On the Origins of Modern Debt and Value: Revisiting Friedrich Nietzsche and William Petty

Philip Goodchild

Abstract: The pursuit of self-interest can lead to market failure when there is a lack of trust. Where Hume and Nietzsche located the origin of trust in the capacity to make promises - debts conceived in terms of values - this article explores the origins of modern distrust and its concomitant pursuit of self-interest. Examining the market economies of the 16th and 17th centuries in England, one finds these were characterised by a shortage of coins so had to rely effectively on trust. Wealth consisted largely of ‘credit’ or trustworthiness, for this was the basis for access to goods and services with a promise of later payment. As such, wealth was not a possession but a reputation, and the pursuit of reputation took precedence over the pursuit of possessions. Since default on a debt could easily spread by contagion, the basis for collective welfare was personal morality. The key question, then, is how this conception of credit came to be replaced by one equivalent to debt, given a precise value and time for repayment. It will be argued that in this context the best way to prove one’s creditworthiness was to pay on time with the debt issued by a sound institution such as the Bank of England or the Exchequer. The financial revolution in England had the effect of turning the pursuit of ‘credit’ into the pursuit of

http://ctt.canterbury.ac.nz
wealth, where debts assumed the money functions of means of payment, unit of account, and store of value. The result was a transformation of morality: pursuit of self-interest, in the form of an ability to pay in money, became the basis for personal morality, while money became the measure of value.

Key Words: Value, debt, credit, money, trust, Friedrich Nietzsche, William Petty, financial revolution.

In discussing the obligation to keep promises, David Hume wrote of a dilemma encountered by two farmers. It is a dilemma that shows how the pursuit of self-interest can lead to market failure, and so is emblematic of our contemporary economic dilemmas:

Your corn is ripe today; mine will be tomorrow. 'Tis profitable for us both that I shou'd labour with you today, and that you shou'd aid me tomorrow. I have no kindness for you, and know that you have as little for me. I will not, therefore, take any pains on your account; and should I labour with you on my account, I know I shou'd be disappointed, and that I shou'd in vain depend upon your gratitude. Here then I leave you to labour alone; You treat me in the same manner. The seasons change; and both of us lose our harvests for want of mutual confidence and security.¹

One can only imagine the sorry history that had led to such estrangement between two neighbours. Caught in the prisoner’s dilemma of game theory, each can do little to save their own harvest.² There is nothing elementary in such a vignette of social life: our task will be to explain how such self-destructive pursuit of self-interest is possible. The farmers do not seem to lack conceptions of debt, in the form of gratitude, nor conceptions of value, in the form of profit. Yet, purely by its absence, the story discloses a vital condition for cooperation: trust. For instead of proposing that people cooperate purely on the basis of reciprocal exchange, as in market transactions where one good or service is evaluated against another – the entire basis for economics from Smith and Ricardo onwards – this scenario introduces a time-delay between one harvest and the next. The temporal interval can only be bridged by trust – or money, which is simply to displace the problem from trust in each other to trust in money.³ All economic relations take place over time, and therefore involve
an element of trust; it is trust that is omitted from modern economic theory. Where Hume enquired as to how distrust might be replaced with trust, and so invoked the power of promises so that commerce might supplement the ‘more generous and noble intercourse of friendship and good offices’, our problem is the converse: how might trust be replaced by distrust? For this, we need to understand how debt and value were conceived in early modern life.

This will be a brief but circuitous and complex narrative. Friedrich Nietzsche will be invoked as the first to place debt and time as logically prior to value in economic life; yet Nietzsche’s analysis of debt solely in relation to power is more reminiscent of Hume’s farmers than of early modern forms of economic life. By contrast, credit as a productive, sociable yet dangerous principle will be explained through the norms of early modern tradesmen’s transactions, expressed as a set of moral norms by Daniel Defoe. Finally, we shall turn to the emergence of value as a rule of measure, elaborated by Sir William Petty, but first made morally effective in the financial revolution when the measure for value was formulated as debt. The outcome was a transformation from a concern for credit to a concern for self-interest – as later to be moralised, in somewhat different ways, by Adam Smith and Nietzsche. The conclusion of such a genealogy is that debt, value and trust remain moral concerns, irreducible to any economic ‘science’.

1. Trust, debt and power: Nietzsche’s genealogy

Friedrich Nietzsche drew attention to consciousness of the past and future as that which distinguishes the human from the animal. At the opening of his second essay On the Genealogy of Morality he proposed:

   To breed an animal which is able to make promises – is that not precisely the paradoxical task which nature has set herself with regard to humankind? Is it not the real problem of humankind?4

Humanity is the remembering and promising animal, related to its own past and future: ‘it is an active desire not to let go, a desire to keep on desiring what has been, on some occasion, it is the will’s memory’.5 How is such a memory achieved, given the opposing tendency to forget – not simply a passive forgetting, such as that of an animal who lives in the present, but an active forgetting as the precondition for any concentration, any reasoning or attention? Nietzsche’s answer is notorious: ‘A thing must be burnt in so that it stays in the memory: only something which continues to hurt stays in the memory’.6 He even attributed the origins of asceticism and religion to the solemn and cruel
attempts to fashion a memory for humanity.

The context for this emergence of promises, memory and pain is treated by Nietzsche as an economic one: the contractual relationship between creditor and debtor.

Precisely here, promises are made; precisely here, the person making the promise has to have a memory made for him; precisely here, we can guess, is a repository of hard, cruel painful things. The debtor, in order to inspire confidence that the promise of repayment will be honoured, in order to give a guarantee of the solemnity and sanctity of his promise, and in order to etch the duty and obligation of repayment into his conscience, pawns something to the creditor by means of the contract in case he does not pay, something which he still ‘possesses’ and controls, for example, his body, or his wife, or his freedom, or his life...7

What we have, here, is a description of unequal exchange, a promise of life in return for a loan. If only Hume’s farmer had demanded such a guarantee, perhaps his difficulties would have been solved; but perhaps Hume’s selfish farmer, who only imagines the impossibility of an equal exchange, would have found such unequal terms quite barbaric.8 No doubt such expedients have often been necessary, but one cannot help but suppose that more often it has been the creditor, not the debtor, who has demanded such terms, whether as a prior condition for a loan or whether to extort payment of tribute by postponing the threat of death. Such formal contracts between creditor and debtor occur more commonly under conditions of unequal resources or unequal power, and in the absence of trust. The basis for trust, on this account, would be the exercise of naked power.

