**Preliminary Reflections on the Visible, the Invisible and Social Regulation: Panopticism, Biopolitics, Neoliberalism and Data Consumption**

**Mike Featherstone**

*Journal of Critical Studies in Business and Society*, 4(1), pp. 6-37.

**Abstract**

Different types of social structure and media, promote different forms of visibility and invisibility. Michel Foucault’s influential discussion of the formation of disciplinary societies highlights the importance of panopticism in which inmates are constantly visible, subjected to surveillance and control by invisible authority figures. To better understanding power in today’s neoliberal societies, we should also consider Foucault’s writings on biopolitics which point to the generation of a new productive form of governance via the invisible forces running through the living mass of population. The new architecture of visibility is also evident in the consumer culture spaces, images and screen culture. Today consumption increasingly takes place in digitalised milieu such as the internet, in which purchases leave traces and create profiles to enable the accumulation of massive data sets which can be made productive by business, yet remain invisible to the vast majority of consumers. At the same time the new digital media such as the internet, also generate a new architecture of visibility with social media sites such as Facebook working off the fear of invisibility.

**Bio**

**Mike Featherstone** is Professor of Sociology at Goldsmiths, University of London. He is founding editor of the journal *Theory, Culture & Society* and the *Theory, Culture & Society Book Series*. He is editor-in-chief of the journal *Body & Society.* Author of *Consumer Culture and Postmodernism*  (2nd edition 2007)and *Undoing Culture: Globalization, Postmodernism and Identity* (1995).Co-author *of Surviving Middle Age* (1982).Editor of over a dozen books and author of numerous journal articles and book chapters on social and cultural theory, consumer and global culture, ageing and the body. His books and articles have been translated into sixteen languages.

**Introduction**

Sociologists have long been preoccupied with the question of how to conceptualise and represent social life. Society or social relations are often regarded as too ineffable, extensive and emergent entities to favour ready observation and description. Unlike the individual embodied human beings, the various agglomerates and groups, whose existence can be noted as they move around a given territory, society and social relations tend to be visible in their consequences. It is the accumulation of consequences of people living together, which makes social theorists speculate about the forces which appear to compel us. For some theorists, then, society is something which is more than the sum total of its parts. The Durkheimian tradition for example highlighted society as a sui generis reality comprised of social things which have a persistence, regularity and facticity which confirmed their operation on a level above that of human beings. But if society is to be conceived as a thing, how could it be described, what could be seen? Claiming the existence of ‘social currents’ which operated behind people’s back to ensure a relatively regular suicide rate over time, would seem to be too inchoate, too difficult to conceptualise and represent. Collective representations such as national flags which are held to generated a communal sense of the sacred, are visible entities which are accorded a good deal of affective power, to the extent that they can command personal sacrifice. At the same time the ceremonies which generate excitement when people came together as Durkheim (1965; Thompson, 1998) reported occurred with totemism, clearly suggest something operating which moves and binds together people in powerful emotional bonds, yet the forces moving people are invisible, only manifest through symbols and sacred artefacts, the rock, the mask, the wood carved totem, the painted and marked body. Some things could be described and represented, a new order of social artefacts used in practice, but the forces that bind people together remain invisible and in need of theorizing. Indeed, while one tendency within contemporary cultural social and cultural theory has sought to reject the notion of society and the social, to rather focus on change, mobility, movement, emergence and singularities, there still remains the need to consider how to get a sense of the quality of larger entities, the question of how we make sense of contemporary social life, to see it as a whole, to focus on totality, even though holistic concepts such as capitalism, society, modernity are now generally seen as less than adequate descriptors (cf. Toscano, 2012).

