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The Biopolitical Economy of Anti-Essentialism

Abstract

If we are to understand the nature of the relationship between a culture and its economy it is necessary to trace out the logic that informs the *apparently* disparate currents that make up that culture and its economy. There are any number of loci by reference to which this relationship might be discerned, but none are so important or profound, or for that matter so telling, than our body. Following on from two previous articles this essay approaches the subject by way of Foucault's understanding of the 'biopolitical'.[1] Through the issues of sexuality and eugenics we see how the logic informing early modern liberal philosophy worked itself out, coming to its full realisation in what is today referred to as 'anti-essentialism'.

The rise of anti-essentialism is concomitant with, if not identical with, the rise of capitalism proper. Anti-essentialism, both as a cultural and economic phenomena, is necessary for the rise to global dominance of capitalism. Although anti-essentialism is often thought of in terms of postmodernism and performance theory something of its logic was understood in the early modern period. And it was so by way of opposition to the growing defence and acceptance of free-market economics, which acceptance went hand in glove with a free market in credit and debt, which is to say in the liberalisation of anti-usury laws.

Cover Page Footnote

[1] These being, 'Promoting what we Oppose: Faith, the Free Market, and First Things' Solidarity: The Journal of Catholic Social Thought and Secular Ethics: Vol. 3: Iss. 1, Article 1, 2013; 'Promoting what we Oppose – Part 2' Solidarity: The Journal of Catholic Social Thought and Secular Ethics: Vol. 4: Iss. 1, Article 6, 2014.

The Biopolitical Economy of Anti-Essentialism Robert Tilley

I. Foucault and the Birth of the Biopolitical

In a lecture given on the 7th of January 1976, Michel Foucault observed how there was what he called a "strange efficacy" to the attacks directed at "traditional morality and hierarchy." He went on to expand upon this saying that "what has emerged in the course of the last ten or fifteen years is a sense of the increasing vulnerability to criticism of things, institutions, practices, discourses. A certain fragility has been discovered in the very bedrock of existence." And this especially so in those aspects "most familiar, most solid and most intimately related to our bodies and to our everyday behaviour." Everything once thought to be firm, solid, and lasting was instead so fragile that it was dissolving before our eyes, even our very bodies were proving to be less substantial than we might have thought.

Foucault's language alludes to the famous passage in *The Communist Manifesto* which sums up the effects of capitalism on traditional doctrines and institutions in a similar way: "All that is solid melts into air; everything sacred is profaned." Under the effects of capital things once deemed substantial and lasting begin to dissolve. The very essence of things is turned evanescent. Foucault's point was that in the preceding ten to fifteen years this process had picked up a pace such that its effects were now clearly discernible to all for the reason that that which is closest to one, namely one's very body, has likewise succumbed. The everyday becomes increasingly different to how it was experienced a decade or two previous.

Two to three years later, Foucault would pursue this theme in more depth in a series of lectures later published under the title *The Birth of Biopolitics*.² The role of the body, we read, had been completely subsumed into the economic machinery of production, which economy can be referred to under the heading 'neo-liberal'. But what exactly does this mean?

There is much in Foucault that repays close reading, and doing so soon puts the lie to the popular and misguided idea that he was a dedicated anti-capitalist, even a doctrinaire Marxist. His lectures on the Biopolitical are *not* in the order of an outright attack on neoliberalism. Indeed some feel (and I am sympathetic to their view) that one can detect something of a note of approval on Foucault's part.³ Contrary to what many think, it can be argued that Foucault was far from being a Marxist in anything but a very loose and qualified way.⁴ But

¹ Michel Foucault 'Lecture 1 of Two Lectures' in *Michel Foucault Power/Knowledge: Selected Interviews and Other Writings 1972-1977*, ed. C. Gordon (New York: Vintage Books, 1980), 80.

² Michel Foucault, *The Birth of Biopolitics: Lectures at the College De France 1978-79*. (New York: Palgrave Macmillan, 2010). Foucault discussed the theme of population control and power in an early series of lectures published under the title *Security, Territory, Population: Lectures at the College de France 1977-78*. (Basingstoke: Palgrave Macmillan, 2007). In brief his argument here is that in the eighteenth century the way in which power operated underwent a conceptual (and category) shift. From governing a nation of subjects, government ruled over a "set of natural phenomena" (352) namely a population described in terms of demographic regularities. Power, writes Foucault, now "has the population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument" (108). As will be argued below, undergirding and informing this turn was natural law understood in terms of mathematics.

³ For example see the comments by Philip Mirowski, *Never Let a Serious Crisis go to Waste: How Neoliberalism survived the Financial Meltdown*. (London: Verso, 2013), 61, 97-101.

⁴ See Jennifer Cotter 'The New Class Common- Sense Biopolitics, Posthumanism, and Love' in *Human, all too* (*Post*) *Human*, eds. Jennifer Cotter et al. (London: Lexington Books, 2016), 15-64. Cotter critiques Foucault (and Hardt and Negri as well as Agamben as well) to the effect that he 'spiritualizes' away the concrete fact of class replacing it with 'life' and the dialectics of labour and exploitation with notions of love (16, 18-21).

what he did set out to do was to take seriously the Marxist imperative to think through the relationship between base and superstructure; the ways in which the economy, politics and culture are inextricably entwined. Foucault's argument was that the best term to use today to clarify and explain this relationship was that of the 'biopolitical'.⁵

Foucault's argument in his series of lectures was that classical liberalism, in its economic, political and cultural expressions, was changing via an American inspired "anarchocapitalism" and for this reason how it is liberalism is to be understood has changed. The old traditions and hierarchies had, as it were, dissolved. The contemporary form of neo-liberal hegemony was rather different to that of classical liberalism.⁶ For a start, neo-liberalism sees the market as a "formal system" by which is meant that it needs no reference to anything outside of its own logic and dynamic. It is subordinate to nothing else, which ultimately means that all else becomes subordinate to it. This rise to dominance is seen especially so in the neo-liberal system's control over population; over what others call the powers of reproduction. Foucault stresses that these controls are not outside or even peripheral to the neo-liberal system, they are central to and integral to its operation. The system is self-regulating and self-referential; it is a formal system. ⁷ Contrary to how many would describe our world, Foucault argues that we are not a "supermarket society" but are rather an "enterprise society." Homo oeconomicus today is revealed as "the man of enterprise and production." Man is "an entrepreneur of himself...being for himself his own capital." This does not mean that our society cannot be described as a vast supermarket, but that informing this idea, dominant over this idea, is that of entrepreneurship. The reason for this is as follows.

The issues revolve around the concept of freedom, a concept integral to how modernity came to understand itself. But what kind of freedom are we speaking about when we discuss the nature of liberalism? Foucault's point is that there can be detected a change from a classical liberal understanding of freedom (one in which the autonomous individual acts responsibly as a civilian in a civil society, which society is oriented by a concept of progress that carries with it a reasonable hope for the perfection of humanity), to a more 'anarchist' concept of freedom (one in which all is subject to the entrepreneurial will, including the very concept of the self). Whereas the classical liberal held to humanist ideals, the neo-liberal ethos dissolves all such ideals. Indeed it dissolves all ideas of essence, which is to say of a nature proper to things, be this of the idea of a "bedrock to existence" or of something called 'humanity', or even the idea of the self. If God is dead, said Foucault, it is a mistake to think that His place is taken by Man. But what of the body, surely this was something with essence, a biological given, something solid and something definable? But even here, says Foucault, in "the last ten to fifteen years" a change is evident, it too becomes something less than solid. It is, however, a change that finds

[&]quot;Biopolitics and transspecies posthumanism articulate the 'spiritual aroma' – the cultural imaginary – of transnational capital now" (22). In an interview with G. Raulet, Foucault locates Marxist thought within a distinctively liberal genealogy and tells his interlocutor that he waits for a return to Marxism but one that liberates Marx from "party dogma" ('Structuralism and Post-structuralism' in Michel Foucault *Aesthetics*, *Method, and Epistemology*, ed. J. Faubian (London: Penguin Books, 1998), 458).

⁵ It ought to be noted here, at the beginning of this paper, that I will *not* in this paper be discussing the work of Deleuze and Guattari or that of Giorgio Agamben, figures whose names regularly occur in context of discussions on the biopolitical. The reason for this is that I want to discuss them in a later article, along with Derrida. As will be made clear in that future article I view these figures, to use a well-worn saying, not as part of the solution, but as part of the problem. I will argue that their writings represent a continuation of the biopolitical. They do so because *exactly when* they seem to oppose capitalism they promote it, for their writings (especially those of Deleuze and Guattari) embody and foster the obfuscating logic of a usurious ideology.

⁶ Foucault, *The Birth of Biopolitics*, 133.

⁷ Foucault, *The Birth of Biopolitics*, 20-1, 137, 171-4.

⁸ Foucault, *The Birth of Biopolitics*, 147.

⁹ Foucault, *The Birth of Biopolitics*, 226.

its earlier intimations back in the eighteenth and nineteenth centuries, and that with the birth of the idea of 'sexuality'. A term that today is found at the centre of most, if not all, cultural issues, it being the *cause célèbre* of identity politics especially in the Western world.

In his *History of Sexuality*, Foucault famously argued that the idea of 'sexuality' was a creation of the middle modern period, in particular the eighteenth and nineteenth centuries. By this he meant that in the pre-modern and early modern periods sexual acts were judged by reference to an often theologically informed morality and not by reference to later so-called scientific or medical categories which tended to naturalise these acts. Thus, prior to the rise of classical liberalism there was no such thing as homosexuality insofar as that term constituted a distinct category of sexuality; there was only the act, for example, of sodomy, which was an act to be assessed by reference to moral standards. It was the new scientific/medical line of reasoning that came to inform what we would call classical liberalism. A form of thinking that saw itself as enlightened by reason that it judged things under the strictures of observational science; by way of methods empirical and not theological.

As is well known Foucault went on to argue that this reasoning gave rise to different forms of discipline and punishment and to the ideal of a society run under the model of the 'panopticon', something made possible by the way in which the logic and values of this new dispensation became internalised by individuals. Interesting as this is it is not what concerns us here. What does concern us, however, is how this relates to the other very modern and classical liberal concern namely population control. Foucault writes that one "of the great innovations in the techniques of power in the eighteenth century was the emergence of 'population' as an economic and political problem." A little later he goes on to say that through "the political economy of population there was formed a whole grid of observations regarding sex."¹³ The rise of sexuality and population control form an inextricable bond and they do so concomitant with the rise of an increasingly dominant liberal economic philosophy. They do so under the aegis of what we would call 'scientism' an ideology in which the claim is made that science (here economic, medical and population science) operates indifferently and objectively, being informed by the very nature of things. Being so informed it demands the acceptance of all who are enlightened, not least those who exercise political and cultural power. It is this system that will ultimately work itself out into neo-liberalism, only the latter will end up turning on its progenitor, not least by calling into question any and all concepts of a nature proper to things. Hence, whereas the classical liberalism held to the death of God, neoliberalism has brought about (or attended) the death of Man; whereas classical liberalism held that there was an essence to things, neoliberalism inculcates and promulgates what is often referred to as 'anti-essentialism'.