Of course, the threat of force offers little real basis for the victor to trust the vanquished. It is here that Nietzsche invokes the phenomenon of guilt, the bad conscience through which the powerless one directs aggression against herself: only the person with a ‘bad conscience’ is reliable.

I look on bad conscience as a serious illness to which man was forced to succumb by the pressure of the most fundamental of all changes which he experienced, – that change whereby he finally found himself imprisoned within the confines of society and peace. It must have been no different for this semi-animal, happily adapted to the wilderness, war, the wandering life and adventure than it was for the sea animals when they were forced to either become land animals
or perish – at one go, all instincts were devalued and ‘suspended’ . . . those regulating impulses that unconsciously led them to safety – the poor things were reduced to relying on thinking, inference, calculation, and the connecting of cause with effect, that is, to relying on their ‘consciousness’, that most impoverished and error-prone organ! . . . All instincts which are not discharged outwardly turn inwards – this is what I term the internalization of man: with it there now evolves in man what will later be called his ‘soul’. The whole inner world, originally stretched thinly as though between two layers of skin, was expanded and extended itself and gained breadth, depth and height in proportion to the degree that the external discharge of man’s instincts were obstructed. . . . Animosity, cruelty, the pleasure of pursuing, raiding, changing and destroying – all this was pitted against the person who had such instincts: that is the origin of ‘bad conscience’.

It is most improbable that there was any such evolutionary transformation. Humanity, as a social animal surrounded by parents, partners, peers and progeny, evolved from other social animals. Trust and suspicion, fight and flight, care and self-limitation have been with humanity from the outset. Yet what is of interest in Nietzsche’s account, here, is the way it exposes the fact that environmental, technological and social changes devalue existing habits and impulses; change requires the weak powers of calculation, consciousness, decision and freedom. Reason only develops in response to crisis; thinking is scarce. So it is those in crisis, the vanquished, who first become capable of calculation and cunning. The problem with attempting to rule by brute force is that such force can often be manipulated for extrinsic ends. Blind force is incapable of ruling insofar as it has no ends, no relation to the past or expectation for the future. Similarly, a consciousness which only knows its past and future as a will, a promise or decision, has no knowledge of changing circumstances and external necessities.

The fundamental problem of humanity as a social animal, then, adapting to the circumstances offered by changeable others, is less a matter of making promises than that of discerning how changeable people can nevertheless be trusted. Trust, the basis for all cooperation, is the fundamental human and economic problem. For it is hardly the case that ‘the oldest and most primitive personal relationship there is’ is that between buyer and seller, or creditor and debtor, as Nietzsche claims. Marx is more realistic in treating the relationship between man and woman as the more primitive, as the condition for human reproduction. Yet even men and women have parents. Relations to parents, partners, peers and progeny, insofar as they continue through time, are relations
of trust. Perhaps there is no distinctively human problem, here, for humans, like many other species, have been bred for both trust and suspicion. The human problem is less a matter of forming bonds of trust that endure through time than that of discerning where such trust is appropriate.

The advantage of Nietzsche’s formulation of the primitive personal relationship as that between creditor and debtor is that it stages the encounter in conditions of radical uncertainty, balanced between trust and suspicion. This situation differs from that between buyer and seller in several significant respects: as we have noted, the relation between creditor and debtor is one that will have to endure through time; but in addition, it is formulated as a social relation between persons rather than as a direct and mutual comparison of things. Furthermore, the context for the emergence of debt is not simply the comparison of preferences but an expression of need. While the strength of an individual might be measured by the superfluity of their resources in proportion to their preferences, the weakness of an individual is measured by the urgency of their need as contrasted with the risks they would be willing to undergo in order to meet it – only one in extreme circumstances hazards their own body, wife, freedom, or life. Nietzsche is realistic in relating economic life, and even differences of power, to degrees of compulsion. In such encounters between strangers, there is a mutual sizing up of each other: ‘here person met person for the first time, and measured himself person against person.’

Fixing prices, setting values, working out equivalents, exchanging – this preoccupied man’s first thoughts to such a degree that in a certain sense it constitutes thought: the most primitive kind of cunning was bred here, as was also, presumably, the first appearance of human pride, man’s sense of superiority over other animals. Perhaps our word ‘man’ (manas) expresses something of this first sensation of self-confidence: man designated himself as the being who measures values, who values and measures, as the ‘calculating animal as such’.

What Nietzsche’s account exposes is the employment of such calculation in the service of cruelty, in taking advantage of another’s need. For in the context of trust, there is no need to calculate. Moreover, when compensation consists in an entitlement to cruelty, there is no direct equivalence between the wrong committed and the pleasure received – these matters are entirely incommensurable. The calculation of equivalents as a form of justice is for the
purpose of setting limits to revenge. In this respect, the one who legislates, who imposes a law of justice upon others, is first of all one who imposes this law of justice upon themselves. Legislators, who are also bound by their promises, are like the debtors, who are bound by theirs. They calculate:

But what a lot of preconditions there are for this! In order to have that degree of control over the future, man must first have learnt to distinguish between what happens by accident and what by design, to think causally, to view the future as the present and anticipate it, to grasp with certainty what is end and what is means, in all, to be able to calculate, compute - and before he can do this, man himself will really have to become reliable, regular, automatic, even in his own self-image, so that he, as someone making a promise is, is answerable for his own future!

In other words, the one who makes promises is committed to behaving according to necessity, as if she were imitating inanimate matter. While a promise may involve calculation prior to it being issued, a promise is in a certain respect a promise not to think. One who promises their own body, wife, freedom or life, who evaluates their urgent need as more significant, is also promising not to re-evaluate their decision: such promising involves an active forgetting, a refusal to attend to the value of body, wife, freedom or life. Such fidelity is inhuman.

The contraction of a debt, under conditions of unequal resources, unequal need, and unequal power, is the moment at which the vital relationship of trust is replaced by a simulacrum, the debt contract, under conditions of distrust. Distrust, then, is the condition for the exercise of power. Now Nietzsche has this relationship between distrust and power inverted, basing trust on power, for his entire account is based on his theory of the will to power.