In addition to the aesthetic question of how to represent or conceptualise society, when much of social life is seemingly invisible, or apparently takes place ‘behind the back’ of individuals who are subjected to social forces they are often unaware of, there is the related question of the role of vision and visibility in social life. As embodied sentient beings, humans rely on their senses to steer them around various social milieu. Given the species evolution of human beings, sight has become by far the dominant form of sensory perception (Simmel, 1997; Jütte, 2005).[[1]](#footnote-1) One important preliminary distinction is that between visuality and visibility. The notion of visibility connotes, what can be seen, often drawing on meteorological terminology referring to the distance we can see, the extent of clear vision, which can be potentially restricted by fog, mist, pollution etc. Technologies based on the photographic camera which are central to the mass media provide an apparatus which not only extends the range of what is visible and can be brought under our gaze, but what can be captured, recorded, stored and re-viewed at will. The term visibility is widely used in a metaphorical sense to point to the relative openness of public affairs, the capacity to scrutinise the political and economic decision-making processes of those in power. The prevalent assumption often being, that the greater the transparency and public accountability, the greater the collective social benefits. Visibility, then can take on a strong moral connotation: the dealings everyone can see, as in the expression ‘above board,’ which is opposed to ‘hidden under the table’ or ‘behind closed doors.’ There is the expectation that certain categories of people, such as business and political leaders, or professional specialists will employ different levels of visibility. For those who emphasise open democracy, there is the expectation that dealings in social life should be as transparent as possible. Others, in particular experienced power-brokers, are quick to label this position as naïve and dangerous – even impossible - to implement.[[2]](#footnote-2)

There is also the possibility that certain social structures may favour certain types of visibility, that visibility of certain categories of persons may be highly circumscribed with limitations imposed on who is able to see and when they can be seen. The permission to look at another, especially those deemed in a higher social category may be denied some people. Indeed, the very power to look at someone directly, to look them in the eyes is strongly socially circumscribed; there are historical examples of the severe restriction of the gaze of certain categories of people deemed the lower parties in binary power relation: women, blacks, children, commoners, as opposed to men, whites, adults and kings or emperors (Elias, 1994a). The notion of privacy, of setting apart or hiding certain matters or dealings from the eyes of others, also becomes reinforced with the development of particular forms of spatial exclusion. The architecture of the house or castle is interesting in this respect with its transition from a single-room collective dwelling to multiple sets of private quarters such as bedrooms (cf. Elias, 1994b).

On the other hand, in some situations, a certain type of visibility of superiors, especially rulers, has historically taken place and can be seen as central to the display and legitimation of power. This is evident in occasions such as a religious or civil ceremonies (coronations, national days, religious festivals such as Easter), military display or mass entertainments such as the Roman coliseum. In such instances architecture is designed to enable the audience to witness the event. Yet it is also usual for the architecture to provide back-stage areas (Goffman, 1971) where certain forms of preparation, security and surveillance remain hidden from the audience. Today, spectacle tends to be broadcast or recorded, with the mass media spectacle notably addressed in Guy Debord’s (1970) *Society of the Spectacle*.[[3]](#footnote-3) Televised events, then, offer new form of visibility: different camera angles, close-ups of faces and editing renders visible previously unnoticed aspects of public performance. Yet at the same time, television, although now able to provide high definition close-ups and enhanced sound, often has difficulty in providing or simulating, the strong affective charge experienced by being there. Actively participating in the audience, is to experience more fully an event which has the potential to fuse together the separate viewers into an active crowd and generate powerful emotional and affective forces; something which can also be powerful in situations of collective television viewing where people watch a live event unfold (Featherstone, 2007: ch. 8).[[4]](#footnote-4) As John B Thompson (2005; Bucher, 2012) points out the televised public spectacle or television programme provides a different type of mediated experience. This can be contrasted with our previous age in which print media was dominant, and worked in ways that provided a carefully managed space of visibility through editorial practices.

Different media, then promote different forms of visibility and favour different degrees and modes of disclosure. Today, with the appearance of new digital media such as the internet, there is a new architecture of visibility. This is not just in terms of access to the virtual space of connectivity, the capacity of previously excluded or minority groups to promote themselves and network more extensively to raise their profile and become visible to the internet public. The architecture of the internet dependence on software: on the range of sorting and filtering algorithms which determine what users will encounter online (Bucher, 2012; Beer, 2009). The emergence of new forms of social media such as Facebook have helped the development of new forms of algorithmic architecture which although largely invisible itself to the vast majority of the public, is designed to promote visibility, in that it encourages and rewards the participation of users (Cheney-Lippold, 2011; Mackenzie and Vurdubakis, 2011; Chun, 2011; Munster, 2011). At the same this software architecture facilitates a form of surveillance and mining of information from respondents which can be made financially productive by Internet businesses through passing on information to advertisers and others. Yet this architecture remains invisible and largely unknown to its mass of participants, who are only made aware of their own positive productive possibilities. There is little sense, except if users monitor the density of automatically generated responses, of the algorithm’s inbuilt and emergent channelling, promoting, rewarding and excluding qualities that amass through their practices over time. The tracking information may be regarded as confidential and restricted information and seen as the exclusive property of the digital company who invites users ‘free participation,’ yet at the same time amass large quantities of time-series data on people’s tastes and choices which can have a certain productive currency when handed over to other business and marketing entities. This invisibility to the mass of users, can be seen as the reverse side of the specific algorithmic software design which reward participants for their greater visibility, the extent to which they display their activities to others.

