and the Political Economy of Enlightenment*, Oxford University Studies in the Enlightenment (Oxford: Oxford Voltaire Foundation, 2014), pp. 31–56.

¹²³ Laslett, 'Introduction' of Robert Filmer, *Patriarcha and Other Political Works*, p. xxxv.

¹²⁴ Sommerville 'Sir Robert Filmer, Usury and the Ideology of Order'.

¹²⁵ Filmer, *A Discourse*, p. 50. He was writing at the same time that Salmasius, perhaps influenced by him whose views were in turn praised by v. Böhm-Bawerk as the high-water mark of interest theory, determining 'the direction and substance of the theory of interest for more than a hundred years'. von Böhm-Bawerk, *Capital and Interest*, p. 36. On the Monte di Pietà and its function of lending money to the poor, with a tax or an interest that could for example oscillate between 0.5 and 7 per cent see, Paola Avallone 'Il credito su pegno nel Regno di Napoli (XVI–XIX secolo) in *Prestare ai poveri. Il credito su pegno e i Monti di Pietà in area Mediterranea* (secoli XV–XIX) (Torino, Napoli: Consiglio Nazionale delle Ricerche, Istituto di Studi sulle Società del Mediterraneo, 2007), pp. 69–100; p. 86.

Upon Aristotles Politiques Touching Forms of Government', this time placing the political relevance of usurious practices in its historical context.¹²⁶ The 'Commons' in Rome found themselves terribly in debt after the wars that endangered their estates, and 'as they thought, oppressed by usury', complained 'of usury and of the power of the Consuls' and managed by sedition to obtain the election of magistrates that represented them as the tribunes of the people.¹²⁷ He also noted the 'incredible gains' achieved in terms of public revenue from 'the usury of the Jews' in Venice,

for in every city they keep open shops of interest, taking pawns after fifteen in the hundred, and if at the year's end, it be not redeemed, it is forfeited, or at the least, sold at great lost. The revenues which the very courtesans pay for toleration, maintain no less than a dozen galleys.¹²⁸

Through this kind of public policy, Filmer seemed to suggest, the practice of usury spread in society and the Jews were exploited at the same time.

In *A Treatise of Taxes*, William Petty devoted a chapter to 'Usury' and commented on the reasonableness of paying interest on loans on the grounds of the inconvenience caused to the lender through making the loan, which amounts to an elaboration of the classic argument also put forward by Aquinas in terms of the 'loss of the lender' (*damnum emergens*).¹²⁹ Petty astutely changed the perspective: instead of criticising the morality of usury on the basis of the borrower's need, he defended its licit nature by looking at 'the necessities' of the lenders:

Wherefore when a man giveth out his money upon condition that he may not demand it back until a certain time to come, whatsoever his own necessities shall be in the mean time, he certainly may take a compensation for this inconvenience which he admits against himself: And this allowance is that we commonly call Usury.¹³⁰

More to the point and, and seemingly with similar ideas to Locke's, he employed the conception of 'simple natural interest' as 'the Rent of so much Land as the money lent will buy'. Where security was uncertain, and troublesome, as in England, Petty thought that interest must be employed;

¹²⁶ Filmer, 'Observations Upon Aristotles Politiques Touching Forms of Government', p. 165.

¹²⁷ Robert Filmer, 'Observations on Mr. Hobbes's Leviathan: Or his Artificial Man-A Commonwealth' in Filmer, *Patriarcha and Other Political Works*; Robert Filmer, 'Observations on Mr. Milton Against Salmasius', in Filmer, *Patriarcha and Other Political Works*.

¹²⁸ Filmer, 'Observations Upon Aristotles Politiques Touching Forms of Government', p. 170.

¹²⁹ *Summa theologiae*, II-II, 78.2, ad 1; Langholm, *Economics in the Medieval Schools*, p. 245.