A sort of pleasure is given to the creditor as repayment and compensation, - the pleasure of having the right to exercise power over the powerless without a thought, the pleasure ‘de faire le mal pour le plaisir de le faire’ [‘to do evil for the pleasure of doing it’], the enjoyment of violating: an enjoyment which is prized all the higher, the lower and baser the position of the creditor in the social scale, and which can easily seem a delicious titbit to him, even a foretaste of a higher rank. Through punishment of the debtor, the creditor takes part in the rights of the masters: at last he, too, shares in the elevated feeling of despising and maltreating someone as an
‘inferior’.17

What is at stake in this morality of the school playground is purely a matter of prestige. As Nietzsche indicates, the pleasure of cruelty is desired primarily by those who have masters themselves who have been cruel. Only a damaged person takes pleasure in such an exercise of power. What is distinctive about Nietzsche’s theory of the will to power, however, is that he extends it from the purely human relations where it belongs to the entire field of nature:

Life itself is *essentially* appropriation, injury, overpowering of the strange and weaker, suppression, severity, imposition of one’s own forms, incorporation and, at the least and mildest, exploitation.

. . . ‘Exploitation’ does not pertain to a corrupt or imperfect or primitive society: it pertains to the *essence* of the living thing as a fundamental organic function, it is a consequence of the intrinsic will to power which is precisely the will of life.18

So on the one hand, for Nietzsche, the one who promises has to behave as if their will were a piece of fate, a natural necessity. On the other hand, however, nature is no longer considered in terms of necessity, but in terms of the active freedom to exploit pleasure from cruelty. There is no doubt some degree of confusion between freedom and necessity here, but it is one born of a significant insight. For freedom can only be articulated in terms of necessity; yet necessity is a compulsion that is present; freedom consists in proportioning anticipation to recollection.

Simone Weil can assist us in sorting out the confusion. In her account of the social struggle for power, concerned with privilege, obedience and oppression, Weil wrote of the necessity that belongs to the exercise of force as such:

The preservation of power is a vital necessity for the powerful, since it is their power which provides their sustenance; but they have to preserve it both against their rivals and against their inferiors, and these latter cannot do otherwise than try to rid themselves of dangerous masters; for, through a vicious circle, the master produces fear in the slave by the very fact that he is afraid of him, and vice versa; and the same is true between rival powers.19

The masters too have needs, have conditions of existence, and these are the source of their strength as well as their downfall. Yet this is a distinctively
social relation: in the relation between humanity and nature, there is no fear, no threat nor promise. For the relation between humanity and nature is an entirely present one; it is not extended by recollection or anticipation on the part of nature. Of course, humans feel the pressure of natural necessity, and meet with resistance and obstacles in their endeavours to fulfil their needs. Yet this struggle is entirely asymmetrical: the natural world does not defend itself against human intervention. It neither anticipates nor fears. Like a perfect Stoic, nature manifests an acceptance of necessity, and so does not collude with any power based on the threat of force. As a result, the struggle is set within real limits, for once an effort is successful and a need fulfilled, the struggle is over. This is not the case with the social struggle for power, for to exterminate one’s slaves would be to exterminate the source of one’s power, and to exterminate one’s rivals would be to exterminate one’s prestige. Social power is essentially unstable:

For, owing to the fact that there is never power, but only a race for power, and that there is no term, no limit, no proportion set to this race, neither is there any limit or proportion set to the efforts that it exacts; those who give themselves up to it, compelled to do always better than their rivals, who in their turn strive to do better than they, must sacrifice not only the existence of the slaves, but their own also and that of their nearest and dearest...  

Here we meet the self-destructive behaviour of Hume’s farmers. The struggle for prestige, unlike the struggle against nature, is an unlimited quest. Even if the masters dream of moderation, they can only practise it at the risk of being overcome by others. Under the conditions of such an unlimited struggle, only the strongest survive.

Now, according to Weil’s account of the natural order, all beings are limited by their conditions of existence. Far from power being a matter of will, it is a matter of resources, and those who exhaust their resources will lose their power. Since everything exists only in dependence on its material conditions, everything exists within given proportions and limits. In this respect, to regard the natural order as a matter of preference or will is simply to extrapolate the conditions of the social struggle for power into the natural order. It is to treat the natural order as though it made calculations, recollecting the past and anticipating the future. It is to treat it as though it senses fear, threat and promise. Yet even the social order is a part of natural necessity, and operates within its own limits and conditions: a power that overreaches itself will destroy itself. So the social struggle for prestige is itself constituted by illusion, since it seeks recognition by others rather than knowledge of its own limits and conditions of existence.
In placing such an emphasis on the will to power, Nietzsche implicitly appeals to prestige. In this he is not alone, as Weil indicates in her critique of all existing moral values:

We all choose for treasure those values that have their substance in social prestige. This is true even for the desires which seem only to have reference to individuals. So is the desire of the lover. ‘Love without vanity is only an invalid,’ said La Rochefoucauld. The pleasures of eating and drinking are much more social than they seem at first. Riches, power, advancement, decorations, honours of every kind, reputation, recognition, are values of an exclusively social order. Under the names of beauty and truth almost all artists and scholars seek social prestige. The etiquette of charity, of love for one’s neighbour, is generally a cover for the same article.

Social prestige, as the name itself indicates, is pure illusion, a thing which has no existence.23

Weil’s conclusion is in accordance with that of Adam Smith:

For to what purpose is all the toil and bustle of this world? What is the end of avarice and ambition, of the pursuit of wealth, of power, and pre-eminence? Is it to supply the necessities of nature? The wages of the meanest labourer can supply them... From whence, then, arises that emulation which runs through all the different ranks of men, and what are the advantages which we propose by that great purpose of life which we call bettering our condition? To be observed, to be attended to, to be taken notice of with sympathy, complacency and approbation, are all the advantages which we can propose to derive from it. It is the vanity, not the ease, or the pleasure, which interests us.24

Yet if such prestige is vacuous, we reach Nietzsche’s fundamental philosophical question: what is the substance of value? From what does the value of values derive? Where Nietzsche offers the will to power, it is all too easy to see a yearning for prestige. The quest for prestige is a social necessity, for insofar as we are dependent for survival on cooperation with others, that cooperation is largely only forthcoming in response to the offer of reified prestige, or money. How does money transform trust? To address this, we shall seek out some of the historical forebears of Hume’s farmers among English tradesmen, merchants and landowners of the seventeenth century.
2. Credit and faith: Defoe and morality as microeconomics

Walter Powell of Gloucestershire, in a pamphlet of 1645 campaigning against the swearing of oaths entitled *A summons for swearers, and a law for the lips*, wrote:

> If wee walk unblameable in our lives; if we so highly value truth, that we sell it at no rate; if we keep touch, and observe promises, though to our hinderance; our word, even in our weightiest businesse, will be credited, and need no superior confirmation: for it is not the oath which give credit to the man, but the man to the oath. . . . speak the truth without an oath, and . . . thy word shall be taken by itself; otherwise thou art like an ill credited borrower, that ridest up and down the country with sureties.25

Powell was clearly concerned that an oath, a declaration of one’s sincerity before God, was a poor substitute for character, putting duty before inclination. It is not the principle behind the oath that offended Powell – that there is a God who is offended by lies but approves of faith and truth – so much as explicitly drawing attention to this principle that was accepted by all at the time. If there is such a God, then one is judged on one’s word, not simply on one’s formal oaths; the invocation of God therefore reveals a practical atheism in the rest of one’s doings, and discloses an untrustworthy character. Powell’s campaign was aimed at the religious improvement of ‘poorer sort’ of people, ‘oaths being the common sureties of the basest of people, even the scum of highways, Alehouses and Taverns’, those associated with vagrancy, debt, idleness, indulgence and dissipation. Yet what is presupposed in such a campaign is that piety is associated with probity, and honouring promises is not simply a matter of personal morality, but the very basis for the common wealth of the people as a whole – if there are some whose word cannot be trusted, then one ought to be miserly with trust, and everyone is poorer. What seems so foreign to the economic culture of England in the twenty-first century seemed entirely natural in the seventeenth: that religious faith should underpin the economic order.

Craig Muldrew offers an explanation in his account of the credit economy in early modern England from 1530-1720. The context, here, was one of rising prosperity: the Tudor policy of encouraging wool manufacture, replacing arable lands with sheep, setting households to work in spinning and weaving, selling the manufactured cloth abroad, while forbidding the export of raw wool, seemed to be paying off.26 Such a concentration led to increasing returns, a division of labour, greater synergies within towns, new knowledge, and the emergence of a free internal market concentrated on market towns. Since farming sheep was
less labour intensive than farming crops, many were displaced from working the land directly, but at least some of these found employment in growing craft production within towns. With a rise in population, and households increasingly engaging in market activities, there was an acute shortage of coinage throughout the period. For out of the coins in circulation, many were centuries old, most were clipped, and the good ones were consequently hoarded by merchants for important transactions. Moreover, coins had to be accumulated for rents, tithes and taxes, for use in emergencies, for lending to those with pressing obligations or whose reputations were in decline, for landowners to pay large bills, and for merchants to engage in overseas exchange, and so they did not circulate frequently. Credit expanded rapidly to take the place of money in daily transactions in the form of deferred payment for goods and services. Debts were often not of borrowed coins at all; they were incomplete transactions. Payment dates were also subject to continual renegotiation, balancing the needs of creditors against debtors. Wherever possible, reciprocal debts contracted between various interested parties over a number of months could then be ‘reckoned’ or cancelled against each other, with only the remaining balance paid in coins. In this way, credit accelerated the velocity of money:27 Muldrew estimates that in the East Anglian port town of King’s Lynn in the 1680s every pound, as an abstract unit of account, would have changed hands once every ten days, while the majority of coins would have been retained by the rich merchants.28

Many writers of the early modern period attested to the fact that private credit, rather than coinage, was the main basis for the transfer of goods and services. The result, as both diaries and legal records show, is that all, whether rich or poor, had a multitude of debts owing to them, as well as owing debts to others. Early in the eighteenth century, Daniel Defoe in *The Complete Tradesman* argued for the impossibility of carrying on trade successfully without giving credit:

> He that gives no trust, and takes no trust, either by wholesale or by retail, and keeps his cash all himself... so no body is in debt to him, and all his estate is in his shop; but I suppose the Tradesman that trades wholly thus, is not yet born, or if there ever were any such, they are all dead.29

Hume’s farmers do not belong here. The phrasing is revealing: an estate is not ‘in his shop’, an inventory or a collection of coins, a private property in his own possession, but with other people in their obligations towards him. Even land was not ultimately a protection against debt, for it could be sold off to
keep debtors out of prison. The only significant form of wealth was ‘credit’ understood as a reputation – one for honest dealing, for care in repaying debts, and for ‘sociability’ or being obliging to others in their needs. Muldrew explains:

Wealth in this period is thus better thought of as a series of personal relationships with neighbours and God in which virtue, providence and fortune were all socially understood to be factors contributing to the condition and estimation of wealth by others.30

Wealth was not a possession but an attitude. Defoe made this difference between wealth as cash and wealth as credit explicit:

Of what fatal consequence then is the raising of rumours and suspicions upon the credit and characters of young tradesmen? and how little do those who are forward to raise such suspicions, and spread such rumours, consult conscience, or principle, or honour, in what they do? how little do they consider that they are committing a trading murther, and that, with respect to the justice of it, they may with much more equity break open the tradesman’s house, and rob his cash-chest, or his shop? and what they can carry away thence will not do him half the injury that robbing his character of what is due to it from an upright and diligent conduct, would do: the loss of his money or goods is easily made up, and may be sometimes repaired with advantage; but the loss of credit is never repair’d; the one is breaking upon his house, but the other is burning it down; the one carries away some goods, but the other shuts goods out from coming in; one is hurting the tradesman, but the other is undoing.31

The difference from what was to follow is extraordinary. To be wealthy was less a matter of having access to money than it was a matter of having access to credit. One’s wealth simply was one’s social standing; but, conversely, one’s social standing was one’s source of wealth. As such, it was insecure: in every sale on credit, in every act of standing surety for an associate or relative, one was exposed to the fortunes of others. An ability to pay one’s own debts was only partially dependent on oneself; it was also dependent on the actions of others. In each transaction, then, it was important to estimate the credit of the counterparty. If one did not sell upon credit, one would have no customers; if one did, one was exposed to the customers’ fortunes and degree of honesty. In this respect, wealth was interdependent. It mattered far less what one had in one’s shop, or that one enjoyed the benefits of luxury, than that one enjoyed the
benefits of reputation, and could call on others whenever need arose.