The new digital technologies such as Facebook, then, not only involve a new interesting entwining of visibility and invisibility. They promise more extensive networking and building new sets of associates and friends offers. This is something which not only has a social payoff, but can be used to mix business and pleasure and amounts to a new potential to maximise people’s social and business opportunities: in effect new forms of productivity (Wittel, 2001). But it also provides the accumulation of data for the internet business entities involved, which can be made productive in the capacity to dissect, classify and profile the various elements of the mass of users. It has been suggested that this could amount to a new form of surveillance and data-gathering which a version of the panopticon described by Michel Foucault (Bucher, 2012). It therefore, would be useful to examine in more detail Foucault analysis of visibility and surveillance in the panopticon and assess its usefulness for understanding the operation of the emerging digital architecture of the internet and other new media forms. In addition, to enable a better understanding of this process in today’s neoliberal economies, we could also usefully consider Foucault’s (2008) writings on biopolitics, population and political economy. Foucault discusses the emergence of a new regime of power not based on observation, surveillance and visibility, but one which seeks to know and analyse the tendencies in the living mass of population and economic transactions which offer a new form of state governance. One which is more indirect and largely invisible to the mass population concerned, yet one which through the amassing of statistical data, offers not only a new form of knowledge, but major productive rewards for the social entities (states, companies or individuals) who can gather, store and analyse it. In effect a new form of governance of the invisible forces that move through social life and can be known and made productive. Indeed, one of the watchwords of the new form of governance in its eighteenth century mode as advocated by political economists was *laissez-faire,* govern less and allow the invisible ‘hidden hand’ to do its work for the benefit of all. We will now turn to an examination of some of Foucault’s writings on visibility and invisibility, before returning to a discussion of the contemporary neoliberal digital situation.

**Visibility and Invisibility in Foucault**

In discussions of Michel Foucault’s work, it is generally assumed that the major focus has been on discursive formation and discourse analysis (Deleuze, 1999; Hook, 2001). Given this emphasis, the visible is often seen as less important separate domain, which in some instances was referred to negatively, as ‘non-discursive environments,’ as in the *Archaeology of Knowledge* (Foucault, 1972). At the same time, Foucault was well aware that that social life depended on both language and the visible. This is reinforced by Deleuze (1999:28) who tells us that it was clear to Foucault that ‘a system of light and a system of language are not the same form and do not have the same formation.’[[5]](#footnote-5) Although there are brief discussions in *Madness and* Civilization (Foucault, 1988) and *The Birth of the Clinic* (Foucault, 1973), the main book in which visibility is addressed the most directly is *Discipline and Punish* (Foucault, 1979). In this book we find Foucault’s well-known depictions of the emergence of a disciplinary society in which people become confined and subjected to ‘panoptic’ surveillance aimed at producing regulated conduct and docile bodies.