When Foucault refers to a certain "fragility" having been discovered in the "very bedrock of existence" although we are tempted to read this as meaning the kind of traditional morality associated with pre-modern or early modern times, we would be mistaken. In a rather

¹⁰ Michel Foucault, *The History of Sexuality: An Introduction. Volume 1.* (New York: Vintage Books, 1990 [1976]), 40-43, 68.

¹¹ As Arnold Davidson put it in his book *The Emergence of Sexuality: Historical Epistemology and the Formation of Concepts* (Cambridge, Mass.: Harvard University Press, 2000): Prior to the 19th century questions of sexual perversity "were not cloaked in silence or secrecy, but were dealt with primarily in treatises of moral philosophy, moral theology, and jurisprudence, and not in medicine" (23). He thus follows Foucault in asserting that the "archaeology of perversion is a crucial stage in understanding the history of the twentieth-century self" (29). As we will see below, for Foucault this 'self' was one that was not be understood by way of identity but as a creative force, it being its own object of creation – in short, the entrepreneurial self.

¹² Foucault, *The History of Sexuality*, 25.

¹³ Foucault, *The History of Sexuality*, 26.

subtle way (and witty way – for Foucault was not only a very clear and elegant writer but a witty one as well) he was applying this to the traditions of classical liberalism, even (in other essays) to psychoanalysis and Marxism. We might say to the traditional givens of the contemporary left. I do not think it illegitimate to say that for Foucault neo-liberalism with its "anarcho-capitalist" concept of freedom, a freedom to make of oneself what one will, an entrepreneurial freedom, was exciting, liberating, and progressive. It is anything but conservative: "On the contrary, it is to be essentially progressive in the sense of a constant adaptation of the legal order to scientific discoveries, to the progress of economic organization and technique, to changes in the structure of society, and to the requirements of contemporary consciousness."¹⁴

The above is a rather lengthy introduction to this paper proper, but as Foucault is often the reference point by which discussion on the biopolitical begins (even as is often the case by way of critiquing him) then it seems appropriate to begin in this way. It also serves to highlight the issues that are dominant today and how it is they have developed over the middle to late modern periods. Given that the term 'biopolitical' is used by not a few theorists to refer to the trajectory of modernity it is appropriate then to turn to the topic of eugenics, for if there is one topic that has found wide acceptance across the various and often competing strains of modernity it is just this topic.

"Eugenics was a fundamental aspect of some of the most important cultural and social movements of the twentieth century, intimately linked to ideologies of 'race', nation, and sex, inextricably meshed with population control, social hygiene, state hospitals, and the welfare state," so wrote Frank Dikötter in his study on 'Race Culture'. 15 Dikötter went on to say, that "eugenics belonged to the political vocabulary of virtually every significant modernizing force between the two world wars," being embraced by those "from one end of the political spectrum to the other, including British conservatives and Spanish anarchists." It's a point Marius Turda takes up and pursues in more detail. Eugenics, he writes, is the "emblematic expression of programmatic modernism." A program that, being entwined with the newly arising politics of population control, came to be associated with "nationalism, liberalism, social democracy, anarchism, communism and fascism." Turda writes how "Biopolitics... operated through investigations of biological processes regulating the triadic relationship between the individual, the nation and the state." For this reason a "new rationality was needed as the foundation of the modern biopolitical state." ¹⁹ It is this new rationality that is summed up under the term the 'biopolitical' and which serves to unite the otherwise disparate currents of modernity. What tends to be obscured in a good deal of discussion on eugenics is that although eugenics has a role in those aforementioned disparate currents it nevertheless represents a logic that finds its origin and locus proper in cultural and political liberalism and, thereby, in capitalism. An argument that the history of eugenics bears out.

Many people tend to identify eugenics with its best known and abhorrent expression, namely the Final Solution of Hitler's Germany. But Hitler's Germany was comparatively late on the scene in terms of programmatic and state intervention in matters of population control, whereas it was those countries informed by developing liberal philosophies that led the way,

¹⁴ Foucault, *The Birth of Biopolitics*, 161-2.

¹⁵ Frank Dikötter, 'Race Culture: Recent Perspectives on the History of Eugenics,' *The American Historical Review* 103, no. 2 (1998): 467.

¹⁶ Marius Turda, *Modernism and Eugenics*. (New York: Palgrave Macmillan, 2010), 2.

¹⁷ Turda, 1.

¹⁸ Turda, 113.

¹⁹ Turda, 112.

providing the model and the spur for the Nazis.²⁰ Liberalism and its attendant progressivism were very much in the forefront of population control and thus eugenics, not least as a means of colonial *and* post-colonial management of what we might now call the peoples of 'developing nations'.²¹ A practice that had an important role to play in Cold War politics to contain the spread of communism to poorer countries.²²

It is not the intention of this paper to rehearse the history of eugenics and population control, something already done not only in the works already cited but in other works besides. Rather is the aim of this paper to tease out something of the deeper logic of eugenics and, thereby, to shed light on the nature of the biopolitical as the locus of the relationship between economic and cultural liberalism.

There are two general currents in the history of modern eugenics, the preoccupation of one has to do with racial purity and regeneration, the other with class politics and an attendant concern over the economic well-being of the state. Both express themselves by reference to the so-called science of population control. The two currents cannot so neatly be separated off, for it is clear that class politics often informs racial concerns, and *vice versa*. At a deeper level we will see that what informs both currents is the language of a specific economic theory, one informed by the rejection of premodern and early modern theological concepts concerning the very constitution of nature and, concomitant with this, the revisioning of the *raison d'etre* of morality. The language of morality is often invoked but what now informs the *telos* or purpose of morality are the principles of efficiency and productivity, which principles are, from the late

²⁰ See: Edwin Black, War Against the Weak: Eugenics and America's Campaign to Create a Master Race. (New York: Four Walls, Eight Windows, 2003); Rodger Griffin, Modernism and Fascism: The Sense of a Beginning under Mussolini and Hitler. (New York: Palgrave Macmillan, 2007). Griffin writes that Auschwitz represented a modernist purity, a "vast biopolitical sewage works, a technocratic installation where human waste products were disposed of" (333); Richard Weikart, From Darwin to Hitler: Evolutionary Ethics, Eugenics, and racism in Germany. (New York: Palgrave Macmillan, 2004); James Whitman, Hitler's American Model: The United States and the Making of Nazi Race Law. (Princeton: Princeton University Press, 2016).

²¹ See Michael Freeden, 'Eugenics and Progressive Thought: A Study in Ideological Affinity' in his collection *Liberal Languages: Ideological Imagination and Twentieth-Century Progressive Thought*. (Princeton: Princeton University Press, 2005). On post-colonial programs see: Mark Mazower, *No Enchanted Palace: The End of Empire and the Ideological Origins of the United Nations*. (Princeton: Princeton University Press, 2009), 49, 62, 111-114. It was only with the rise of Nehru and the formation of what used to be called a 'third world' block that the dominance of white European concerns began to be checked (25, 169). See also Duncan Ivison, *Postcolonial Liberalism*. (Cambridge: Cambridge University Press, 2002). One might also note how the Biopolitics of population control especially of poorer countries is still being played out, albeit under a more 'enlightened' discourse of women's reproductive rights and matters ecological. See, Matthew Connelly, *Fatal Misconception: The Struggle to Control the World Population*. (Cambridge, Mass.: The Belknap Press of Harvard University Press, 2008). The more polemical and politically informed critique of this as a rule comes from Christian, more specifically Catholic authors. For example see the essays in Michael Cook, ed. *The New Imperialism: World Population and the Cairo Conference*. (Sydney: Little Hills Press, 1994); Jacqueline Kasun, *The War Against Population: The Economics and Ideology of World Population Control*. (San Francisco: Ignatius Press, 1999).

²² This included the dissemination of contraception and increasingly the introduction of abortion rights in developing countries. This anti-communist tactics found a place in the 1960s rise of so-called counter-culture sexual libertarianism. See: David Allyn, *Make Love not War: The Social Revolution an Unfettered History*. (Boston: Little, Brown and Company, 2000). Allyn notes that a key moment came when President Lyndon B. Johnson announced the promotion of birth control abroad in order to stop the "explosion in world population and the growing scarcity in world resources" (30). At the time some in America saw the reason behind the promotion of population control differently. Thus, the NAACP in 1965 charged Planned Parenthood with helping Negroes to commit racial suicide (40). Carrie Pitzulo, *Bachelors and Bunnies: The Sexual Politics of Playboy*. (Chicago: Chicago University Press, 2011). Pitzulo writes that attempting "to minimize the influence of communism on unstable regions, American foreign policy increasingly focused on overpopulation in the Third World" (162).

eighteenth century on, often presented under the language of 'hygiene'. The presence of too many people (and that predominantly of the wrong type) spells problems for the body of the nation as well as being a source of the corruption and degradation of the land. These problems will first of all be evident in matters economic and thus must be answered by reference to economic principles, something writ large in the writings of Thomas Robert Malthus (1766-1834).

II. The Malthusian Moment

Malthus represents the more congenial face of population control in that he is not an early advocate of what would later be termed eugenics (a term coined later in time by Francis Galton). Indeed, it is argued that his arguments arose in part to *oppose* utopian ideas of human perfectibility, ones associated with the likes of William Godwin and the Marquis de Condorcet. As eugenics would later come to be associated with the idea of the perfection of the human species (or a part thereof), then is it just, some may ask, for Malthus to be seen as an early progenitor of eugenics simply because he advocated forms of population control? Rather, ought not Malthus to be understood as following in the line of the Scottish Enlightenment of figures such Hume and Adam Smith whom he admired?²³

Malthus was concerned not only about the risk of famine due to the failure of agriculture to keep up with the population of the British Isles, but of the kind of social and political upheaval that such a famine would bring. Especially among those who had fallen under the influence of those revolutionary ideas present on the Continent. The French Revolution was a concern for many, especially those in the more favoured classes, a concern that was exacerbated by the series of constitutional crises between the then monarch, George III, and parliament.²⁴ Malthus was representative of the enlightened, progressivist, and liberal politics of his day, he was in short a Whig. But he was a Whig to err on the side of caution. His politics were tempered by the rejection of the kinds of 'metaphysical' claims that attended the rise of the French Revolution. Claims that informed the aforementioned utopian-like beliefs of thinkers such as Godwin. (This rejection of matters metaphysical in the field of politics and culture was most famously expressed by Edmund Burke in his critique of the Revolution when he traced its utopian ideas back to what he claimed to be the metaphysics of Rousseau.) We might say that Malthus' was a politics of cautious improvement rather than zealous perfectibility. In this he represents the dominant current in British liberalism, with what has come to be referred to as 'classical liberalism'. Nevertheless, as Foucault noted, classical liberalism would give rise to and be succeeded by neoliberalism and, as a consequence, to the dominance of the biopolitical, with all of that it entails, including, of course, eugenics. It is with eugenics that the belief in the perfectibility of humanity (or a part thereof) again comes to the fore and that attended by the claim of being expressive of modern developments in the sciences.