¹³⁰ Petty, *A Treatise of Taxes*, p. 80.

that was in itself unpredictable, amounting to ‘any height below the Principal’. It was fruitless, in Petty’s view, to seek to limit usury at any given time and in any given place, and was akin to making ‘Civil Positive Laws against the Laws of Nature’ – an activity that involved ‘a vanity and fruitlessness’, and Petty could only think ‘that those who make such Laws were rather Borrowers than Lenders’.¹³¹

Among the books in Locke’s library was *A Letter to a Friend Concerning Usury*, published in London 1690.¹³² The Catalogue produced by John Harrison and Peter Laslett indicates that it was the only work on the issue of usury that he possessed. It argues against high interest rates and is concerned with summarizing the ideas for and against the reduction of interest in works penned by Sir Thomas Culpeper in 1621, Sir Thomas Culpeper junior (1668), Sir Josiah Child (1668) and Thomas Manley (1669). These works are in the main economic tracts, although all also touch upon the moral uncertainty of usury. This is particularly true in the writings of Sir Thomas Culpeper junior, who made a point of demonstrating that it was unlawful. Josiah Child’s *Brief Observation Concerning Trade, and Interest of Money*, published in 1668, adopted an international perspective through which he sought to show the negative aspects of a high interest rate. While Child – who was soon to be Governor of the East India Company – acknowledged that a high rate of interest might attract Dutch money, he stated that was a ‘meer Chymera’ which would not increase the circulation of money in the country on a consistent basis. At any moment the Dutch could withdraw their money. Quoting the Bible, once again with reference to interest, Child recalled the lesson of ‘that wise legislator’, Moses, forbidding the use of money at interest among Jews and permitting it to foreigners. The Nation would become richer without high interest at home and no public good could ensue from consenting to it. Moreover, in terms of moral behaviour, the accrual of high interest on money also led to all sorts of vices, such as idleness.¹³³ The staunch defence of a higher rate of interest in Thomas Manley’s controversial *Usury at six per cent examined* takes much less of a moral tone. Its main point was that abatement of usury was only possible in a rich country, while forcing ‘Usury as low amongst us, a needy and declining people’ was as reasonable as expecting fruitfulness

¹³¹ Petty, *A Treatise of Taxes*, p. 80.

¹³² R. C., *A Letter to a Friend Concerning Usury* (London: 1690), Early English Books Online Text Creation Partnership, 2011, <http://name.umd.umich.edu/A31146.0001.001>.

¹³³ Sir Josiah, Child, *Brief observations concerning trade and interest of money* (London: Printed for Elizabeth Calvert and Henry Mortlock, 1668), p. 16.

from a barren land, thus repeating the strategy of painting a dark picture of the economy employed by those who called for higher interest rates. One of a cohort of pamphleteers, Manley blamed the bad economic situation (as he saw it) upon the idleness of the poor and was probably among the first to openly praise usurers for their service to the commonwealth.¹³⁴ Sir Thomas Culpeper senior was the most original of the writers under consideration, and his approach probably set the tone for many subsequent tracts, including Locke's. His insistence that 'Land and money are euer in ballance one against the other' may have given Locke impetus to think the issue through.¹³⁵

It was, of course, a moral approach that Robert Sanderson took when discussing usury, but the winds of change are already visible in the respected moralist's work. Almost writing from the trenches of morality, attacked from all flanks, he wrote that one *ought not be forced* to lend at interest. He discussed usury in the context of necessary evil, as well as in other contexts. As 'an evil thing', similarly to other evils – divorce is the other example he gave – usury may be permitted by the law, since there were some evils that could be made to disappear only at great inconvenience to the public. Therefore it 'pertaineth to the political prudence of Government' to moderate how it was used, and in order to make it 'subservient to the Publick profit', delimit the bounds within which it was lawful. Permitting an evil, however, did not force anyone to commit it. Sanderson underlined that 'nevertheless this is certain, that were it never so lawful, no man by that permission is obliged to the exercising of it'.¹³⁶

The letter from the physician and religious controversialist Lewis du Moulin (1605–1680) to 'the very noble' Robert Boyle on the question of usury testifies to the anxieties Boyle suffered on account of this issue, perhaps due to his own activities, or in the light of the proposal to readmit the