It can be argued that the development of a more concentrated urban society, especially around the turn of the nineteenth century, made the population, the masses and crowd more visible. From the point of view of the state authorities, this was in part to do with the risk of civil insurrection, of large numbers of people in urban areas turning into a riotous mob. Michel Foucault (1979) opens *Discipline and Punish* with a graphic description of a public execution of the regicide Damiens and noted that although this was meant to be a public spectacle and display of sovereign power which involved the torture and destruction of the criminal’s body, there was always the danger that the crowd’s emotions would get out of hand and lead to violence, riot and even rebellion. The visible spectacle of public ceremonies and executions displayed the power of the monarch, in ways which produced excitement, fear and other emotional responses. Yet sovereign power, gave way to new regimes designed to control, confine and regulate bodies and Foucault provides an account of the systematic application of disciplinary techniques to what became known in the nineteenth century as ‘the dangerous classes.’ Referring to the new panopticon type prison, Foucault (1979:200) remarks that one object was ‘to avoid those compact, swarming, howling masses that were to be found in places of confinement, those painted by Goya or described by Howard.’ The birth of the prison, but also the hospital, school and barracks provided a new architecture of visibility and differentiation with the individual cell, or desk, or hospital bed, carefully designed and placed to facilitate the regimes of recording bodies and subjecting bodies to disciplinary control.

This contrasts markedly with the former practice of treating people as an undifferentiated mass – often through practices of exile, exclusion or limited confinement. According to Foucault (1979:201) the major effect of the Panopticon is to make prisoners subjected to a state of permanent visibility in which the inmates can be separated, numbered, supervised and observed. This makes the Panopticon a ‘marvellous machine,’ for dissociating the see/being seen dyad which we are accustomed to in much of everyday life, because those in individual cells are totally seen, while the guard or authority figure in the central tower ‘can see everything without ever being seen’ (Foucault: 1979:202). The Panopticon, then, was a machine of observation to assess individual character and performance; but it was also a laboratory, a machine for carrying out experiments to alter, train and correct behaviour.

The taming of the unruly bodies of the crowd and the institution of a disciplinary and surveillance apparatus to train and control people, is often seen as an epochal product of modernity, something extended to more and more areas of social life to deal with the large demographic upsurge of the eighteenth century. The spread of disciplinary procedures and techniques was accompanied by centres of observation which were disseminated throughout society (Foucault, 1979:212). The formation of the disciplinary society entailed the ordering and classification and hierarchization of bodies, with the aim to increase the utility of each element of the multiplicity. It involved collective training, timetables, exercises, surveillance and registration with view to make the multiplicity more productive. New disciplinary techniques and procedures were accompanied by new forms of knowledge applied in the hospital, the school, the workshop and with more formalised studies of clinical medicine, child psychology, pedagogy, criminology and other empirical sciences developed (Foucault, 1979:226).

In addition to this set of disciplinary technologies to order and control the body, Foucault in his series of lectures at the *Collège de France* between 1976 and 1979 identifies the emergence of a second ‘regulative technology of life,’ whereby people are considered and analysed at the population level. There are, then, two distinctive technologies of power. As he remarks

One technique is disciplinary; it centres on the body, produces individualizing effects, and manipulates the body as a source of forces that have to be rendered both useful and docile. And we have a second technology which is centred not upon the body but upon life: a technology which brings together the mass effects characteristic of a population which tries to control the series of random events that can occur in a living mass, a technology which tries to predict the probability of those events (by modifying it, if necessary), or at least to compensate for their effects. (Foucault, 2003:249)

This suggests for Foucault (2003:250) that there are two series: ‘the body-organism-discipline-institutions series’ and the ‘population-biological processes-regulatory mechanisms-state’ one. The second regulatory technology focuses on the biological or biosocial processes characteristics of human masses; he remarks ‘Unlike discipline, which is addressed to bodies, the new non-disciplinary power is applied not to man-as-body but to the living man, to man-as–living-being; ultimately, if you like, to man-as-species(Foucault, 2003:242-3). The second, or biopolitical form, focuses on the discovery of the stable characteristics of a population mass, the numbers of deaths by different diseases, or suicides etc., which when recorded in the new form of statistical knowledge appeared to be stable or follow noticeable trends over time. In the second half of the eighteen century, the birth rate, the mortality rate, longevity, epidemics etc. became objects of knowledge for the first demographers who began to measure them in statistical terms. Once the various births, deaths and other characteristics, which on the individual level have their own aleatory and unpredictable causes, were recorded and examined on the mass level, as a series over time, it was possible to detect constancy with the potential to forecast and then modify at a later point through intervention.[[6]](#footnote-6) Life then in the mass could be examined, controlled and regulated; a particular form of life could be optimized. The previous form of sovereignty, based on the rule of the monarch had entailed the direct power of the sovereign over his subjects, manifest in his right to punish, to deal in death. Biopolitics, in contrast involved a new technology of power over the population, the power to let live. It was a form of power which was embraced as productive, in the sense that the population, the mass of people became seen as a resource which could be governed.