Much of this may be a problem of definition insofar as when people spoke of the *perfectibility* of humanity they meant something like the greater *improvement* of humanity. It is a fine line between the ideas of improvement and perfection in any political vision informed by the idea of progress. As we will see a little later in this article, in more recent times the biopolitical logic inherent in liberalism *is* working itself out in a way that promotes a vision of

²³ See Roy Porter 'The Malthusian Moment' (57-72) in *Malthus, Medicine, and Morality: 'Malthusianism' after* 1798, ed. B. Dolan (Amsterdam: Rodopi, 2000), 58-59.

²⁴ See Nobuhiko Nakazawa, 'Malthus's Political Views in 1798: A 'Foxite' Whig?' *History of Economics Review*, 56, no. 1 (2012): 14-28. For a general background of the period see, Jennifer Mori, *William Pitt and the French Revolution*, 1785-1795. (Edinburgh: Keele University Press, 1997).

progress that entails far more than merely an 'improvement' of the species, rather than perfection the vision is one of transformation.

Here we need to go deeper into the logic of classical liberalism so as to see the *continuity* between it and neoliberalism, to do so by charting out their common origin and how they work themselves out in the rise to dominance of the biopolitical. In order to do this we need to turn to matters economic.

Malthus was a proponent of political-economy and for this and other reasons scholars trace out the influences on his ideas of theorists such as Adam Smith and Ricardo. But as Samuel Hollander has argued whatever served to influence Malthus was not taken on board in an uncritical fashion. Though he corresponded a great deal with Ricardo, Malthus thought his work needed improving and that he was the man to do it.²⁵ The point here is that Malthus did so (following the method of those who preceded him) by way of mathematics. Fundamental to his arguments, as he himself allowed, was the "arithmetic ratio" of food increase to the "geometric ratio" of population increase.²⁶ Here was the equivalent of the Golden Mean in things social and political.

It has been said that Malthus' arguments were not new, that others had preceded him, that although he met with informed and often strident criticism that these arguments won out by reason that they were not solely Malthus' own. ²⁷ All of this is no doubt true, but issues of authorship of ideas to one side what these arguments witness to is that given the underlying principles of modernity there was a certain inevitability in the working out of its logic, and that on a global scale. Every area of life, inclusive now of human life in its most intimate and basic of concerns, namely reproduction, was coming under the sway of this logic. As we will see below, it would become a truly global ideology. It might be said by historians of ideas that Malthus was the lucky one who "caught the tide" (as Smith has it²⁸), but fair or unfair to others who preceded him he now stands as the locus of the rise to dominance of a distinctly *liberal* political economy which would later develop into 'the biopolitical'.

What kind of logic was it that informed the thinking of Malthus and the economy under which he lived? The answer is not hard to divine given what has been noted above, it was the logic of mathematics. Science and mathematics came to be seen as being of a piece, for with the rise to dominance of empiricism in order for a science to be a science proper it needed to quantify results and (almost inevitably) it thereby quantified those things that were the subject of those results. It is well known that the means by which we study a subject can shape the way we think about that subject. Hence the imperative for hermeneutics whereby we study the ways in which we study. It is of utmost importance that a researcher pay close and critical attention to their method so that he or she does not end up defining the object of their study by way of that same method. All too often the result of our study can be that our findings are little more than artefacts of the method employed. To study things human by way of sciences that employ mathematical means will result in seeing things human in terms of mathematical quantities that can, thereby, be manipulated as one might manipulate the numbers on a page. It was this that informed the arguments and thus the findings of Malthus, just as it informed those criticisms levelled against him. Malthus was wrong because he got his maths wrong, not because he was

²⁵ Samuel Hollander, *The Economics of Thomas Robert Malthus*. (Toronto: University of Toronto Press, 1997).

²⁶ Hollander, 13, 18-21.

²⁷ See Kenneth Smith, *The Malthusian Controversy*. (New York: Routledge, 2006 [1951]).

²⁸ Smith, The Malthusian Controversy, 324.

using an inappropriate method. It needs to be stressed that among those who mattered, he was neither critiqued for his assumptions nor for his method.²⁹

The proper study of humanity, as well as the subsequent governing and shaping of humanity, were to be carried out informed by the strictures of modern science, which science was informed by the discipline of mathematics. It is important to understand that this approach to the study and governance of humanity was, in early modernity, evident in the rise of an economic theory based on an understanding of nature very different to that which preceded it in Scholasticism. A theory that would champion liberalism by reference to the freedom of the markets which came to include the freedom to lend money at interest, as well as early forms of what we would now call currency speculation. In short, an economic theory and practice that would soon develop into what we call capitalism.

Contrary to what is popularly thought, Adam Smith was not the founder of capitalism in any sense of that term. Some may claim him as being its first modern systematiser but even that is somewhat dubious. Perhaps like Malthus he ought rather to be seen as the one who "caught the tide" at its peak and who has, thereby, come to be the identifiable locus by reference to which capitalism began to come clearly into its own. Adam Smith could be called one of the first and most able defenders of early capitalism in that the primary intent of his work Wealth of Nations was to argue that capitalism needs to be defended against those factors that will hamper and even destroy it, chiefly monopolies. (Smith, of course, does not use the term 'capitalism' as it was not as yet coined.) If we were to look for an earlier figure with a greater claim to being the earliest systematiser of early capitalism then a prime candidate would be Sir William Petty (1623-87) and that by reference to his work *Political Arithmetick* (1690). Certainly the historian of economics Alessandro Roncaglia argues, with due qualification, along these lines.³⁰ Petty was an early champion of the extension of the natural sciences to cover the social sciences, and that by way of the "quantitative method." This method, Petty argued, consisted in "reducing many terms of matter to terms of number, weight, and measure, in order to be handled mathematically."31 In his method Petty followed the lead of those earlier philosophers (as well as contemporary ones) who rejected Scholastic metaphysics for a method that, it was held, was empirical being based upon a materialistic-mechanical view of the universe.³² A view well expressed by Galileo who wrote, "This great book which is open in front of our eyes – I mean the universe – ...is written in mathematical characters."33 By this Galileo meant to depict the universe as a machine, for machines were the examples wherein the principles of mathematics were most clearly seen as being operative.³⁴

²⁹ Of course there were those who did critique Malthus and later advocates of population control and eugenics on just this score. But by and large these were the religious, especially by way of the teaching of the Catholic Church. But the very fact that these critiques were (and still are) treated as being beyond the pale, of being of religious sentiment and not so-called science, hence that should have minimal say in the secular economic and political realm, evidences just how dominant the logic is of programmatic modernity.

³⁰ Alessandro Roncaglia, *The Wealth of Ideas: A History of Economic Thought.* (Cambridge: Cambridge University Press, 2006). For a history of Petty see Ted McCormick, *William Petty and the Ambitions of Political Arithmetic.* (Oxford: Oxford University Press, 2009). Petty, in my opinion, ably stands as representative of those theorists and defenders of capitalism who manage to find employment under the auspices of government. Petty applied his methods to Ireland when hired by Cromwell to do what we would call a demographic survey of that land. Providence clearly smiled upon Petty for he managed in the process to enrich himself. We might note that some hold Petty's friend John Gaunt (1620-74) to be the author of modern demographics.

³¹ Roncaglia, 55.

³² Roncaglia, 55-56.

³³ Cited in Roncaglia, 57.

³⁴ History is rarely a matter of smooth transitions, hence in the sixteenth and seventeenth centuries differences in viewpoint as to acceptable methods are clearly evident. See by way of example the work by James Barry Jr on

III. A Change in the Concept of Nature

This fundamental change in the way in which the world and all that it contains, including humanity, was to be understood (and thus studied, governed and shaped) is well known, indeed for most (if not all) historians of ideas it is this change that defines the beginning and rise of modernity proper. It is this change that will later give rise to what Turda refers to as the common element in programmatic modernism, namely eugenics and the rise to dominance of Foucault's biopolitical neoliberalism. When Foucault spoke of neoliberalism as a formal system and did so in order to characterise the nature of the biopolitical, the meaning is not, at first, clear. When we understand, however, that the birth of modernity is attended by the rise of a new view of nature, one that specifically excluded Scholastic metaphysics (and for an increasing number *all* metaphysics), which exclusion was expressed in the dominance of mathematical modelling and quantifying, then Foucault's meaning becomes clearer. If there is one discipline that is, above all others, expressive of a formal system then it is mathematics. Everything, including human life and the body itself, has become subject to the strictures of this formal system. A formal system which makes itself felt through the economy of capitalism, in particular its late modern and global form, namely neoliberalism.

In his essay on the rise of economic individualism, Alfred Chalk, following on the work of Harold Laski and H. M. Robertson (and to a lesser degree R. H. Tawney), detailed how all of the major components of free market theory, those later championed by Adam Smith and other eighteenth century figures, were to be found in the literature of the latter half of the sixteenth century in England.³⁶ Chalk's argument is that the rise of economic liberalism attended the change in the way natural law was understood. "In brief, the spirit of Thomism was, in most respects, the antithesis of that which was later to prevail during the liberal revolution." This was especially the case in respect of the pursuit of self-interest in matters of business and profit.³⁸ The upshot was that state regulation of the market was to be rejected

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the differences between Bacon and Descartes, and later between Descartes and those that followed after (Measures of Science: Theological and Technological Impulses in Early Modern Thought. Evanston, Ill.: Northwestern University Pr., 1996). However, it is also true that there is one dominant current of thinking that wins the day. As Edward Dolnick puts it in his book The Clockwork Universe: Isaac Newton, the Royal Society and the Birth of the Modern World (New York: Harpers, 2011) in the course of the seventeenth century the faith was that "all things are numbers" (124), and that science is the "language of mathematics, the measure of quantity" (95).