The dynamics of this economy of obligation were very different to the
dynamics of free market competition based upon self-interest, even though
this was largely a free market where the state had very little role. For there
was no complete estrangement of economic from social life: wealth consisted
in social relations, or specifically, in one's credit as estimated by others, and in
one's debtors' ability and willingness to pay. If rumours went around that one
was unwilling to pay debts, dishonest in transactions, spending beyond one's
means, or too idle to provide for oneself, then one's ability to trade could quickly
evaporate – few would advance goods. As a corollary, if one was slow in paying
one's debts, then rumours about one's character might start to circulate. This
economy of obligation was extremely insecure. Credit as reputation was far
more valuable than cash in hand: the diarists of this period, such as Samuel
Pepys, were not kept awake at night by the fear that some of their debtors might
never pay, for they expected to have to write off a portion of what was owing
to them due to the misfortune or poverty of their debtors. What kept them
awake was their own debts, for a reputation for paying honestly was the basis
for their credit. Account books were very poorly kept, but debts, sworn in front
of witnesses, were seared into memory. There was little need for the extraction
of a pledge to guarantee payment, for every purchase on credit involved staking
one’s entire reputation.32 People cared more for their social standing than they
did for their profits, for their creditworthiness was the basis for their survival. As
Defoe explained:

CREDIT is so much a tradesman's blessing, that 'tis the choicest ware
he deals in, and he cannot be too chary of it when he has it, or buy it
too dear when he wants it; 'tis a stock to his warehouse, 'tis current
money in his cash-chest, it accepts all his bills; for 'tis on the fund of
his credit that he has any bills to accept... in a word 'tis the life and
soul of his trade, and it requires his utmost vigilance to preserve it.33

These are heartfelt words: Defoe had gone bankrupt and was writing to earn to
repay his debts.

Yet this is only part of the story: it regards credit from an individual
(microeconomic) point of view. A person's trustworthiness was the
(macroeconomic) concern of whole towns and villages because of the
extensiveness of credit and the potential domino effect of default. The more
reliable people were in paying debts, or delivering goods and services as
promised, the more secure the chains of credit, and the greater the chance of
material security for the whole community.34 An interest in the moral conduct
of others was a concern for all: this is why there were campaigns to improve morals. The word ‘interest’ itself was not used in the sense of self-interest, but in the sense of mutual advantage. Honest trade was sociability and cooperation. It was conducted through extensive conversation and negotiation.

The growth of credit, even if an expression of a growth of cooperation, also led to a growth in risk and instability. Misfortunes such as a poor harvest, fire, or death, whether they struck one’s family, one’s debtors, or simply one’s customers, could have a significant effect. Instability was certainly a spur to competition, but competition was not simply for wealth or customers, but especially for credit. For among the misfortunes that could strike must be counted dishonest, lazy or profligate neighbours. In reaction to this, moral competition was far more apparent than economic competition: one had to cultivate a reputation for paying dues, honesty, diligence and thrift. In addition to this, the main economic effect was competitive piety – religious belief, virtue and honesty were regarded as the basis of moral virtue. For the basis for trust in promises in early modern England stemmed from the shared culture of Christian belief: one could trust one’s neighbours as fellow believers. One would trust above all others those who were most devout – and for the purposes of trade, unlike those of politics, the variety of Christian devotion itself was less significant than its authenticity. Above all, one had to use words both to persuade and to manifest transparently the decency of one’s character.

3. Measure for measure: William Petty, value and money

An abiding fascination with the skill of the wordsmiths of the Tudor and Stuart eras may be due, in part, to the heavy burden words had to bear in the daily interactions of the time – not merely in entertainment, as in the theatre or intrigues at court, but in the quotidian business of negotiating credit and exchange. Business negotiations would last for hours, and consisted of elaborate speeches appealing to need, conscience, morality, religion, and mutual interest. By contrast, how efficient, elegant, articulate and, above all, concise must have seemed those negotiations conducted by the offer of money. For where requests for credit could only offer vague assurances of future value, money could offer the substance itself. Money talks. John Briscoe – a man who imagined that the value of land itself could be invested into a paper sign by means of a land bank – was to argue in a pamphlet of 1695, A Discourse of Money, that gold and silver possess intrinsic value. Briscoe even attributed a lack of productivity to the parlous state of England’s coins, ancient, worn, clipped and highly underweight as they were – people would work for a fine, beautiful, and correctly minted new coin simply for its intrinsic value, but would not be willing to labour for the
worn and underweight. Of course, the ideas of this pamphlet were relatively insignificant in comparison to John Locke's effective arguments for a thorough recoinage, but they are, at least, illustrative of attitudes at the time: a correctly weighted coin is the antidote to all suspicion and hypocrisy. When discussing the advantages of collective depositing to form a bank, Briscoe observed: 'For in such a case men are ingag’d by stronger Bonds than can be had from Conscience, Religion, Honour, or any other specious Tye; because in these we may be sure there may be Hypocrisie, but in Interest we know there is none.' Likewise, when trust is sorely needed, how much more reliable it is to place one's trust in a coin than in a character.

Yet how radical to take this truthful speech of money in merchant's negotiations and turn it into a theory of language to displace all prior metaphysics. This is precisely what had been done four decades earlier by Thomas Hobbes: 'For words are wise mens counters, they do but reckon by them; but they are the mony of fools, that value them by the authority of an Aristotle, a Cicero, or a Thomas, or any other Doctor whatsoever, if but a man.' More formally, Hobbes expressed his account of the merchants' reasoning that was to replace the cleric's metaphysics like this:

In summe, in what matter soever there is place for addition and subtraction, there also is place for Reason; and where these have no place, there Reason has nothing at all to do... For REASON, in this sense, is nothing but Reckoning (that is, Adding and Subtracting) of the Consequences of the generall names agreed upon for the marking and signifying of our thoughts.

Just as in merchants' negotiations, knowledge, for Hobbes, consisted in taking an agreed object of the senses, clearly defined, and finding a numerical value for it. There is no place here for moral philosophy or metaphysics.

It was Thomas Hobbes' one-time protégé, the enlightened colonialist Sir William Petty, who applied this reasoning to invent the science of 'political arithmetic', and who was therefore regarded by Marx as the founder of classical political economy. Petty was one of the founding members of the Royal Society in London, but was unique among them in applying empirical investigation to economic matters. Although gaining a chair in medicine at Oxford at the age of 27 as a result of the fallout of the English Civil War, he was disillusioned with clerical influence in the university and its suppression of the new science, so he took a post as the physician to Cromwell's army in Ireland, and then volunteered to undertake a thorough survey of the entire land and economy of Ireland so that those who had funded the expedition, the so-called Irish Adventurers, could
be paid in equitable portions of land – some 2.5 million acres. Petty worked out his economic ideas through a painstaking survey of the conquered land and its livelihood. Petty was an ambitious political man, rather than a merchant, but sought to apply the merchant’s morality of truth-telling, diligence, and thrift to a whole nation through scientific calculation. The colonisation of comparatively undeveloped Ireland – Petty estimated that 85% of the population engaged in virtually no commodity exchange at all – provided the perfect opportunity for the application of political arithmetic. For Petty was convinced that Irish poverty was no more a result of their character or land than Dutch wealth was a result of theirs – it was simply a matter of organisation and opportunity to work.