There are a number of dynamics to this process and modes of feedback between the regulation of population and security dynamics and disciplinary technologies which emerged more clearly in the eighteenth century. The new forms of knowledge that emerged with Physiocracy and political economy, helped better understand a process and apply knowledge for further stimulate the advance of trade and the accumulation of people in towns and cities. This not only made possible increased regulation in terms of the discussion of security (life and trade circulation) mentioned above, but also on the more granular level new ways for dealing with the unruly bodies on the street, whose accumulation in the dense ‘cockpits’ and overcrowded ‘slums,’ provided a new challenge. The response being the new forms of disciplinary techniques outlined by Foucault in *Discipline and Punish,* entailing the construction of the institutional frameworks of the prison, school, barracks, clinic, hospital, asylum etc. Liberalism, Foucault (2009:67) remarks intensified this process as the motto of liberalism is ‘live dangerously,’ and he argues ‘There is no liberalism without a culture of danger.’ Economic freedom and *laissez-faire*, exacerbated these dangers, but were themselves incorporated into the security/population/political economy discourse, given one of the aims was to indicate what interventions were productive and which ones would be doomed to failure, in terms of the newly discovered economic laws, which became regarded as a second nature.

The population, then, becomes seen as based on a set of variables that acts like a natural phenomenon, which follows its own laws and resists the decree of the sovereign. At the same time, if it is carefully observed and studied, the population can be made accessible to techniques of transformation. This is something which demanded careful reflection, analysis and calculation, but above all, as was the case in the early eighteenth century in France through the research of Quesnay and the Physiocrats, it involved the acknowledgement of the naturalness of individuals’ desires and pursuit of their own self-interests, which could be analysed as the collective interest of a population and in turn be subjected to management. This new form of knowledge laid the foundation for the science of economics. It heralded a new domain of knowledge, based upon the introduction of population into the field of economic theory and practice: a new subject-object for the analysis of wealth.[[7]](#footnote-7) One of the central advocates of this new political economy, Quesnay never tired of saying that ‘real economic government was government that concerned itself with population’ (Foucault, 2007:77).

The sovereign was the person who could say no to any person’s desire, he held the power of death over his subjects, and this was manifest in the way in which the absolute state had moved towards a police state controlling the population.[[8]](#footnote-8) Yet, now the state was faced with a different problem: how to say yes to desire, how to encourage self-esteem and desire, because of their potentially productive beneficial effects. This form of utilitarian philosophy became the theoretical underpinning for the government of population (Foucault, 2007:74). Saying yes to desire, also became part of the dynamic which went on to produce mass consumption and consumer culture, which will be discussed later in the paper.

In the eighteenth century, then, the population became an object of government and the underpinning for the new science of political economy. The mechanisms political economy had discovered suggested the operation of a new ‘nature,’ a social nature which had its own order and could be made intelligible and exploited to further the exercise of governmentality. Hence the economists explained the movement of population to places where the wages are highest as a law of nature, a phenomenon which rulers would be unwise to ignore or seek to countermand. The consequences of actions could now be judged in terms of success or failure; this was to become central to utilitarian philosophy in the nineteenth century. The advice to the monarch would now be that governing too much, as we find with the extension of the absolute state and the emergence of the police state, could be dangerous, raising the question of the need for the self-limitation of government. The principle of *laissez-faire* (*laissez-nous faire* or ‘leave us alone’) became acknowledged as a new type of rationality entailing ‘the self-limitation of governmental reason,’ which was the basis of what became called ‘liberalism’ (Foucault, 2008:20).

The birth of liberalism meant that the market became presented as the key regime of truth for the governance of society, with the assumption that it would spread its benefits to all. But to sustain the market, liberalism must produce and organize freedom, not just the freedom of the market, the freedom to buy and sell, but the free exercise of property rights, freedom of discussion etc. Yet to produce the freedom of the internal market, monopolies must be prevented and at the same time, tariffs established to prevent the national market being swamped by the goods and economic strategies of more powerful states. Colonialism was an important part of this process of preferential exploitation, with the graded and circumscribed application of free market principles within restricted milieu which benefitted the colonizer and impoverished the colonized (Venn, 2009).