¹³⁴ Thomas Manley, *Usury at six per cent. examined, and found unjustly charged by Sir Tho. Culpepper and J.C. with many crimes and oppressions, whereof 'tis altogether innocent* (...) (London: Pr. by Thomas Ratcliffe, and Thomas Daniel, 1669), Early English Books Online Text Creation Partnership, 2011, <http://name.umd.umich.edu/A51784.0001.001>, p. 59. In a letter to a patron of his Manley was again supplying arguments against Culpeper in 1673, among them also of theology: 'The Lawfulness of ye encreas of monie both from Nature & reason, & yt ye prohibition of it among ye Jewes related to them as Jewes only, & so not binding to Christians.' See the letter and generally on Manley in the debate, Tim Keirn and Frank T. Melton, 'Thomas Manley and the Rate-Of-Interest Debate, 1668–1673', 29 *Journal of British Studies* (1990), p. 172.

¹³⁵ Culpeper, *A Tract Against the High Rate of Usurie*, p. 18.

¹³⁶ Sanderson, *Several Cases of Conscience Discussed*, p. 221.

Jews to England.¹³⁷ Du Moulin wrote that moral law and natural equity prohibited usury, but that one also must distinguish between loans that helped and loans that bit (*juvantis* or *laedentis*), the former being allowed and the latter prohibited.¹³⁸ However du Moulin's larger conclusion was that 'all the usury that benefits the debtor is licit'.¹³⁹ As a means of allowing a debtor to use someone else's money, it was permissible for creditors to demand interest on their money. It was true that God had prohibited the Jews from practising usury among themselves. Nevertheless, it was permissible if practised in accordance with moral law and natural equity. And, like Filmer, du Moulin noted that that prohibition of usury that applied to the Israelites did not affect Christian countries.¹⁴⁰ In addition, he considered that the arts of banking and commerce though more prone to vice than other liberal arts gave no cause to suspect dishonesty or deception if practised 'within the bounds of the rigor of the law'.¹⁴¹ Here du Moulin contributed two interesting ideas. First, he focused on the promotion of the borrower's commercial activities. Second, in describing banking as being like any other profession and endorsing a legalist conception of the state, he indirectly pointed to the urgency of having *good laws* to regulate moneylenders' activities.

¹³⁷ Hunter, *Boyle: Between God and Science*, p. 85; p. 101. On Lewis du Moulin, see Vivienne Larmine (23 September 2010). Du Moulin, Lewis (1605?–1680), physician and religious controversialist. *Oxford Dictionary of National Biography*. Retrieved 30 October 2020, from www.oxforddnb.com.libproxy.helsinki.fi/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-19428. The letter is inserted in a work that du Moulin dedicated to William Sydenham, the military man, older brother of Thomas, the physician. Ludovici Molinaei, 'Ad Nobilissimum & Praestantissimum Virum Robertum Boyle' in *Corollarium ad Paraenesim suam* (London, 1657), pp. 247–270. See also Michael Hunter, 'The Disquieted Mind in Casuistry and Natural Philosophy: Boyle and Thomas Barlow' in Michael Hunter (ed.), *Aspects of the Life and Thought of Robert Boyle (1627–91)* (Farnham: Ashgate, 2015).

¹³⁸ Molinaei, 'Ad Nobilissimum & Praestantissimum Virum Robertum Boyle', p. 261.

¹³⁹ 'sed in omnibus constitutionibus quibus societas & commercium inter homines constant eo spectet ut commodis utriusque partis consulat, quod fit per contractum usurarium aequum & moderatum. Unde colligere est eiusmodi usuram à legislatore prohibitam quae in damnum debitoris cedit, eam verò usuram concessam per quam ipse rem facit sine cuiusquam fraude. sed ne praesidium petam ab illa distinctione, assero quantumvis apud omnes in confesso esset eam usuram quae debitori fructuosa est licitam esse, eamque probe concordare cum lege morali & aequitate naturali.' Molinaei, 'Ad Nobilissimum & Praestantissimum Virum Robertum Boyle', p. 262.