Petty sought the basis of value in natural rent and necessary labour, rather than in any monetary comparison or measure, for money itself can vary in value, whether in place, time, or in the quality of its coinage. He suggested that one man could produce enough grain seed to provide subsistence for nine others apart from himself – this was the necessary labour, and the natural rent was the surplus product in addition to basic subsistence. The key political question was how to handle this surplus. Petty recommended redistribution through taxes, taking the surplus from the landed and idle and rewarding craftspeople and the industrious. Since thrift was the only way to enrich a nation, this would naturally be a consumption tax. The wealth of the public is diminished if tax goes the other way, and is imposed on ‘the Stocks of laborious and ingenious Men’ for the sake of supporting ‘such as do nothing at all, but eat and drink, sing, play and dance; ... such as study the Metaphysicks, or other needless Speculation; or else employ themselves in any other way, which produce no material thing, or things of real use and value in the Commonwealth.’ Specifically, Petty sought to reduce expenditure on defence, public offices, universities, clergy, lawyers and physicians, but also considered that the numbers of merchants and retailers in England could be significantly reduced. By contrast, the unproductive poor could be provided for out of the surplus, although it would be better if the able-bodied among them could be put to work improving highways, clearing rivers, building bridges and planting trees. This is thrift and industriousness considered on a national scale.

Of course, there are enormous over-simplifications involved in any attempt to put figures on such values. In particular, all labour is compared with simple, subsistence labour, as though skilled labour did not make any difference; similarly, subsistence products are assimilated to corn. The problem of making comparisons of heterogeneous values has not been solved. Petty was aware of such simplifications, but quoted simple estimates of figures in order to demonstrate the underlying principles. Clearly, a wealthy nation was not necessarily one that had the highest per capita production of corn. After all,
food is perishable, and Petty had a hierarchical notion of kinds of wealth based on degree of perishability, from food, through commodities, to property, land, and unperishable gold and silver. For all his interest in the division of labour and technological improvements, he still lacked a conception of capital as the means of production that is itself produced. Yet what is striking is that Petty, who invented the concept of the ‘velocity of money’, did not estimate the wealth of the nation in terms of its possession of durable coinage any more than by its possession of perishable corn. The quantity of money was not a measure of wealth. For just like a merchant, a nation lacking in coin is not necessarily poor, ‘For as the most thriving men keep little or no coin by them, but turn and wind it into various Commodities to their great Profit, so may a Nation also.’ He even calculated a quantity of coin needed for circulation; if a nation had too much, it could easily melt some down for plate, or send it out for trade where it is desired, or lend it out at interest. More pressing, in his day, was the converse problem of too little money, and on this issue he was both optimistic and prophetic: ‘We must erect a Bank, which well computed, doth almost double the Effect of our coined Money: And we have in England Materials for a Bank which shall furnish Stock enough to drive the Trade of the whole Commercial World.’

For all Petty’s seminal ideas concerning intrinsic value in relation to subsistence, labour and land, and their subsequent influence, via Cantillon and Quesnay, on Smith, Malthus, Ricardo and Marx, it was perhaps the financial revolution in England that succeeded in making his science possible by providing a practical measure for measure. Petty had already given one of the strongest arguments for a thorough recoinage back in 1682:

Qu. 1. Whether the old unequal Money ought to be new coined, and brought into a new Equality?
Answ. It ought. Because Money made of Gold and Silver is the best Rule of Commerce, and must therefore be equal, or else it is no Rule; and consequently no Money, and but bare Metal which was Money before it was worn and abused into Inequality.
England (1694). For a paper note, since it is merely the promise of money, has none of the disadvantages of wear, debasement and clipping. Moreover, paper notes can be printed in sufficient quantities to meet the requirements of trade and commerce. Most of all, while a paper note issued by an individual may not be trusted sufficiently to be transferrable, one issued by a bank or a sovereign state could be – with highly significant effects for lubricating investment. Banking, which converts illiquid bilateral debts into transferrable ones, could increase the rate of investment fourfold or more, even without direct bank loans to entrepreneurs – one hardly needs to seek further for the origins of capitalism. The decisive economic and cultural transformation which took place in the eighteenth-century as a result of the financial revolution is that an increasing proportion of trade took place as an instantaneous exchange by means of the transfer of paper securities, rather than by spoken credit agreements. Trust in paper with an institutional backing was more secure than trust in the individual who stood before one pleading. As a result, people proved their integrity by paying with money; and more transactions over greater distances could be conducted. Money, it would seem, offered the substance rather than the mere promise of value; and yet the money that was offered was still credit.

It was in this way that both the success and the insecurity of the credit economy of the seventeenth century set the demand for money. The initial impulse of the demand for money was competitive piety: the ability to pay in money was useful to prove one’s credit, one’s honesty, diligence and thrift. To pay with cash was to outdo one’s neighbours in respectability. This was the ‘intrinsic’ value that merchants saw in gold and silver: not simply that it was desirable in exchange, but that it could be used as an immediate offer of lasting worth. Moreover, money was desired as a public good: the greater the proportion of transactions effected immediately by money, the less the outstanding debts, and the more secure all would be from contagion by default. Such may have been the motivations for mercantilism, the policy of endeavouring to increase the stock of money in the country by subsidising exports of goods in exchange for money, and restricting imports. There was also a strong political case for the establishment of a bank. Yet, as if by an invisible hand, public benefits were transformed into private vices, for one could best contribute to this aspect of the common good – economic security – by means of the private pursuit of money. The greater the private accumulation of wealth, the more secure one was as an individual, and the greater the contribution one could make to the security of society by paying for one’s needs with money. Money, as opposed to credit, could even turn the principle of thrift upside down: it was through avarice and luxury that the wealthy could best contribute to the common good by passing their money on to others to spend. The satirist Bernard Mandeville’s 1705 *The
Grumbling Hive (later re-published with a commentary as The Fable of the Bees, or Private Vices, Public Benefits) describes this situation with the causality inverted because, in his opposition to moral education of the poor, he started with production as the fundamental reality: for him it was greed which, through trade and exchange, led to hard work to produce commodities for the common good. He delimited the common good to the goods that can be individually appropriated. By contrast, those whose primary concern was for the moral state of the commonwealth and the security of its credit, could sanction the pursuit of individual wealth for the sake of contributing to economic security and prosperity. It was hardly surprising that such a standpoint could be suspected of hypocrisy.