History. (Cambridge: Cambridge University Press, 2013). Outram notes that the term 'political economy' is first used in 1615 to describe the science of production, of buying and selling, and their relationship to the law, custom and government (43). Frederick Beiser wants to qualify this view somewhat in his *The Sovereignty of Reason: The Defense of Rationality in the Early English Enlightenment*. (Princeton: Princeton University Press, 1996). Certainly, rationalism represented the rise of a new concept of the natural sciences. Rather than these sciences being understood through the lens of metaphysics, they came to be understood by way of mathematical and mechanical models. Only there were those who resisted this (16). This is true, only the current was heading to the new model's dominance. See too the thesis of Alasdair MacIntyre, *After Virtue*. 3rd ed. (Norfolk: Duckworth, 2007): 82-5. Joel Kaye in his *Economy and Nature in the Fourteenth Century* (Cambridge: Cambridge University Press, 1998) argues that we already see in the fourteenth century a turn to understanding nature in terms of mathematics, which turn was beginning to be expressed as well in economics. But in response we might note that in the study of history it is not so much about what was or was not *present* but what was *dominant* that defines an age.

³⁶ Alfred Chalk, 'Natural Law and the Rise of Economic Individualism in England,' *Journal of Political Economy* 59, no. 4 (1951): 332-347.

³⁷ Chalk, 'Natural Law and the Rise of Economic Individualism in England,' 332.

³⁸ One might qualify somewhat Chalk's argument. In fact questions as to what constituted a just price in relation to profit and the self-interest of the seller were not unique to these late sixteenth century thinkers. The Scholastics had pursued this issue, not least St Thomas himself. For this reason some, like Joseph Schumpeter have argued that the Scholastics have their place as well in the history and formation of capitalism. See, Rodrigo

(in certain cases some authors made an exception, noticeably in the case of trade between nations – but these too would soon come to be rejected). The belief was that the liberal concept of freedom was expressive of and in harmony with "the law of nature," a freedom expressed pre-eminently so in the individual acting in his own best interest. If the state were to thrive then this freedom ought not to be hampered. The early modern liberal theorists repeatedly referred to the futility of opposing these laws of nature. "During the early decades of the seventeenth century the conviction that the flow of trade was subject to inexorable natural laws was becoming a commonplace."³⁹ Exemplifying this is the comment from an economic document that Chalk sees as especially significant, one dated December 4, 1550: "Nature will have her course."⁴⁰ The argument being that it is best, then, that the state keeps out of Nature's way and not impose artificial price controls on the market. In the same spirit, William Petty would later write of the "vanity and fruitlessness of making Civil Positive Laws against the Law of Nature." That Nature should agree with men set on making a profit is serendipitous indeed, no wonder then that the same kind of language will continue to be used and that in the discourse on population control. We find it employed over a century later in the writings of Malthus who opposed the reformist zeal of the likes of William Godwin. Godwin thought that with the granting by a government of political equality many of the troubles between people would come to a halt. But this was not the case, for the spanner in the works, Malthus argued, "was not government but nature.",42

IV. Nature as a Closed System

The change in the concept of nature that attended the beginnings of early capitalism is summed up by Chalk so: "The great creative minds...gradually came to view the world as an intricate machine in which each part played a role that was rigidly predetermined by inexorable laws." Laws expressed in mathematics, ones which favoured the pursuit of gain, self-interest, and an individualism that was not to be unduly imposed upon by the government.

There is, however, another significant change that began to take place, one that answered to the incipient logic of liberalism; a change that will call into question this early modern concept of nature as the determinative principle by which social matters must be regulated. The language of the first liberal proponents of what would later come to be referred to as the free market is that of an opposition to Scholastic metaphysics, but later theorists would argue that this opposition was not consistent enough. These earlier figures were still under the spell of Scholastic metaphysics. Thus, for all of its break with what went earlier nevertheless the early modern liberal understanding of freedom is informed by a classical, even Aristotelian, concept in which freedom names a positive state wherein one is in accord with Nature proper. Freedom is not simply a negative state that names a 'freedom from' but rather a 'freedom for'. To be free is to accord with Nature with a capital 'N'. But following on from the critiques of Hobbes, Descartes, Locke and Hume any idea of a metaphysical system by which man must draw himself into accord with Nature is increasingly brought into question.⁴⁴

Muñoz de Juana, 'Scholastic Morality and the Birth of Economics: The Thought of Martin de Azpilcueta,' *Journal of Markets and Morality* 4, no. 1 (2001): 14-47. However, Chalk is right, in my opinion, to argue that the concept of nature behind the changing views as to what constituted a just price had changed significantly so. ³⁹ Chalk, 339.

⁴⁰ Chalk, 337.

⁴¹ Chalk, 343.

⁴² Porter, The Malthusian Moment, 59.

⁴³ Chalk, 'Natural Law and the Rise of Economic Individualism in England,' 343. It ought to be noted that Chalk is not unfavourable to this development in economic thinking.

⁴⁴ On what is called by some the rise to dominance of the 'historicist' philosophy in eighteenth to nineteenth century liberalism, see Robert Denoon Cumming, *Human Nature and History: A Study of the Development of*

As touched upon above, those who believed in the perfectibility of humanity were characterised as utopians, thinkers who were still under the spell of metaphysics. For this reason they were held to be imminently impractical men who would lead the world into bloodshed and ruin. It is the same argument employed in more recent times against 'utopians' of all stripes, especially those who advocate a different system to that of neoliberal capitalism. It is found, for example, in Hannah Arendt's influential critique of totalitarianism, a work that became something of a talisman for late twentieth century liberalism. It is a line of thinking that has, since at least the latter part of the eighteenth century, become the dominant position in liberal thinking. But that it wasn't always so needs to be stressed, for in registering this change we are better placed to see what it is that constitutes the essential elements in both economic and cultural liberalism, and how this logic informing liberalism will be played out. It is an effect alluded to at the beginning of this paper when we cited Foucault's comments on the solidity of things becoming increasingly fragile. Comments which bore the imprint of Marx's statement that under capitalism "all that is solid melts into air."

Early liberalism is informed by a profound change in the conception of the universe. It is a change that is evident both in those who kept to the earlier form of religious belief and those who didn't, who instead chose to progress to what they considered to be more enlightened views. In studying the early modern period there is thus some confusion for similar concepts can be found operative in those who claim to Christian orthodoxy and those who do not and who are, in fact, opposed to it. The clearest example of this is in the seventeenth into the eighteenth century in respect of those who have been termed 'Deists'. The term has come to be considered by some historians as of limited value, even at times a bit misleading for it can cover a number of different views. However, the term does have its uses when it serves to denote those who came to hold to an essential autonomy to creation while not entirely excluding the existence of a God other to creation. An autonomy congenial to both the Deist and the atheist (indeed for this reason the Deist was often referred to as an atheist), and an autonomy more often than not discoursed upon under the language of mathematics. It is this autonomy that constituted the freedom of creation, albeit a freedom that is expressed in terms of inexorable laws to which we humans ought to comply which laws were expressed in mathematics. An autonomy that informed the idea of Nature referred to above. Hume would later call into question whether there really were any actual inexorable laws, and if so are they even knowable? Contrary to what is popularly thought, Hume's work, the Dialogues Concerning Natural Religion (1779), is not primarily aimed at revealed religion, but rather at the kind of religion that affects to trace out the divine mind in the mechanics of the cosmos – in short what we would call Deism or more recently Intelligent Design.

What one sees taking shape from our early economic theorists on, through Hobbes and Descartes, to Locke to Hume is an aversion to and then rejection of any and all metaphysical language, and any reasoning founded upon that language. Concomitant with this was a reconsideration of morality, for if traditional morality was based upon theological and metaphysical givens, which givens sat ill with the now posited autonomy of Nature, then what kind of morality answered to this the modern age? What kind of morality attended the new

Liberal Political Thought, Vol. 1. (Chicago: Chicago University Press, 1969). Denoon traces the rise of 'psychological' and social categories in place of earlier metaphysical ones by which human nature and the state were to be understood and improved upon. By 'historicist' is meant here the idea that "all questions of political institutions are relative, not absolute..." (23, Denoon is here quoting John Stuart Mill). That is, they are not metaphysical questions answerable to by metaphysical answers, rather are they subject to the vicissitudes of historical contingency. With the post-modern turn in the second half of the twentieth century it will be argued that even this historicism was informed by a 'white mythology' that instantiated a Eurocentric privilege (see Robert Young, White Mythologies: Writing History and the West. (London: Routledge, 1990)).

economy? For some, like Mandeville in his famous *The Fable of the Bees: or Private Vices, Publick Benefits* (1732), what was once considered vice and destructive of the social commonwealth, ought now to be considered conducive to its health! Vice, self-interest, and luxury are essential to the prosperity of a market economy. ⁴⁵ They answer to the mathematical models that express the autonomy of nature, a nature which, in matters social, is best expressed in the free-market economy.

To recap, the dominant current of thinking was that Nature is a machine to be studied and manipulated by way of the empirical sciences informed by mathematics. This manipulation can only be effected by bringing our processes and methods into accord with the laws of this machine, hence the central importance of mathematics. ⁴⁶ Thus, Julien de la Mettrie's work *Man a Machine* (1747) argued that nature exhibited a "built in finalism" that required no explanation dependent upon anything external to nature. ⁴⁷ Man is no exception, it is in this sense that he is a machine, albeit subordinate to the greater machine that is Nature. Nature being autonomous in that it defers to nothing other to itself (be it to God or Platonic like Ideals) approximates to a formal system. It is a formal system insofar as it is a *closed* system. ⁴⁸

But as the logic of this approach works itself out something strange begins to become apparent; although a machine conjures up images of solidity and weight, Nature understood as a machine begins to seem rather ethereal. There begins a decline into insubstantiality. A decline that will become fully apparent, as we will see below, in more recent decades. It is a logic that begins to make itself felt in the arguments of David Hume. Not only is the discipline of metaphysics rejected (that's pretty much a given by Hume's time) but any idea of a nature proper to things that can become the basis for a hard and fast epistemology becomes increasingly tenuous, if not dubious.

⁴⁵ See Joseph Cropsey, 'Adam Smith' in *History of Political Philosophy*, eds. Joseph Cropsey and Leo Strauss (Chicago: The University of Chicago Press, 1987). Cropsey details something of the connection between "liberal capitalism" and the "sceptical" and "scientific" principles upon which Hume set out to found all philosophy (636). In this, Cropsey argues, Locke led the way (641). For Hume and his like-minded colleagues the engine of progress "was the ignoble desires and strivings of man, channelled through the economic institutions of production and distribution" (656).