The two technologies of power disciplinary and biopolitical Foucault (2003:249) refers to are based on two very different assumptions about visuality. The disciplinary form is based upon direct surveillance, it places the multiplicity of people in the light so they can be seen, individualized and recorded; it slows down, separates and orders their bodily movements and regulates behaviour; it produces a visible subjection of individual bodies to the purposes and plans of the authorities, be it the authority of the prison guard observing the ordered ranks of prisoners exercising, the regiment of soldiers rehearing parade under the eyes of the drill sergeant, or the ranks of school children sitting at their desks writing in silence.

The biopolitical form, on the other hand perceives bodies not in action, moving in front of the eyes of the observer. Rather, it dwells on the mass effects of population sets, the events they produce and characteristics they generate and accumulate over time, which can be documented and recorded, then analysed through statistical techniques to predict the probability of future events, which in turn could be subjected to modification and manipulation. The bodies of prisoners in the Panopticon cells are illuminated and are under the surveillance of unseen guards, yet while the bodies of the population mass cannot be observed, detailed information about individual characteristics can be amassed and series data accumulated, classified and put into tabular form to reveal patterned change over time (numbers of births and deaths, along with data on health, income and other variables). In addition, data could be captured and recorded concerning the movement of things, the numbers and volume of carts of corn, or barges of coal entering the city, or cannons cast and rifles manufactured, the weight of silver imports.

Information which could be used to render the population and its economic transactions useful for those in power, in terms of planning new roads or canals, the siting of new towns. Based on a new form of knowledge in which the capacity to accurately record numbers of objects, their movement in transactions, along with the attributed characteristics of human beings (gender, age, health, weight, size etc.) could be abstracted in numerical form with figures and series recorded on the form of statistical tables. The population and economy could be made more productive from the governmental perspective, in order to increase the state’s overall power potential, in terms of: total economic wealth, citizens’ well-being, as well as the military potential for aggression or defence in the struggle with neighbouring states. The second technique of power Foucault mentions, biopolitics, then, could potentially fit well with a panopticon society, with top-down authority and control as we find in twentieth century totalitarian societies, societies in which the endeavour is to regulate all aspects of life and subject bodies to the pre-ordained state purposes. But it also has its place in contemporary neoliberal societies, which we will turn to shortly.

It could be tempting to conceptualise different types of societies operating in a developmental series, each with different modes of visuality: sovereign societies, which operate a version of the totalizing gaze; followed by panoptic disciplinary societies which provide a more impersonal and invisible surveillance gaze; and then governmental societies based on invisibility, in which population and economic processes operate behind our backs and are best left alone. But Foucault (2007:107-8) is strongly against this over-simplification and emphasises he does not see a set of stages or clear cut chronological process with clean breaks; as he remarks ‘So we should not see things as the replacement of a society of sovereignty by a society of discipline, and then of a society of discipline by a society, say of government. In fact we have a triangle: sovereignty, discipline and governmental management, which has population as its main target and apparatuses of security as its essential mechanism.’ He adds ‘from the eighteenth century, these three movements – government, population, political economy – form a solid series that has certainly not been dismantled even today.’

Eighteenth century society, then, operated through different forms of power: sovereign, discipline and governmental management, each of which employs different techniques and types of optics. In the case of sovereign power, it is possible to see it as operating through the visibility of the sovereign, with power invested in the person of the ruler. One of its strongest forms was the European doctrine of the divine right of kings, with the monarch seen as God’s appointed steward on earth. Louis XIV of France, the ‘sun-king’ with his remark ‘L’Etat c’est moi,’ captures this sense of absolutism, that the king is the state and has the divine right to steer it as he sees fit. The state’s power is manifest in the persona of the king with lavish ceremonials, elaborate costumes and settings on state and other occasions, designed to display his magnificence. It has been suggested that the assumption of the all-seeing gaze of the god-like monarch draws its impetus from Christian scheme of pastoral power.[[9]](#footnote-9) Sovereign power is visible, it is manifestly the power of the individual monarch or his agents operating on particular events. While disciplinary power in the form of the panopticon operates through the gaze of authorities which can be invisible to those under surveillance, but is known to operate in potentially totalizing ways. The disciplinary gaze, therefore, has some similarities with the sovereign gaze, yet it operates in more diffuse and all-pervasive ways.