¹⁴⁰ Molinaei, 'Ad Nobilissimum & Praestantissimum Virum Robertum Boyle', p. 265

¹⁴¹ 'etiam cum ex aequo omnes tum trapezitae, tum alii mercenarii seu mercatores seu opifices intra legum rigorem professione sua defunguntur: trapezitae enim nec cause nec occasion pejerandi aut dejerandi datur.' Molinaei, 'Ad Nobilissimum & Praestantissimum Virum Robertum Boyle', p. 269.

10.2.5 *Economists and Scientists*

Appeals to the divines in relation to usury began during the last years of the reign of Charles I, prior to the breakthrough on usury made during the Interregnum. This is evidenced by Henry Robinson's *England's Safety in Trades Encrease*, presented to the High Court of Parliament in 1641. Robinson (1605–1673) is regarded as one of the most brilliant and versatile English economic thinkers of the seventeenth century and one of the leading non-ecclesiastical theorists of Independency.¹⁴² Lord Ashley Cooper was not only one of Robinson's protectors, but apparently also one of his pupils in economic matters during the busy years before the Restoration.¹⁴³ *England's Safety in Trades Encrease* contains a long list of reforms Robinson deemed necessary to resuscitate trade and the national economy.¹⁴⁴ The text also shows that he was the main inspiration behind later economic schemes, that figures such as Worlsey and Locke put forward as their own. As a member of a family that had been successfully involved in the practice of trade for more than a century, his expertise went beyond the theoretical and chiefly lay in his capacity to think about economy and trade with the breadth that the contemporary English context demanded. Robinson knew how to take into account the West Plantations, the East India Trade, and all the English territories in reordering the economic life of the country, with the ambitious goal of making 'of England the Emporium' of the world.¹⁴⁵ In the context of recommending the introduction of 'Faires or Money marts' such as that of Lyon in France or Placentia in Italy, Robinson – who faced issues in an upfront manner – produced an instructive and detailed discussion of usury. His purpose was to encourage the employment of bills of exchange, by which merchants could be given the money they needed immediately, to be paid back at an agreed time at a level slightly higher than the prevailing rate of interest. Catholic merchants, Robinson argued, had invented the 'unnaturall use of Exchange' as a means to obtain absolution in their confessions, a pardon that was denied if they presented their dealings openly as usury. Robinson's remark also shows how much of an influence Aristotle

¹⁴² W. K. Jordan, *Men of Substance: A Study of the Thought of Two English Revolutionaries, Henry Parker and Henry Robinson* (Chicago: University of Chicago Press, 1967); Aylmer, *The State's Servants*, p. 225.

¹⁴³ Jordan, *Men of Substance*, p. 60; p. 216; p. 222.

¹⁴⁴ Henry Robinson, *Englands Safety in Trades Encrease* (London, 1641) Early English Books Online Text Creation Partnership, <http://name.umdl.umich.edu/A57437.0001.001>

¹⁴⁵ An 'emporium' is the Latin word for a trading station, a market town or market. See Robinson, *Englands Safety in Trades Encrease*, p. 22.

remained on mid-seventeenth-century English consciousness. The users of Venice avoided the charge of being in that business by sending their money abroad, for example to London, with no other purpose than to put the money to use and obtain interest on it, while also helping merchants that endorsed the bills of exchange by relieving them of the need to carry coins.¹⁴⁶