⁴⁶ As Richard Olson notes in his *Science and Religion 1450-1900* (Baltimore: The Johns Hopkins University Press, 2004) by the mid-16th century there were any number of different takes on 'nature' and thus on the character and ends of science (47). There was thus a "striking rise in the number of works devoted to natural theology" especially in England in the 17th century (85). The methods used in the pursuit of science might be shared but assumptions could differ as to what they were founded upon and to what end should they serve. In a like manner the understanding of mathematics could differ. But this is so to this day. As Reuben Hersh notes in his book *What is Mathematics Really?* (London: Jonathan Cape, 1997) there are two basic views about the discipline: one he calls Formalism by which is meant that mathematics only describes its own rules (7); the other is Platonism wherein the discipline defers to real Ideals or Forms (9). But by and large the development evident in the modern period is one in which mathematics is held to really correlate to the nature of the universe as a closed system (see footnote 49 below). Hence the universe, being mathematical in character, represents a formal system in that no other external system with its concomitant logic impinges upon its workings. It might be argued that not all closed systems are formal systems, a position that finds its defenders in this our late modern period. I want to discuss and critique this view in a later article in this series when I treat of Derrida, Guattari, Deleuze and like theorists.

⁴⁷ Lester Crocker, ed., *The Age of Enlightenment: Selected Documents*. (London: Macmillan, 1969), 17. See too the references to Hobbes and the Royal Society in Porter, *Flesh in the Age of Reason*, 56-72. Porter also observes that there were those who took to task the mechanical view of things, such as the Cambridge Platonists (83-87), but it is clear theirs was not the dominant view.

⁴⁸ "A collection of objects – particles, waves, or whatever – is a called a system. A system that is either the entire universe or is so isolated from everything else that it behaves as if nothing else exists is a closed system." George Hrabovsky and Leonard Susskind, *The Theoretical Minimum*. (New York: Basic Books, 2013), 2.

Early liberalism is informed by a concept of Nature that is, by and large, opposed to earlier Scholastic concepts, but time will show that informing liberalism is a logic that will end up rejecting any and all concepts of a nature proper to things. What Foucault brings out is that nowhere is this more evident than by reference to the body as the locus of the identity proper of a person and, thereby, of the rights that attend an individual. It is the body that becomes the locus proper of the operation of liberal (and thus capitalist) ideology, hence it becomes the clearest expression how the value of a thing can be abstracted from any so-called essence of that thing. A point raised in the first essay of this series in respect of the justification for abortion. The value of the unborn human life is not located in the actual biological body of the baby but in its potential for personhood if allowed to live. That this has ramifications for classical liberalism is something Foucault explored, after all in early modernity the body of the individual formed the fundamental principle that undergirded the idea of private property, and of all else that follows on from this in respect of the relationship between the individual, the market, and the state (most famously enunciated and argued for in the writings of John Locke⁴⁹). If the body has no essence proper, then to what do the rights of an individual refer? This question underlies a good deal of discussion and debate today not least in reference to the status of personhood in respect of animals and machines (of which more below).

V. Anti-Essentialism

Foucault argued that we can trace the rise of the biopolitical in the way in which morality in matters sexual came to be translated into scientific and medical categories, which categories in turn can be grouped under the term 'sexuality'. Whereas morality, traditionally understood, operated by way of a metaphysical grounding in reference to divinely appointed principles to be found in nature (and revelation), the principles of sexuality are to be found by reference to a concept of Nature that has become not only decidedly less about morality but at the same time less 'metaphysical'. To use more recent terms, the change is from an *essentialist* to an *anti-essentialist* understanding of Nature, so much so that the very word 'Nature' (or even in its more qualified sense as merely lower case 'n' nature) is regarded as dubious in that it serves as a mask and a means of legitimisation for a dominant ideology that seeks to impose itself upon the individual. As there is no essence to anything, then there is no definitive category or law to which one must answer; it is in this absence of essence that the freedom of an individual has come to consist. And, as we will see below, it is in this absence of essence that the freedom of finance capital consists. It is in this confluence of cultural freedom and financial capital that the biopolitical reveals itself.

So it is that what was once solid *has* melted into air. Or, for reasons that will soon become apparent, we might rephrase this famous saying in this way: What is solid has been translated into data, reduced to 'information', made subject to the vicissitudes of the virtual and in the process made more conformable to the dictates of financial capital.⁵⁰

⁴⁹ In particular his *Two Treatises of Government* (1689). In his *An Essay Concerning the True, Original, Extent and End of Civil Government* 2:4 Locke writes that political power needs to consider "what state all men are naturally in, and that is, a state of perfect freedom to order their actions, and dispose of their possessions and persons, as they think fit, within the bounds of the law of nature, without asking leave, or depending upon the will of any other man." Thus, as this was the original state, a state now compromised by a social contract, then government must seek to come as close to this state, as far as is possible so as to retain social concord. Private property and the freedom of the individual self are here made synonymous.

⁵⁰ See, McKenzie Wark 'All that is Solid Melts into Airwaves' (54-59) in *Everlasting Uncertainty: Interrogating the Communist Manifesto 1848-1998*, eds. G. Dow and G. Lafferty (Sydney: Pluto Press, 1998). Wark quotes Marx in the *Grundrisse*: "capital drives beyond national barriers and prejudices...it is destructive towards all of this [that is, traditional morals and cultural constraints] and constantly revolutionises it, tearing down all the barriers which hem in the development of the forces of production..." (57). Wark argues that this

It is in the area of sexual politics that anti-essentialism has found its primary theoretical expression, and this by way of developments in feminist theory particularly since the late 1970s and 1980s. Earlier feminist theory was, by and large, 'essentialist' in that it held that there is an essence to being a woman that marked a woman off, in both an epistemological and ontological fashion, from men. It was a view, however, that came to be seen as harbouring a racist and class-based ideology. 'Gender essentialism' (as it came to be known) claimed in good Enlightenment fashion to be universal and egalitarian was, however, at root expressive only of the "lived experience of middle-class white women." It was this critique of early feminism that would increasingly become a commonplace as anti-essentialism gained ground in the 1980s.

In her overview of questions concerning gender, Mary Holmes summed the issues up by reference to the body. The question of gender "centres around the problem of to what extent (gendered) bodies are natural entities with some sort of fundamental essence and to what extent they are endlessly malleable products of social life and discourse."52 Essentialism, Holmes noted earlier in her book, "is the idea that there are identifiable necessary properties which define objects, for example it supposes that there is some essence (usually with a bodily basis) which is what makes a woman a woman."53 Holmes' sympathies lie on the anti-essentialist side of the argument.⁵⁴ Perhaps the most famous and most influential theorist of anti-essentialism is Judith Butler. In her best known work Gender Trouble, Butler critiqued the very notion of an 'I' and did so by way of the body as the assumed locus of sexual difference and thus gender identity. Butler argued against the "ontological priority" given to sexual roles over factors that have to do with "social visibility," by which she means that in thinking that there is something substantive about gender and the gendered 'I' we do not see that gender has a performative origin, an origin that masks itself.55 "The substantive 'I' only appears as such through a signifying practice that seeks to conceal its own workings and to naturalize its effects."56 As a corrective to this she offers up drag as a means to revealing gender's imitative and contingent structure; which is to say, transvestitism reveals the non-essential performative character of gender.⁵⁷ Drag strips away the ideology of essentialism to reveal the absence of any nature proper to sexual difference. Butler's is thus an "anti-foundationalist approach" which expresses itself in the "expansion of existing identity concepts." More recently, however, some argue

process is now gone up a notch or two with the rise of the virtual economy. Capitalism, he writes, "liquidates old ideological forms, transmitting itself through walls, rendering them transparent" (58). Capitalism now needs and is creating a "fully abstracted information landscape in order to function" (59). Which, of course, it now has brought about.

⁵¹ Nancy Dowd, 'Introduction' in *Feminist Legal Theory: An Anti-Essentialist Reader*, eds. Nancy Dowd and Michelle Jacobs (New York: New York University Press, 2003), 5. A little later in 'Part 1: Theories, Strategies and Methodologies', Dowd writes how these earlier "universalist, essentialist perspectives" masked a white middle-class heterosexual model of gender (10-11). K. King 'The Situation of Lesbianism as Feminism's Magical Sign: Contests for Meaning and the U.S. Women's Movement 1968-72,' *Communication* 9, no. 1 (1986): 65-92. More recently polyqueer theorists such as Mimi Schippers in her book *Beyond Monogamy: Polyamory and the Future of Polyqueer Sexualities* (New York: New York University Press, 2016) have accused earlier feminist and queer theorists of championing a "homonormativity" (8) that by working for marriage they have thereby given support to the idea of monogamy and for this reason support the old way of "heteromasculine domination and white privilege" (28).

⁵² Mary Holmes, What is Gender? Sociological Approaches. (Los Angeles: Sage Publications, 2007), 174.

⁵³ Holmes, What is Gender?, 88-89.

⁵⁴ Holmes, 61.

⁵⁵ Judith Butler, *Gender Trouble: Feminism and the Subversion of Identity*. (New York: Routledge, 1999 [1990]), 22, 33, 173, 177, 189.

⁵⁶ Butler, 184.

⁵⁷ Butler, 175.

⁵⁸ Butler, 21.

that *all* talk of gender classifications or "sex markers" no matter how fluid and diverse ought to be removed from anything that functions as a requirement in the public realm, be it in colleges, businesses, or banks. ⁵⁹ This, at least, will avoid all the problems associated with the current ever-expanding range of gender identities or what Butler called "identity concepts." ⁶⁰

VI. The Rise of Cybernetics

A related development in the 1980s was the rise of Cybernetic Theory, in particular what has been referred to as Cyborg Feminism. An early proponent for this development was Donna Haraway in her now famous essay *A Cyborg Manifesto*.⁶¹

"A cyborg is a cybernetic organism," writes Haraway, "a hybrid of machine and organism, a creature of social reality as well as a creature of fiction." It is with women that the recognition of the absence of anything like hard and fast boundaries, ones based on ontological givens, marks this our age of capital and technology. "In short, the certainty of what counts as nature [...] is undermined, probably fatally. The transcendent authorization of interpretation is lost, and with it the ontology grounding 'Western' epistemology." Thus is undermined all "justifications for patriarchy, colonialism, humanism, positivism, essentialism, scientism and other unlamented —isms" but also "all claims for an organic and natural standpoint." As "sexuality, reproduction, family and community life are interwoven" in our "new economic structure," and that in "myriad of ways," then we must reconsider how the body is now to be located within a matrix of the organic and the machine. If we are to overcome the dominant socio-biological 'myths' that affect to tell us of our origins, and thereby of our supposed nature proper, then we (well, especially women) are to embrace new technology, to become, fully so, cyborgs. There must be no opposing of the organic to the technological.

It is this embrace of technology that will bring about the "permeability of boundaries" which will, in turn, aid the fusion not only between humans and machines, but with animals as well: "we can learn from our fusions with animals and machines how not to be Man, the embodiment of Western logos." In "explicitly embracing the possibilities inherent in the breakdown of clean distinctions between organism and machine and similar distinctions structuring the Western self" then will the "matrices of domination" crack, thereby opening up

⁵⁹ For example see, Heath Fogg Davies, *Beyond Trans: Does Gender Matter?* (New York: New York University Press, 2017), 20, 101-3, 142.