Most significantly, following the financial revolution and the printing of secure paper money, money could at last start to fulfil effectively its traditional role as the measure of values. For paper money merely signifies an abstract quantity, uniform and homogeneous. The value that it signifies is purely metaphysical. Of course, the value of that paper depends on trust in the bank’s ability to pay. When Sir Isaac Newton established the gold standard for the Bank of England’s note issue in 1717, the effect was not that people presented their bills for payment in gold, but quite the opposite: trust in the backing of paper by the ‘intrinsic value’ of gold was quite sufficient to lend value to paper. Of course, neither the paper nor the gold itself held any intrinsic value – the whole charade was a confidence trick. In economic life, things hold value only if sufficient people believe that they do; those who believe, however, can rarely acknowledge this without dissolving the basis for credit. Yet the basis of banking is quite simple, as J. K. Galbraith has explained:

The original depositor could get his money, for it was still there. So, alternatively, could the man to whom the deposit was lent. Both could not. The marvel of banks in relation to money – the wonder of creating deposits or issuing notes that so served – was suspended on one silken thread. That was the requirement that depositors or noteholders come in decently small numbers for the hard currency that the bank was under obligation to pay.55

Credit, when institutionalised by the establishment of a bank, does not cease to be credit. The measure for measure remains a degree of trust or credulity. Debt and value are constructed on the basis of trust. Subsequent economic expansion, with its multitude of financial crises, never ceases to remind us of this fact.

Perhaps the new morality of self-interest reached its ultimate
consequences in the South Sea Bubble of 1720. The South Sea Company had been founded in 1711 for providing a loan to the state: the company undertook to provide the money due to the army and navy in return for security on various duties and a monopoly on trading in the Pacific Ocean. But in 1720 it offered to take over all the debts of the State, estimated at over £30 million, in return for an interest rate of 5% for seven years, 4% thereafter. Such a scheme was extremely attractive to those who could afford to invest: the success of the initial subscriptions caused its share prices to rise from £126 in 1719 to £2,000 by June 1720. In response to this, a host of fraudulent companies were set up with share prices that also rose rapidly. On the basis of this rapid increase of merely nominal wealth, there was greater spending and overall growth. As a result of the rising prosperity and inequality, speculation fever took hold of the entire nation, with perhaps £300 million subscribed in total to different projects. Many of those who shared in the fever knew perfectly well that it was all a fraud, but hoped to make a profit by withdrawing before the others did. Even Sir Isaac Newton was dragged in, against his better judgement, and lost a considerable amount. The bubble was finally pricked by the South Sea Company itself, when, alarmed by the success of these other projects, it obtained a writ from the Lord Justices to dissolve the bubble companies. As everything collapsed, and thousands of families were bankrupted, the panic spread to its own shares. A handful of individuals were enriched at the expense of many. The ultimate result, however, was a shaking to the foundations of an economy based on personal credit, thrift, and sociability, for most had contributed to the destruction of the public welfare by their own self-seeking. While each might have repented of being caught up in the folly, the basis for personal trust could never be as solid as before. Payment, in the future, would be increasingly expected in the form of money. It was the national debt and the Bank of England that survived. And in spite of the nominal convertibility of Bank of England promises for gold, it was the notes themselves that increasingly became the object of credit, and the measure for measures of value.

4. Conclusion

Let us return, therefore, to the exceptional mutual distrust of Hume’s farmers. Why do they pursue their perceived self-interests at the expense of their own livelihoods? Why do their private vices yield no public benefits? A Nietzschean answer would offer a straightforward moralism: in their competitive bids for power, they do not wish to be deceived. Yet what remains to be explained is why they seek power, why their pursuit of power is unlimited, even at the expense
of their harvests and interests. Why seek power, when trust would be so much more advantageous to life? One cannot help but suspect that here, too, these farmers remain pious, and plough and harvest a purely moral ground. They take their fire from the flame lit by a faith that is but three centuries old, the same flame as Nietzsche, that power is the truth, that power is divine. It is time to spell out their genealogy.

Their forebears were Presbyterian tradesmen – real farmers, their lives ruled by necessity, could never have been so foolish as Hume imagines – whose pursuit of security in an unstable world destined them to honesty, diligence and thrift. For such tradesmen, in an economy based on deferred payments, the public good was upheld by personal morality. The pursuit of personal credit, as an ability to fulfil promises and complete transactions, was the basis for collective welfare. An appearance of personal piety was the strongest recommendation for personal credit, alongside prompt payment, honesty, diligence and thrift. Since wealth was measured more by one’s credit, by the estimates of others, than by one’s cash reserves, the pursuit of material wealth was a means towards the pursuit of social prestige in the form of creditworthiness. The value of values was purely spiritual: it measured character; it could not be directly quantified.

The most remarkable transformation was brought about by the transfer of debts to a third party. For one who pays with a reliable third parties’ credit note is like one who pays immediately with cash: not only is their own personal credit enhanced, and certainly is no longer under scrutiny, but they also benefit the seller as well as the security of wider society because the seller can, in turn, transfer the debt onwards. The most respected and transferrable credit notes of Hume’s era were, of course, those of the principal Scottish banks – the Bank of Scotland, and the Royal Bank of Scotland – as well as treasury bills issued by the Exchequer in London – Hume’s farmers could have solved their problems if they had sufficient money. Insofar as such credit notes were underwritten by the State with its power of taxation, they came with a reliable guarantee. Gradually, through the eighteenth-century, bank notes came to function effectively as money, in contrast to commercial paper that was widely distrusted after the South Sea Bubble. It was this that brought about the remarkable transformation of personal morality. Initially, one paid with cash and sought after cash, both for the sake of the public welfare, and for the sake of one’s personal reputation: using cash gave one better credit. Yet gradually, economic success came to be measured in terms of cash rather than measured in terms of credit. It was far safer to do business with those who were wealthy in cash terms than those who were poor, for they would be under less pressure to defer payments as customers or to impose harsh terms as suppliers, and so
those who were cash-rich grew more so. Moreover, the cash-value of assets could be directly quantified, leading to comparisons of more and less, and the pursuit of quantifiable profits. With no upper limit on the quantity of paper in circulation, the quest for claims upon the State in the form of money could become unlimited. The unlimited quest for power, power at any price, retained the social approbation formerly offered only to personal credit by enhancing the stability and welfare of all. Moreover, insofar as wealth was seen as a result of productivity, then wealth measured the productivity of individuals and their contribution to society. Our farmers have taken this quantitative competition one step further: here person measured himself against person for the first time. For where cooperation governs the economy of obligation, competition governs the economy of credit money.