Robinson's discussion of the contemporary theory of usury in a tract on how to increase trade is representative of an approach in which the 'safety of trade' included both economic and moral aspects of 'safety'. Nevertheless, the fact that the matter was now being addressed by a professional merchant was equally characteristic of the change of atmosphere. Robinson's aim was to shine a light on the muddle reigning in relation to the question of usury. 'Protestants and Papists Doctors, Divines and Lawyers' all disagreed in what exactly the definition was, but Robinson considered the following to be the most useful general definition: 'Usury is received profit from a debtor for the use of a thing given in loan' (*Usura est lucrum receptum à Creditore pro usu rei mutuó datae*). However, in his view that definition was incomplete, since it did not include the 'mutuall' and 'intentionall' usury, which was also condemned in *foro conscientiae*. It also disregarded the complex nature of 'giving in loan' (*dare in mutuum*): a house may be rented, wages may be paid, a horse may be lent, and these did not constitute usury. For Robinson, demanding either 2 or 10 per cent was usury – the exact rate was immaterial. That did not mean, he suggested, that one ought to oppose absolutely the practice of usury. Those who read Luke 6:35, *Date mutuum, nihil inde sperantes* ('lend without expecting anything back') as an absolute prohibition, were undertaking a radical interpretation that was not altogether justified since it disregarded the fact that in Deuteronomy 23:20 the Lord allowed the Jews to practice usury in relation to foreigners. Thus, Robinson's argument was that the discussion about making the use of money legitimate ought to move beyond 'need'. Robinson went to the heart of the matter when he pointed to the distinction between 'need' and 'profit' and made an argument in favor of virtuous facilitation of one's neighbour's profit.¹⁴⁷

¹⁴⁶ Almost thirty years later Child was still urging to start the practice of Bills of Exchange, this time from the Netherlands. However, Child was already unconcerned about its possible usurious uses. Child, *Brief observations concerning trade and interest of money*.

¹⁴⁷ 'In regard there may be an occasion of borrowing, as in a rich man that cannot be said to doe it for need: for which cause I am not bound to lend him, but because he sees certaintie of profit, and rather than I will bee his hindrance of such profit, me thinks I find my selfe in a manner oblig'd to lend him what I could, and intended otherwise to imploy my selfe not without good hopes of benefit: and may not I in this care of certaine profit to my neighbor

In *England's Safety in Trades Encrease* Robinson launched a momentous challenge aimed at addressing the gulf between moral theory and commercial practice. He proposed that the divines should take the matter into serious consideration and declare what percentage of interest amounted to usury. All authors agreed currently, he noted, that taking 8 or 10 per cent of interest on the use of money was usury and unlawful, while nonetheless being practised by entire nations, 'so sweetly and powerfully doth gaine and lucre benumbe the conscience'. England, and the entire world, accordingly needed an 'adequate' definition that would not 'vitiate most contracts, bargaines, and sales, so commonly practised by all nations to the multiplying of trade, and reliefe of whole Kingdomes'. Reformation of trade ought not to signify 'the ruine of $\frac{2}{3}$ of all commerce throughout the Universe' – a reformed commonwealth must therefore make usury legal and legitimate.¹⁴⁸ In line with the ideals of the new science of the advancement of laypersons he urged: 'at this studie and consultation of our Divines I crave leave to be bold, and entreat them not to disdaine that light which experts Merchants might give them in this poynt'.¹⁴⁹

However, fears as to the irreligiosity of usury persisted throughout the Interregnum among the pious Reformers. William Potter's 1650 tract, *The Key of Wealth, or a new Way for Improving of Trade*, is probably the most remarkable text on this topic to have appeared in the period in question. It evidences again that in the England of the new science the question of the 'lawfulness' of putting money out at interest was both a delicate moral matter and a pressing economic quandary.¹⁵⁰ After half a century of reflection upon Bacon's call to consider usury in practical terms, the greater part of the problem that remained was as to what those *practical* terms comprised. Which were the correct means by which to obtain credit and thus resuscitate trade in the defunct post-Civil War economy? Furthermore, how could more bullion, and thus money, be obtained in a country without mines?

Published on 15 September 1650, *The Key of Wealth* appears pitched somewhere between fantasy and reality but contains an array of brilliant

in borrowing, and certain dammage, (for the imploying it is alwayes valued at somewhat) to my selfe by lending, take interest for my money, and so he get more by borrowing, and I by lending?' Robinson, *Englands Safety in Trades Encrease*, p. 41.