⁶⁰ Davies, *Beyond Trans*, 101-3. Foucault seemed to intimate a similar position when he wrote: "one should no longer pose questions about sexual identity. It is therefore not a case of confirming one's sexual identity, but of refusing the injunction of an identification in sexual terms or in different forms of sexuality" cited in Judith Revel, 'Identity, Nature, Life: Three Biopolitical Deconstructions,' *Theory, Culture & Society* 26, no. 6 (2009): 48. Revel agrees and expands on Foucault's argument.

⁶¹ Donna Haraway, 'A Cyborg Manifesto' reprinted in *The Cybercultures Reader*, eds. D. Bell and B. Kennedy. (London: Routledge, 2000 [1991]), 291-324.

⁶² Haraway, A Cyborg Manifesto, 291.

⁶³ Haraway, 294.

⁶⁴ Haraway, A Cyborg Manifesto, 297.

⁶⁵ Haraway, 306.

⁶⁶ Haraway, 309-10.

⁶⁷ Haraway, 310. "This is why cyborg politics insist on noise and advocate pollution, rejoicing in the illegitimate fusions of animal and machine" (312). And earlier in her essay Haraway writes how the cyborg "appears in myth precisely where the boundary between human and animal is transgressed." So it is that "Bestiality has a new status in this cycle of marriage exchange" (293). Haraway in more recent years has, to the consternation of some, departed somewhat from her original manifesto. Although not, it would seem, the accent on human and animal interactions (see her *The Companion Species Manifesto* (2003). See Jenny Turner's review of Haraway's recent writings 'Life with Ms Cayenne Pepper' *London Review of Books* 1 June, 2017.

to a myriad of "geometric possibilities." While on the one hand people are less than "fluid, being both material and opaque," on the other hand "cyborgs are ether, quintessence." It is the state of being cyborgs that we are to strive for by embracing technology and the ability it affords us to fully realise our non-essential nature, to become as ether. All that is solid *is* to melt into air. The *indicative* status of Marx's diagnosis concerning the effects of capital has now become an *imperative*; the imperative to realise the chief of all values, namely a freedom from any determinative nature whatsoever; *a freedom from essence*.

In the absence of any essence all things can become 'fluid', become plastic, become malleable; there are no fixed borders, all boundaries are rendered permeable, a fact that is, first and foremost, played out on the body. Haraway appeals to the new generation of theorists (especially feminist theorists), those in the forefront of becoming cyborgs: "Cyborgs might consider more seriously the partial, fluid, sometimes aspect of sex and sexual embodiment." They must always keep in mind that *all* boundaries are to be subject to "construction and deconstruction." As there is no essence proper to things then no identity is fixed, no border impermeable, all *is* fluid, and all can now be subject to a will that, in union with technology, is able to shape a world made virtual. It is the body with its sex-become-sexuality that is the locus of this development for biology and technology are no longer two distinct realms. Here is realised the early modern liberal hope. Here is the biopolitical!

The ideas Haraway championed would soon enough morph into what is now referred to as 'posthumanism' and, in certain quarters, would come to be tied to the utopian hope often termed the 'Singularity'. A time in which humanity and technology would fully merge together in what might be called the grand Internet-of-Things. Heaning by this that so melded together are computer technology and the biological that any distinction between the real and the virtual disappears. For good or for ill [...] the era of posthuman possibilities is beginning," writes Chris Hables Gray in his work *Cyborg Citizen*. Now is the age of freedom, exemplified in "the right to control and change one's own body," where all can "determine their own sexual and gender orientations." Thus "simplistic male/female categories cannot stand against the polymorphous desires of so many people mobilized by so much cyborg technology." Indeed, cyborg science not only "changes genders" it can "create new ones."

"This image of the human journey toward a superior 'posthuman' may be difficult for many to take seriously," writes Gregory Stock in *Redesigning Humans*, "but the determination to use whatever new technologies emerge from today's explorations of human biology aligns

⁶⁸ Haraway, *A Cyborg Manifesto*, 311). "High-tech culture challenges" all the primary dualisms of Western thinking, including that between "God/man", and it does so by reason that it is "not clear who makes and who is made in the relation between human and machine" (313).

⁶⁹ Haraway, 294.

⁷⁰ Haraway, 315.

⁷¹ Haraway, 316.

⁷² One of the more influential books in this area is by Ray Kurzweil entitled *The Singularity is Near: When Humans Transcend Biology*. (London: Duckworth Overlook, 2005). It is pertinent to the thesis of this article that Kurzweil became something of a financial speculator who launched his own hedge fund informed by the kinds of complex mathematics that informs financial capitalism and his cyborg utopia (see S. Patterson *Dark Pools: The Rise of AI Trading Machines and the Looming Threat to Wall Street*. (London: Random House, 2012), 306.

⁷³ Chris Hables Gray, Cyborg Citizen: Politics in the Posthuman Age. (New York: Routledge, 2001), 12.

⁷⁴ Grav. 27.

⁷⁵ Gray, 29.

⁷⁶ Gray, 89, see too 154-55).

⁷⁷ Gray, 155.

well with prevailing attitudes." However, though "most geneticists say the eugenic goal of reducing the number of deleterious genes in the population is an important one,"⁷⁹ it is not an easy task to make "ourselves anew." We are assured though that with the right economy in place things will be alright: "What is more," Stock concludes his book echoing those early modern writers we met with earlier, "a free-market environment with real individual choice, modest oversight, and robust mechanisms to learn quickly from mistakes is the best way both to protect us from potential abuses and to channel resources toward the goals we value."81

The narrative of modernity has gone from the language of being in accord with nature to now not only shaping nature but creating it as well; creating a hybrid and cyborg world in which terms such as 'unnatural' have no meaning at all. It is a contemporary view captured well by Philip Ball in his book on creating life and making people. The role of humanity in shaping nature is "already one of the major narratives of the twenty-first century." The term 'unnatural' has nothing to do with physical world but is, Ball writes, "a metaphysical and moral category, born out of a perpetually uneasy relationship with techne and imbued with judgments of value and propriety."83 Values which had to do with the status of the unborn, but as these values were attendant upon metaphysics they suffered along with metaphysics, and the unborn, like all else, fell under the determinations of technology, which is to say by reference to what are held to be practical and beneficial outcomes. Ball quotes approvingly from the work of Michael Mulkay who wrote: "we should abandon any attempt to try to settle once and for all, the ontological standing of the human embryo...we should concentrate instead on the practical task of specifying the degree to which the circumstances under which new human entities can be manipulated and, indeed, destroyed in order to bring about beneficial outcomes."84

Since the beginning of modernity the way in which liberalism has set about manipulating both the world and humanity is by translating all into the language of mechanism and, more basic still, into the language of mathematics. Into the language of a formal system par excellence. A language that both informs the dominance of virtual technology and the biopolitical, a circumstance especially evident in the growing discipline of biomedia.

VII. Biomedia and the Virtual

Today, writes Eugene Thacker, the "assumption is that there exists some fundamental equivalency between genetic 'codes' and computer 'codes', or between the biological and digital domains."85 Biomedia "is an instance in which biological components and processes are technically recontextualised in ways that may be biological or nonbiological."86 Here there is no "body anxiety," rather is there "the will to transcend the base contingencies of 'the meat' in

⁷⁸ Gregory Stock, *Redesigning Humans: Our Inevitable Genetic Future*. (Boston: Houghton Mifflin, 2002), 159.

⁷⁹ Stock, 161.

⁸⁰ Stock, 162.

⁸¹ Stock, 201. Stock does however praise Chinese communism insofar as it was aggressive in managing its people's reproduction by way of the one-child policy. This we are told was "an extraordinary accomplishment" (159).

⁸² Philip Ball, *Unnatural: The Heretical Idea of Making People*. (London: The Bodley Head, 2011), 316. 83 Ball, 317.

⁸⁴ Ball, Unnatural, 321. The quote is from Mike Mulkay, The Embryo research Debate: Science and the Politics of Reproduction. (Cambridge: Cambridge University Press, 1997), 161-2. Ball, however, isn't totally comfortable with this new world for when writing on the growing of organs to be harvested for those lucky enough to be allowed to live he evidences a failure of nerve. Ball allows that "personally I suspect that our repugnance at the creation of headless embryos grown for spare parts is worth listening to" (321).

⁸⁵ Eugene Thacker, Biomedia. (Minneapolis: University of Minneapolis Press, 2004), 5. For a more theoretical elaboration on this line of thinking see, Marcello Barbieri, 'Biosemiotics - a new Understanding of Life,' Naturwissenschaften 95, no. 7 (2008): 577-599.

⁸⁶ Thacker, 5-6.

favour of virtual spaces." There is now the ability and willingness to use "informatics capacity to enhance biological materiality" and thereby to create a "body more than a body." We are engaged in a "boundary crossing process" one that works within "the complicity of materiality with information." Thereby is the biological optimized; more than that it is "impelled to realize, to rematerialize, a biology beyond itself." The real and the virtual begin to merge.

Biological reproduction elides with technological reproduction which, as Anthony Giddens argued, spells the end of nature: "The invasion of the natural world by abstract systems brings nature to an end as a domain external to human knowledge." For this reason "reproduction is now a field where plurality of choice prevails," just as it does in the free-market. While biology answers to technology, technology answers to the economy, and at each stage a concept of freedom as a freedom from the strictures of nature orients the progress and development of the system. The body of the individual becomes the locus of the meeting of base and superstructure, which is to say the locus of economic and cultural liberalism. What is perhaps most telling about this turn is that, like Foucault who led the way in theorising this state of affairs, it is unclear if commentators approve of it or not. In fact, one gets the strong impression that they approve. 92

If eugenics, as Turda argued, is at the very heart of programmatic modernity then what we have seen above is significant indeed; it tells us of something even more fundamental to modernity than eugenics, something that eugenics is an expression of. We saw earlier that eugenics expressed itself by way of ideals that answered to the dictates of Nature with a capital 'N'. Whether by way of improving the general stock of the populace in terms of class, or of purging a people in order to bring about the purifying and regeneration of a race, the underlying concept was one of being in proper accord with Nature. From the beginning, eugenics and population control were inextricably entwined and, via the claims of science as the new arbiter of natural law, both answered to mathematical modelling. A modelling that also informed the creation of the modern capitalist economy both in its nascent and fully developed forms. Whether it be in respect of demographics, eugenics, or more generally the empirical sciences the concept of Nature still held sway, albeit in a very different way to how it was envisaged prior to the rise of modernity. In more recent decades, however, eugenics answers not to a concept of a nature proper to things but to the concept of the plasticity of all things.