Genealogies, of course, may simply be ‘just so’ stories. Our forebears do not tell us of the character or dynamics of our contemporary experience. Nevertheless, they may help to formulate research agendas by indicating where we might look beyond the surface of our contemporary world. The world of global finance continues to function as an economy of pure credit, where one only issues promises or exchanges the debts of others, and where reputation – especially that of central banks, sovereign states, and the principal banking corporations – is all. Yet the dominance of this financial world is maintained by a discourse of the competitive, self-maximising behaviour of individual rational actors, like Hume’s farmers, in flagrant disconnection with the boom and bust dynamics and credit crises of the interconnected financial world. In both cases, behaviour is regulated by preaching a kind of morality, even if such moralities cannot be easily reconciled. An account of how debt and value in this world come to be constituted via morality is the first step towards a revaluation of values.


2 See the discussion in Martin Hollis, Trust within Reason (Cambridge: Cambridge University Press, 1998) 41.

3 As Sir Mervyn King, the governor of the Bank of England 2003-13, observes in relation to an analogous case, the best outcome is supported by trust,
not money: ‘Trust obviates the need for money, and money without trust has no value. Perhaps it is trust that makes the world go round.’ *The End of Alchemy: Money, Banking and the Future of the Global Economy* (London: Little, Brown 2016) 83.


5 Nietzsche, *Genealogy* 39.

6 Nietzsche, *Genealogy* 41.

7 Nietzsche, *Genealogy* 44.

8 Unless the failure of his harvest led to him taking to sea to encounter other peoples as a British colonialist...

9 Nietzsche, *Genealogy* 61.

10 Nietzsche, *Genealogy* 49. Maurizio Lazzarato bases his account of the economy on this claim (*The Making of Indebted Man* (New York: Semiotext(e), 2012) 39-40). But this is the precise point which David Graeber disputes in Nietzsche, arguing that relations of communism and hierarchy are at least equiprimordial with relations of exchange, if not primary (*Debt: the First 5,000 Years* (New York: Melville, 2011). Lazzarato, in his retort, seems to have missed Graeber’s wider argument about the multiple bases for society; he finds Nietzsche’s theory uniquely valuable for explaining contemporary capitalism as making debt infinite and unpayable (* Governing by Debt* trans. Joshua David Jordan (New York: Semiotext(e), 2015) 84-7. Lazzarato’s reading of Nietzsche draws out the important dimensions of power, interiority, and temporality in the debt relationship, yet neither Graeber nor Lazzarato pose the crucial question of the basis on which trust is appropriate.


12 Nietzsche, *Genealogy* 49.

13 Nietzsche, *Genealogy* 49.

14 Nietzsche, *Genealogy* 44.

15 Nietzsche, *Genealogy* 53.

Nietzsche, *Genealogy* 44-5.


The point, here, is not that animals do not anticipate or fear; they clearly do. In this respect, animals, and perhaps even plants, are free. The point is that natural necessity presupposes a metaphysics of presence, while temporal acts of labour, desire, investment, care, attention and devotion can only be understood in terms of recollection and anticipation.


Weil proposed an improvement of Marxism inspired by Darwin’s improvement on Lamarck: to inquire into the conditions of existence of societies, rather than invoking a dialectical account of the progress of history. See *Oppression and Liberty* 56-61.


Note that Hume offers precisely this reason for the obligation to keep promises:
if one fails to do so, one's reputation will be lost; he saw no need for a pledge extracted by the threat of violence.


35 Muldrew, *The Economy of Obligation* 130.

36 This was indeed a source of political division: while the Whigs and merchant classes were broadly in favour of toleration, the Tories and landowners regarded the national fate as intimately tied up with the Church of England. It is difficult to appreciate today why such political divisions were so heated. An excellent illustration of this is the outcome of a fiery but paranoid sermon preached on 5 November 1709 by high churchman Dr Sacheverell, warning of the threat of dissenters within the church seeking to undermine it - some 250,000 copies were printed, as large as the total electorate, and riots ensued destroying dissenting chapels, with Sacheverell hailed as a hero. Religious unity was clearly seen as the condition for national unity and mutual trust, just as had been in relation to the 'Roman threat' of the previous century and a half.

37 This is, of course, the primary subject matter of the Book of Job - it was a perennial concern of economic life prior to modernity.

38 An allusion to such arts of persuasion is still present in Adam Smith's famous remarks about obtaining his dinner from the butcher, the brewer and the baker.


41 John Briscoe, *A Discourse of Money* (London, 1695) 136. Briscoe was actually an opponent of the Bank of England on the political grounds that a monied interest would put their own deposits first before the interests of state, but was one of the promoters of the Land Bank of 1697 that completely failed to attract any significant subscriptions.


43 Hobbes, *Leviathan* 32; emphasis in original.


The Irish who survived without commodity exchange must have been extremely skilled to provide for themselves.

Such principles, we may note, because of their reduction of quality to quantity, had eliminated methodologically all need for metaphysics.


Petty, *Quantulumcunque* question 1.

For an account of this effect of transferrable debt in enhancing liquidity and investment by solving the problem of the non-coincidence of wants in relation to time, see Nobuhiro Kiyataki and John Moore, ‘Evil is the Root of All Money’, *American Economic Review* 92 (2): 62-6, and the Clarendon lecture of 26 November 2001 available at: https://ideas.repec.org/p/edn/esedps/110.html

The way in which gold and silver might increase the wealth of the nation by replacing insecure credit agreements is missed in Adam Smith’s critique of mercantilism for ignoring productive resources in favour of stocks of gold. Smith’s view presupposes that money is not in fact a productive resource, but a mere means of circulation by replacing barter. See Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* volume 1 (Oxford: Clarendon Press, 1976), 49; on the mercantile system, see 429ff.


For example, it may be objected that Hobbes largely anticipated such a transformation. Yet Hobbes’ views were not widely regarded as morally acceptable; our concern has been with a widespread moral transformation.