¹⁴⁸ Robinson, *Englands Safety in Trades Encrease*, p. 41.

¹⁴⁹ Robinson, *Englands Safety in Trades Encrease*, p. 42.

¹⁵⁰ William Potter, *The Key of Wealth Or, a New Way, for Improving of Trade: Lawfull, Easie, Safe and Effectuall* (Printed by R.A., 1650). Early English Books Online Text Creation Partnership, 2011 <http://name.umd.umich.edu/A90881.0001.001>

ideas. It is a futurist tract, which proposes the establishment of a company as 'A Certain Myne of Gold' built upon security provided by land and by insurance mechanisms that would create a new form of paper money.¹⁵¹ For 'the use and possession of the said Myne', Potter asked for a number of investors to lay out the money to purchase the land and guarantee the insurance system. Then, in order to increase their trade, rich and poor traders alike would be able to borrow from the money generated by the land rents, in whatever sum as they could offer security for, on the basis of a bond that required repayment of the money in six months.¹⁵² Wennerlind regards Potter's *Key of Wealth*, along with several of Robinson's and Hartlib's writings of the 1650s that were inspired by it, as a turning point in the endeavours of Hartlib's scientific circle. He takes the view that this was the moment at which alchemy and experiments aimed at transforming base metals into gold were abandoned in favour of the far more realistic idea of monetizing land as security and the promotion of land-banking as the means to supply much-needed credit. In ideological terms, this represented a movement from the 'transmutation of nature' to the 'passive security of nature'.¹⁵³

The religious and moral question of usury also arises in the context of the connection between alchemy and credit-money. The undesirable social consequences of usury – enriching the few and entailing money being sent out of the country – plainly conflicted with the Reformers' religious ideals. They were democratic and suspicious of greed, but at the same time the entire political project of the Commonwealth depended on England's economic success. In the pursuit of wealth, recourse to alchemy, the land-banks and other means of producing credit were indicative of the efforts undertaken by the intelligentsia in their search for alternatives to usury.

In his correspondence with Hartlib, William Potter emerges as an unhonoured man, unsuccessful in his business career as an inventor and, perhaps for this reason, something of a fatalist in outlook. At the same time, Potter stands out among his peers as being not only incredibly knowledgeable about money but as a visionary who was half a century ahead in his creative approach to it.¹⁵⁴ In 1690 the Government of Massachusetts produced paper money for the first time, as proposed in *The Key of*

¹⁵¹ Schumpeter praise of Potter's analytical work in Joseph A. Schumpeter, *History of Economic Analysis*, Elizabeth Boody Schumpeter (ed.), with an Introduction by Mark Perlman (New York: Routledge, 1987), p. 280

¹⁵² Potter, *The Key of Wealth*.

¹⁵³ Wennerlind, 'Credit-Money as the Philosopher's Stone', p. 250; p. 256.

¹⁵⁴ *Hartlib Papers*.

Wealth, to pay for the invasion of Canada, and the link between that event and Potter has been only recently established.¹⁵⁵ Potter weighed the communal aspects of adopting a security in relation to land and creating a common fund of credit against interest-driven usury and its intolerable elitist aspects. The book's introduction explains that this entailed going beyond 'nature alone, (without improvement by the use of mans Reason)' and unlike 'the brutish people of America' who lived 'upon Roots and Acornes' to benefit from the 'Accomodations' furnishing 'Art'; it was also about providing 'help, for the crying and the dying poor', and that 'the Rich may wealth increase' and fundamentally that 'none shall neede (who now will Work) to want their dayly-bread'.¹⁵⁶