⁸⁷ Thacker, 6.

⁸⁸ Thacker, 16, see too 28.

⁸⁹ Thacker, 27.

⁹⁰ Antony Giddens, *Modernity and Self-Identity: Self and Society in the Late Modern Age*. (Cambridge: Polity Press, 1991), 224.

⁹¹ Giddens, 219.

⁹² Take by way of example Michael Dillon and Luis Lobo-Guerrero's essay 'The Biopolitical Imaginary of Species-Being,' Theory, Culture & Society 26, no. 1 (2009): 1-23. Following the lead of Foucault the authors argue that while biological categories (grouped under the term 'species-being') defined humans from the eighteenth century on this has now changed. Under the influence of the "liquefaction of 'information" (12) all such classifications and categories dissolve (7). Now we understand life and the concomitant new understanding of freedom in terms of the "digital and molecular" revolution (9). Freedom "is increasingly understood [...] in terms of the informationally transacted emergent properties that are now said to define what it is to be a living thing" (10). It is later in the piece that what this means becomes clearer. There is now the conflation of "what it is to be a living thing with the universal exchange of information [and this] has also extended the category of living thing to forms of living being that radically transcend ontological distinctions between animate and inanimate matter" as well as between life and death (15). All boundaries and borders have dissolved, even that between animate and inanimate matter, and this has taken place by reason of all things being translated into 'information'. The authors argue that now the things that define life are circulation, connectivity, and complexity (16), all of which things are of the dynamic and character of capital (7). There is no explicit critique of this state of affairs, in fact the tone is one of enthusiasm as it is in many similar papers that affect to give an overview of things as they stand today.

Accordingly, it has become the means by which humanity is not merely to be bettered but is to be transformed into something *greater than* the human. The earlier form of eugenics was 'essentialist'; the contemporary form is 'anti-essentialist'. The earlier form of eugenics operated under an ostensibly humanist program; contemporary eugenics has a *transhumanist* program. Early eugenics thought in terms of the natural world; contemporary eugenics thinks in terms of the cybernetic. Eugenics has become a technology oriented to a world in which all boundaries are rendered permeable, not merely those between human and other species, nor simply between life and machine, but a world in which it makes no sense to speak of a boundary between the real and the virtual. A world increasingly subject to the mathematical.

Eugenics is morphing into a *formal* system, by which is meant that it does not answer to anything outside of the principles by which and in which it operates; which principles are of piece with those of mathematics. As biology elides with technology, as technology increasingly answers to the demand of the virtual economy, then, as the virtual exists by reason of mathematical code, all becomes translatable into mathematics. Mathematics being the formal system *par excellence*. It is this that Foucault intuited in his lectures on the biopolitical when he wrote that neoliberalism has turned the economy into a formal system to which all else must submit.

What Foucault intimated we are now in a position to see being played out, for capitalism, having achieved close to global dominance, has today come into its own, it has subordinated all else to itself. It is not simply a case that all things have been commodified in that they ultimately answer to a market value, but that having been commodified they are able to be translated into mathematical data, into 'information' that being 'fluid' can be subsumed into the ever circulating value of the electronic flow that is the virtual world of financial capital. It is a process that necessitates both economic *and* cultural liberalism, for although the latter often affects to oppose the former its concept of freedom is informed by the same logic of antiessentialism that operates within and drives economic liberalism. The ideology of antiessentialism is necessary for the biopolitical eliding with the virtual. The logic of capitalism is the logic of the virtual. In other words, the biopolitical *is* the virtual. It is in the merging of the real with the virtual that the hope of ultimate individual freedom is being promised and marketed. It is exactly here that the ideology of capitalism is being fully realised, it is here that its nature is being revealed.

What, then, is capitalism?

VIII. The Nature of Capitalism

Although the fuller answer to this question must wait for the completion of this series, it is appropriate to give some indication here of what it is we mean by the term 'capitalism' if only to distance ourselves from the more popular usage of the term. In popular use 'capitalism' often serves as a kind of catch-all term for anything that people happen to dislike and, thereby, its use becomes a form of shorthand for ersatz rebellion. Among an ever increasing list the term has become identified with money, the rise of morality, the role of markets and consumption,

⁹³ A similar point is made, though to different ends, by Christine Mills in 'Biopolitics, Liberal Eugenics, and Nihilism' in *Giorgio Agamben: Sovereignty and Life* eds. M. Calarco and S. DeCaroli (Stanford: Stanford University Press, 2007), 180-202.

⁹⁴ See Hilary and Steven Rose, *Genes, Cells and Brains: The Promethean Promises of the New Biology*. (London: Verso, 2014). Especially chapter 4 'From State to Consumer Eugenics'. The Roses chart out the way in which neoliberalism has grown to shape the biopolitical in respect of more market oriented eugenics. This is made abundantly clear in the rise of transhumanism: "Deeply embedded in such transhumanist writings [they refer here to the writing of Ray Kurzweil] is the possessive individualism of the neoliberal economy, where the mantra is choice and the consumer king or queen" (156).

private property, business and profits, and with war, sexism, racism and even the rise of the so-called nuclear family and heteronormativity. However, if we want a definition that tells us more than the likes or dislikes of the disaffected then we need something a little more specific. We require a definition that will help us to identify its presence as it develops in economies that are not *per se* capitalist, as well as a definition that identifies an economy as being capitalist in its own right. The simple definition followed here (and to be expanded upon in the rest of this series) is that capitalism is that system which instantiates and facilitates the creation of monetary value through the promotion of and circulation of credit and debt.

Many (if not most) historians of economic theory place the birth of capitalism sometime in the mid to late Renaissance, for convenience's sake somewhere in the sixteenth century. Now it may well be true that capitalism begins to come into its own at this time, however its antecedents can be traced as far back as the third millennium BC to the ancient near east (a point to which we will return in the next article in this series). It may also be that the antecedents arose at the same time as coinage (or other form of money), but it would be a mistake to see them as identical. Whether or not money began as a semiotic system to denote commodity value and facilitate barter is a question that is probably impossible to answer with any kind of historical certitude. But in respect of capitalism we can say that the value of money is not, first and foremost, tied to its signing a commodity other to itself; rather is the value attendant upon money oriented to a system in which it becomes increasingly self-referential, self-circulating, and self-fructifying. With due qualification we might say it is when capital value becomes financial capital, where the latter needs no tangible asset to give it value. 96 For example, whereas it used to be held that at least a portion of circulating money value needed a real reference, say to gold reserves, this has not been the case now for some decades. Capitalism has always been oriented to the ideal of a formal system, but the logic that seeks to realise this goal has taken a while to work itself out. In order to become a formal system all boundaries, all borders, all friction must be removed. Strange as it may seem, the very absence of reference to an asset that denotes a real presence of value (and which thereby grounds the circulation of financial capital) is the prerequisite for capitalism's achieving its goal. To chance a paradox, this absence is of the 'essence' of the system. Any real reference represents an impediment to the system; represents unacceptable friction that impedes the flow and speed of circulation. Both the orientation and the logic of capitalism calls forth the dominance of the virtual. As Cédric Durand puts it, using the terminology of Marx, the shift to the "capitalist mode of production" is seen in the "rising power of fictitious capital." He later quotes Marx to the

rehabilitation of usury which was once condemned as being parasitical (3-15).

⁹⁵ As an example of more temperate definitions, but still misleading, take by way of example the two that follow: Larry Neal, 'Introduction' in *The Cambridge History of Capitalism, Vol. 1*. Eds. L. Neal and J. Williamson (Cambridge: Cambridge University Press, 2014), 1-23. Neal writes that there are four elements in common in each variant of capitalism, these being private property rights, contracts enforced by third parties, markets with responsive prices, and supportive governments (2). That these work with capital that is "physically embodied" and which operates on a "long time horizon" (3). The challenge would be to find an economy that does not in some way meet this criteria. Furthermore, the reference to capital being physically embodied and with a long time horizon runs counter to financial capital. Jerry Muller, *The Mind and the Market: Capitalism in Modern European Thought*. (New York: Alfred A. Knopf, 2002). Muller writes that capitalism is a "system in which the production and distribution of goods is entrusted primarily to the market mechanism, based on private ownership of property, and on exchange between legally free individuals" (xvii). The problem here is that this assumes that the idea of political freedom and ownership is of a piece with capitalism when, in fact, others (and I would include myself in this group) would argue it destroys freedom and property ownership. Muller does refine his definition somewhat when he writes that the rise of modern capitalism is associated with the

⁹⁶ On the history of financial capitalism, its rapid global dominance, and its tie in with Enlightenment liberalism, see Larry Neal, *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason*. (Cambridge: Cambridge University Press, 1990).

⁹⁷ Cedric Durand, Fictitious Capital: How Finance is appropriating our Future. (London: Verso, 2017), 4.

effect that "everything in this credit system is duplicate and triplicate, and is transformed into a mere phantom of the mind." All that is solid indeed melts into air for, in some manner, what is solid conforms itself to an economy that breeds phantoms and fictions.

The most simple and primitive form capitalism takes is when a loan demands more by way of return than the principal.⁹⁹ For much of history this process was termed 'usury' and was, up until the modern period, by and large universally denounced (at least ostensibly so). It might be said that modernity can be defined as the age in which usury was not only made acceptable but positively encouraged; it becomes an economic virtue. As was noted earlier in this article, it should occasion no surprise that other vices, ones often associated with usury, came likewise to be hailed as virtues insofar as they stimulated the economy.¹⁰⁰

The history of capitalism is the history of the development of debt into usury and thence into an ever increasing number of ingenious financial vehicles/products. ¹⁰¹ We now live in a world in which financial vehicles/products have become so many and varied, so quick and subtle, so mathematically complex that only the algorithms know what they are up to and how they work together to comprise the financial market. ¹⁰² Importantly, it is this market that characterises what it is that is meant by 'globalism' for, although this term can mean different things to different people, common to all definitions is that of a "frictionless world of shared meanings." ¹⁰³ A world in which, through the power of communication technology, all meaning is abstracted and disembedded, where distance is made irrelevant, where the goal is the ideal of unfettered and thus immediate circulation, where almost instantaneously capital is created (or destroyed). ¹⁰⁴

In the world constituted by the circulation of finance, pride of place belongs to international currency speculation, it being the most lucrative form the financial market takes and to which all other markets ultimately answer. ¹⁰⁵ Currency speculation is thus the formal

⁹⁸ Durand, 48. The quote is from *Capital*, Vol. III, chapter 29.