As discussed above, the biopolitical or governmental form of power, as manifest in the development of modern economics is very different, in that it operates through an indirect, or secondary gaze, based on the accumulation of statistical information about the changing attributes and characteristics of people (population analysis in the form of demography and other emergent human sciences) and things (the value of commodities in the market). Certainly for market transactions, with the operative principle of laissez-faire becoming seen as the most efficient form of both economic and societal governance, there is a different attitude towards the state, with the proclamation of non-intervention and the brutal freedom of people to seize their own possibilities to ‘live dangerously,’ to calculate carefully their transactions, but also seize the possibilities of the market. Yet the nascent modern liberal economy of the eighteenth century, was one not held together by divine purposes, sovereign power or panoptic surveillance, it did not need the gaze of an outside agent to make it function. Indeed, the opposite was seen to be the case, especially in the view of one of the key figures of political economy, Adam Smith with his emphasis on ‘the hidden hand.’ The key point for Foucault about the hidden hand was not that somehow it ties together all the disperse threads of individual actions, but rather that it has to be invisible because modern economics depends upon the analysis of an open and unfolding process; it is thus open to a future, which is not yet visible, but emergent and vulnerable to chance, or to use Foucault’s term *aleatory* forces (Foucault, 2008: Siisiainen, unpublished).

**From Liberalism to Neoliberalism**

When we turn to contemporary neoliberalism, which has become the dominant global economic force since the 1980s, it is clear there are many continuities here with liberal economics. But one of the big differences is the role of the state. With neoliberalism, which according to Foucault (2008; Terranova, 2009) originates with the German Ordoliberals in the 1930s, but can be traced back to the earlier interwar writings of von Mises and Hayek (Gane, forthcoming), the state is given an active role to break down monopolies to ensure that the process of open competition works as well as possible. Here,Foucault emphasises the ‘shift from exchange to competition in the principle of the market,’ adding that ‘It is the problem of competition and monopoly, much more than that of value and equivalence, that forms the essential armature of a theory of the market’ (Foucault, 2009:119). In this the Ordoliberals in Germany in the 1930s and the neoliberals in the United States in the post-war era, have been following the development of liberal economic thought from the late nineteenth century which accepted that the most important thing about the market was competition – not equivalence and exchange, rather the need for inequality. This is where the Ordoliberals break with traditional eighteenth century and nineteenth century liberalism in arguing that *laissez-faire* cannot be the principle of competition and the organizing form of the market.

The implication as Foucault (2009:121) puts it is that from now on ‘One must govern for the market, rather than because of the market...’ which means that an active governmentality was needed to produce and sustain pure competition. Indeed, American neoliberalism has sought to extend market criteria to many parts of society such as the family and birth rate, delinquency and penal policy. Whereas in eighteenth century liberalism, the theory of the invisible hand put forward by Adam Smith indirectly linked together the pursuit of self-interest by *homo economicus* with the general interest of society, in twentieth century neoliberalism, the market ceases to be seen as a place of exchange, but as only viable and productive when based on competition. In order to reap the benefits of the market in terms of efficiency and the lowering prices, competition had to be sustained with the elimination of tendencies towards monopolization, even if this new intervention form could not be justified on the natural economic grounds of eighteenth century liberalism, and had to be artificially constructed through governmental action. Competition then, required constant activity, vigilance and intervention. Yet the intervention also involved a critique of any residual ambitions to accumulate knowledge of everything and present it to the sovereign who could potentially control the economic process. This had been an ambition of the Physiocrats, which was criticised by Adam Smith who held such absolute knowledge to be impossible; (Foucault, 2008:285). This critique of totality with its ‘visual excess,’ was also central to Hayek and other proponents of neoliberalism (Gane, forthcoming).