Potter took the view that the way to revive the 'decayed trade' in any place was to 'encrease money', which, in his opinion, would not cause the prices of commodities to increase.¹⁵⁷ On the contrary, extraordinary quick trade, in which the market takes as much as it can, would make commodities and produce cheaper, and thus land-rents would fall. At the same time, landlords would benefit, and traders would see a quick return and a level of profit that would enable them to increase their stock year on year, thus further increasing profits. Finally, cheap commodities in England would attract bullion to the country from overseas. At the foundation of the whole enterprise, 'the Myne', was land, with the advantage that if it were a real mine it would give rise to much more jealousy than a mine crafted through human ingenuity.¹⁵⁸

In *The Key of Wealth* Potter envisaged the circulation of paper money which, crucially, unlike gold coins, could not be hoarded.¹⁵⁹ He was aware of imitating the Dutch in this regard.¹⁶⁰ Furthermore, the paper money or bills would be *private* to those committed by a bond and this commitment would be made visible by means of flags or signs in one's businesses, and of course, since Hartlib was somehow involved, its complex management would be done through 'an Office'.¹⁶¹ When everyone, or many, was willing to borrow 'gratis' on such a firm security as 'the Myne' the use of the

¹⁵⁵ Katie A. Moore, 'The Blood that Nourishes the Body Politic: The Origins of Paper Money in Early America' in 17 *Early American Studies: An Interdisciplinary Journal* (2019), pp. 1–36.

¹⁵⁶ David Brown 'Introduction' in William Potter, *The Key of Wealth*.

¹⁵⁷ Potter, *The Key of Wealth*, p. 15.

¹⁵⁸ Potter, *The Key of Wealth*, p. 23.

¹⁵⁹ Dunn, 'Milton among the Monopolists'.

¹⁶⁰ 'The way of trading upon Bills is, (I confess) used in Flanders'. Potter, *The Key of Wealth*, p. 57.

¹⁶¹ Potter, *The Key of Wealth*, p. 45.

new money that the company would provide could become general, and hence function as real credit and real money.

as the case now stands with us, *the only feasible means, whereby both to receive and multiply the decayed Trade of this Land, is by increasing amongst Tradesmen some firm and known Credit or Security, equal to that of the Chamber of London, Banke of Amsterdam, or any Bills of Exchange, which being given in written or printed Evidences, may be fit to transfer from hand to (hand).*¹⁶²

Significantly, one of the novelties of the entire enterprise was that borrowing money would be possible ‘without paying any *Interest*’, which poor merchants could not afford and that would keep the price of the commodities low.¹⁶³ Instead of serving usurers’ sectorial private interest, the Company would have a communitarian aspect. The rationale behind this was to help poor merchants. In fact, one of the effects of the whole enterprise would be ‘to diminish the *Interest for monies*’. For who would

put in *security* to borrow money upon *Interest*, when he may upon like *security*, have such Bills as will passe in the place of money lent him *gratis*, & that in such a way, as whereby to be brought into a capacity of multiplying his trading to the utmost degree possible?¹⁶⁴

Therefore, borrowing conditions would be most favourable for the poor merchants:

the procuring of sufficient security, for the borrowing of any considerable sums of money, may be too hard a task for the poorer sort of Tradesmen to perform; yet there will be nothing required of them, in order to the putting themselves into a capacity of multiplying their trading, and that with ready pay.¹⁶⁵

Potter did not consider this Company more risky than usury itself: ‘there is (as I have already proved) greater hazard in letting out moneys to *Interest*, then in this undertaking,’ and yet people, ‘in hopes of a small profit of *Interest*, and by that small profit, do one time with another gain more then (sic) they loose by such hazard, as is evident, by mens continuing this practice’.¹⁶⁶ Moreover, he envisaged the possibility of multiplication

¹⁶² Potter, *The Key of Wealth*, p. 38.

¹⁶³ Potter, *The Key of Wealth*, p. 22; pp. 29–30.

¹⁶⁴ Potter, *The Key of Wealth*, p. 72.

¹⁶⁵ Potter, *The Key of Wealth*, p. 26.

¹⁶⁶ Potter, *The Key of Wealth*, p. 25.

‘ad infinitum’ of returns.¹⁶⁷ And if business was unsuccessful for traders, all borrowers had to do was to return the bills, while the insurance system and land rents would make good their losses.