⁹⁹ Marx writes in *Capital Vol. III* (London: Penguin, 1991) chapter 36 of early antecedent forms of capitalism: "Interest-bearing capital, or, to describe it as its archaic form, usurer's capital, belongs together with its twin brother, merchants' capital, to the antediluvian forms of capital [...] and are to be found in the most diverse socio-economic formations" (728).

¹⁰⁰ Outram *The Enlightenment: New Approaches to European History*, 48-51. Outram quotes Hume who argued "luxury nourishes commerce and industry" (51). See W. H. Adams *On Luxury*. Washington DC: Potomac Books, 2012. Adams notes how the taste for luxuries, now approved of, gives rise to limitless markets which are, in turn, expressive of an "all-consuming culture of limitless freedom" (178). Alessandro Somma argues that to this day this reliance on vice (or hedonism) for the functioning of the economy creates a tension with the equal reliance upon a certain ascetic morality in terms of work, 'The Biopolitics of Debt-economy: Market Order, Ascetic and Hedonistic Activity,' In *Reshaping Markets: Economic Governance, the Global Financial Crisis and Liberal Utopia*, eds. B. Lomfeld et al. (Cambridge: Cambridge University Press, 2016), 115-6.

101 Durand opens his book writing, "One of the most remarkable developments in the rich countries since the 1970s has been the accelerated expansion of financial operations" *Fictitious Capital*, 1.

¹⁰² See Michael Lewis, *Flash Boys*. (London: Penguin, 2014). Lewis, one of the best know popular writes on the intricacies of the world of finance, details how the use of algorithms have created a financial market that operates at such a speed that no one can keep tabs on what is going on. The chief expression of this market goes by the name of 'high speed trading' and has become bedevilled by allegations of (among other things) 'front running'. With the rise in advanced mathematical operations the market is (almost) friction free being "now pure abstraction" (52). Perhaps with understandable exaggeration Lewis observes that those who once peddled stocks to big investors now sell algorithms (35).

¹⁰³ James Mittelman, *The Globalization Syndrome*. (Princeton: Princeton University Press, 2000), 126. ¹⁰⁴ "A minimal definition of globalization could delimit it simply as all the contemporary processes that make distance irrelevant." Thomas Hylland Eriksen, *Globalization: The Key Concepts*. (Oxford: Berg, 2007), 16, see too 20, 35.

¹⁰⁵ Durand writes that the currency market is the most "important financial market," not least because it has a "daily exchange volume of some 5.3 tn" dollars ('tn' stands for trillion). *Fictitious Capital*, 13.

system become global, something that would have been all but impossible to *fully* realise without the rise of virtual technology. ¹⁰⁶ But deeper still, without the rise to dominance of antiessentialism, and that in matters both economic and cultural, the dominance of the virtual would itself have been impossible.

IX. Usury and Sexuality

In his work *The Specter of Capital*, Joseph Vogel begins his treatise on the nature of capitalism by way of Don DeLillo's book *Cosmopolis*. He agrees with one of the central tenets of *Cosmopolis* which is to the effect that "market culture can absorb revolt and anarchy as vital expressions of its own system, treating protest as a fantasy spawned by the free market itself and capitalism as the consequential self-optimization of that fantasy." The power of capitalism is that in embodying the immanentistic power of self-referential formalism, a power brought to fruition in anti-essentialism, it is its own double. This is a topic to which we will return in depth in a later essay in this series, for the moment however we need, via Vogel's work, to conclude our tracing out of the self-referential, immanentistic nature of capitalism.

The power of capital resides in its formal nature, in its becoming a self-organizing system. Something made possible by the "mathematization of economic science." The sphere of circulation becomes autonomous [...] is subject only to its own laws." The "self-referential nature of finance is institutionalized," such that now we live under a "regime of free-floating signifiers" that no longer defer to "any transcendental signified." The representative power of the sign has been relocated: it now lies in the capacity to facilitate transfers through self-reference." The global financial market is a "self-referential and therefore frictionless universe," in which all things social are "embedded" and by which all relations are 'optimized'. 113

Capital "denatures nature itself" and is thereby a "spectral double or travesty of the natural order." In this travesty of nature "perversion" rules in that money comes to be self-reproducing, it is an "end in itself" and becomes its own father. At times Vogel turns to the language of the pre-modern and early modern philosophical and theological commentators to damn this "industrious infertility," for as he notes the name they gave to this economy was

¹⁰⁶ See Dan Schiller *Digital Capitalism: Networking the Global Market System.* (Cambridge, Mass.: The MIT Press, 2000). Schiller's work details the ways in which the (then) comparatively new world of the internet went hand in glove with the global ambitions of neoliberalism. A process seen in the way that universities were beginning to shape both the structure and the content of the courses they delivered in order to answer to the demands of this (comparatively) new e-economy. "As it comes under the sway of an expansionary market logic, the Internet is catalysing an epochal political-economic transition towards what I call digital capitalism – and toward changes that, for much of the population, are unpropitious" (xvii).

¹⁰⁷ Joseph Vogel, *The Specter of Capital*. (Stanford: Stanford University Press, 2015), 4.

¹⁰⁸ Vogel *The Specter of Capital*, 37-9.

¹⁰⁹ Vogel, 39.

¹¹⁰ Vogel, 56.

¹¹¹ Vogel, 61. See too the comments by Brian McCall, *The Church and the Usurers: Unprofitable Lending for the Modern Economy*. (Ave Maria, Florida: Sapientia Press of Ave Maria University, 2013), 40-1

¹¹² Vogel, 55.

¹¹³ Vogel, 80.

 ¹¹⁴ Vogel, 89. Norman Jones in his *God and the Moneylenders* (Oxford: Basil Blackwell, 1989) notes how the arguments for the legitimising of usury in the transition to the modern period tended to base themselves on arguments either derived directly from Nominalism or indirectly derived in that they shared the same anti-universal and non-metaphysical (even subjectivist) principles that Nominalism appears to promulgate.
 115 Vogel, 88. For a discussion on the reasons adduced by the Church in opposing usury see John Noonan Jr. *The Scholastic Analysis of Usury*. (Cambridge, Mass.: Harvard University Press, 1957). And his more controversial essay in which he draws an analogy with contraception, '*Tokos* and *Atokian*: An Examination of Natural Law Reasoning and Contraception' *Natural Law Forum Paper* 109 (1965).

'usury'. Perhaps most telling of all was that in the medieval and early modern cosmos, usurers and sodomites were placed in the same circle of hell. 116 As Foucault rediscovered, economics and sexuality were understood in the pre and early modern worlds to be inextricably entwined.

X. Conclusion

In his book *The Culture of Usury in Renaissance England* David Hawkes traces out a picture of the early modern period as being that which not only witnessed the beginning of the rise to dominance of capitalism proper, but that saw as well the effects of this on society and morality, and, in fact, on the psyche itself. The sixteenth and seventeenth centuries, Hawkes writes, "witnessed an utterly unprecedented explosion" in the power of usury. Usury is defined as "any excess whatsoever above the principle of a *mutuum*, or loan executed by reason of the loan itself." Although this might strike us as rather innocuous the early moderns felt differently, as Hawkes notes they were very much alive as to what the ramifications would be of the general acceptance and even praise of usury. Unlike them, we are, by and large, blind to its effects and the study of usury, Hawkes argues, has as a consequence been neglected. "Perhaps the reason for this neglect is that usury has so successfully remolded postmodern culture in its own image that it has rendered itself, or at least its social and psychological effects, invisible. The fish knows nothing of water."

To repeat, the early moderns were alert to the kind of logic usury instantiated and what the effects would be as this logic worked itself out in the economy and on morality. An effect that would be especially evident in the area of sexual behaviour. "The pornographic, commercialized sexuality of the postmodern world would have been understood by the people of Renaissance England as an entirely predictable consequence of our society's domination by usury." With the growth and acceptance of usury there was a corresponding change in consciousness, a change seen, most fundamentally of all, in the way in which signs and representation were understood to operate. The "order of representation" was "rearranged in people's psyches," thus the internal operations of the mind were being fundamentally altered. It is precisely in respect of the body as it expresses itself in the sexual act that this change is revealed.

Usury was seen by the early moderns (and pre-moderns as well) as being of a piece with unnatural sexual activity, sodomy being the case in point. Here we need to recall Foucault's point mentioned earlier in this article, this being to the effect that in the early modern world people spoke of moral dereliction rather than of 'sexuality', of a decision of the will rather than of a scientifically defined category. Sodomy was held to be allied to usury as both were seen to be unnatural acts, acts that sinned against nature. Just as usury abstracted the value of money from its representative function in which it signed substantial goods, sodomy made an abstraction of sex orienting it away from its proper *telos* (which is reproduction) and

¹¹⁶ Vogel, 92.

¹¹⁷ David Hawkes, The Culture of Usury in Renaissance England. (New York, Palgrave Macmillan, 2010), 17.

¹¹⁸ Hawkes, 20. Here, Hawkes is citing the definition given by the mid-twentieth century scholar Raymond de Roover.

¹¹⁹ Hawkes, 1.

¹²⁰ Hawkes, 2, 21. Of the outworking of usury, Hawkes writes that the "more abstract and self-referential money grows, the less reference it bears to the physical world or to any objective reality, and the more energetic, voracious, and destructive it becomes" (3). The paradox being that the more insubstantial it becomes, the more potent the effects of usury on things substantial.

¹²¹ Hawkes, 165.

¹²² Hawkes, 25.

¹²³ Hawkes, 105, 116, 161.

redirecting it to a sterile, self-pleasing act.¹²⁴ Sodomy oriented the sexual act away from a real substantial outcome and, being now oriented toward the 'same', the act was rendered infertile. Like masturbation and contraception, sodomy represents the turning of an act that is meant to be directed to a *substantial* other into an act oriented to self-referentiality – to an *insubstantial* pleasure. Hawkes observes that the same logic not only informs usury but is in the circulation of financial capital made all the clearer: money as a sign of something other becomes a sign that is "self-referential and self-generating." ¹²⁵

Here, then, is the rise of the modern 'homo oeconomicus' that Foucault spoke of in his lectures on the biopolitical, for here is the self-seeking individual and autonomous actor, the entrepreneur, who instantiates the rationality of self-interest. ¹²⁶ Here is where the formal logic of neo-liberalism finds its embodiment, but in the body become insubstantial, become virtual. A body the meaning of which is abstracted from any natural essence, rendered fluid, and the value of which finds its locus proper under and in the circuit of financial capital. The conclusion being that the biopolitical is nothing more and nothing less than the triumph of usury.

And usury is what the Church has always condemned.

The next article in this series will explore the Church's condemnation of usury in more depth and then do so by reference to its condemnation in Scripture.

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¹²⁴ Hawkes, 163.

¹²⁵ Hawkes, 16.

¹²⁶ Hawkes, 65.

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