Yet considering that *those who borrow of it pay no Interest*, it follows, that if they cannot make it to be taken for *Commodity*, *all they are Ingaged unto, is but to return it again at the time appointed*; although indeed if it be remembered, that *this money is such as will yield the Value without any considerable losse, though sold to the Gold-smith*; it cannot be doubted, but that *all wise Tradesmen, will take it much rather then turne away a Chapman*.¹⁶⁸

In sum, despite the almost general benefit Potter prophesied, the only ones who would not benefit from ‘the Myne’ in the Commonwealth would be ‘Usurers, Brokers and Lawyers’ who would ‘lose all their customers’ and the ‘money mongers’ that ‘hoard money to raise the interest’.¹⁶⁹

This review of positions on usury concludes with Locke. His analysis followed the same path of promoting commerce. Money was put to work in the context of trade through the industry of the borrower in the same way as land that would otherwise be left fallow was put to use through the tenant’s work. The premise, however, was inequality.

For as the unequall distribution of Land, You having more then you can or will manure, and another Lesse brings you a Tenant for your Land, and the same unequall distribution of mony I having more then I can or will Employ and another Lesse brings me a Tenant for my mony.¹⁷⁰

Locke did not deny that the ‘usurer’ and the landlord were reaping the results of other peoples’ work.

his 6 li per Cent may seeme to be the fruit of another mans Labour as he that Letts Land to a Tenant for without the Tenant Industry (supposeing as before the owner would not manage it himself) his Land would yield him Little or noe profit.¹⁷¹

But the reason for paying interest on it lay in the fact that the borrower and tenant received more from the use of money than they paid. A merchant borrowing 1000 pounds at 6 per cent, would, if he knew the business, obtain profit exceeding the 60 pounds paid in interest. Those with

¹⁶⁷ Potter, *The Key of Wealth*, p. 6.

¹⁶⁸ Potter, *The Key of Wealth*, p. 33.

¹⁶⁹ Potter, *The Key of Wealth*, p. 60; p. 68; p. 72.

¹⁷⁰ John Locke, ‘Supplement’ of ‘Some of the Consequences that are Like to Follow Upon Lessening of Interest to 4 per Cent’, p. 182.

¹⁷¹ Locke, ‘Supplement’ of ‘Some of the Consequences that are Like to Follow Upon Lessening of Interest to 4 per Cent’, p. 182.

skills in trade and husbandry but neither money nor land were able to obtain their livelihood through the usurer and the landlord. In this way Locke explained why borrowing money was unavoidable on the grounds of ‘the necessity of affaires and the Constitution of Humane society’, and the unequal distribution of land and money; and why receiving profit from lending money was equitable and lawful as it was for the landlord to receive rent from the tenant.¹⁷² Locke’s point was that the individual was entitled to obtain a livelihood and eventually enrichment thanks to the loan. Locke’s suggestion sounded commonsensical as more money needed to be in circulation in order to resuscitate the national economy. As discussed in his economic writings of the 1690s, the funds needed to meet the costs of government as well as both the necessities required and the luxuries desired by people would certainly not come from conquest and plunder, especially in England. As he realistically put it:

In our present circumstances, no Body is vain enough to entertain a Thought of our reaping the Profits of the World with our Swords, and making the Spoil and Tribute of Vanquished Nations, the Fund for the supply of the Charges of the Government, with an overplus for the wants and equally craving Luxury, and fashionable Vanity of the People. Commerce, therefore is the only way left to us.¹⁷³

Locke was original in that he developed a scientific discussion outside the narrative of moral theology. His philosophical methodology, which treats money as a necessity, deserves closer study.

¹⁷² Locke, ‘Supplement’ of ‘Some of the Consequences that are Like to Follow Upon Lessening of Interest to 4 per Cent’, pp. 182–183.

¹⁷³ Locke, ‘Some Considerations of the Consequences of the Lowering of Interest, and Raising the Value of Money’, pp. 222–223.