The other thing to note is that the benefits of the liberal and subsequently neoliberal economies are presented in terms of efficiency, which points to a process of the accumulation of value. This can be translated into the money form which can be re-invested in the production process to purchase new plant, equipment, technical and scientific knowledge. Or it can be turned into higher wages for the workforce, which results in increased levels of consumption. In one sense the goal of all production is consumption. Either directly, or indirectly via the amassing of capital equipment and plant, along with technical knowledge; all these gains feed into greater productive accumulation and wealth, which in turn offer great possibilities for consumption. But the consumption side of the equation has generally been assumed to be unproblematic. People will necessarily want fine things and luxuries given the opportunity. Yet historically, religious and moral prohibitions often hedged in the consumption of luxuries. In the eighteenth century the luxury debates resulted in a victory for the perspective or Adam Smith, Mandeville, Hume and others on the acceptance that ‘vices,’ or the consumption of wasteful or morally inappropriate things, themselves contributed to the general economic good. This reinforced laissez-faire and the de-moralization of economic life.

Consumption, then began to be seen in a more positive light, as stimulating the economy and resulting in a more satisfied population able to enjoy what became eventually known as ‘a high standard of living’ and ‘better quality of life.’ Yet, it is possible to see the line between consumption and production becoming even more blurred under neoliberalism. Foucault (2008:226) argues that neoliberalism seeking to foster the type of person who is ‘an entrepreneur of himself.’ He goes on to suggest that this means a person being for ‘himself his own producer’ and the sources of his earnings. There are two ramifications here Foucault makes which are interesting. The first is to suggest that we should follow Gary Becker to explore this mode of analysis not just in production but consumption and think of consumption as enterprise activity, in which the consumer should be seen as a producer, one whose activity is geared to producing her or his own satisfaction. The notion of enterprising consumption, the consumer as an active lifestyle innovator and investor in her or his self, is a long way from the alleged passive consumer manipulated by advertising and culture industries who spends free time in standardized and regimented pursuits.[[10]](#footnote-10)

Foucault’s second point draws on the work of Gary Becker and other theorists of human capital, to explore the argument that income is allocated on the basis of human capital, which is comprised of innate (hereditary, embodied) and acquired elements. The latter are formed over the lifespan and involve activities such as parental time spent in feeding, training and giving affection to their children as well as educational investments, professional training, health care and investments in mobility (the ability to migrate). Human capital investment, then, is seen as a key element in the self-development and growth of the individual, but also for nation-states.[[11]](#footnote-11) The enterprising consumer, then ideally is involved in investment, consumption is not just non-productive waste-making – as for example in the consumption of food, alcohol and other pleasures. It can result in profitable investment, in the accumulation of resources which work for the individual, as for example in house purchase. The expectation, especially up to the subprime mortgage crisis, was that house prices would steadily increase. Yet the over-availability of cheap credit, which brought on the banking crisis of 2007 and long recession, has seen a massive increase in debt. The economic crash has exacerbated the trend in neoliberal society to strip down welfare state the support systems. Ordinary people may still be encouraged to become entrepreneurs of their selves, to invest in the stock market, to buy homes speculatively, yet the actual experience in many cases has been the accumulation of high levels of private debt (Lazzarato, 2012; Graeber, 2011). At the same time to encourage austerity and relinquishing debt have their political and economic drawbacks; given the high dependence of contemporary economies on consumption, the most favoured way out of the crisis has been ‘quantitative easing,’ the increase in the money supply with the aim of stimulating consumption.[[12]](#footnote-12)

**Ubiquitous Consumption**

Contemporary neoliberal economies have, therefore, managed to positively link together the encouragement of enterprise and ‘productive consumption.’[[13]](#footnote-13) While Foucault, seems to have had little direct interest in consumption or consumer culture,[[14]](#footnote-14) and also did not directly use the term lifestyle, his focus on the significance of the person who is an ‘entrepreneur of himself,’ or ‘enterprising self’ and positive remarks above about ‘the man of consumption’ seeking to produces his own satisfactions, would suggest that the topic is worthy of investigation.[[15]](#footnote-15) Foucault became more interested in questions of active self-construction and inventiveness in his later writings, where he focused on the care of the self and the development of an aesthetics of existence, or art of living.[[16]](#footnote-16) Yet there is little in Foucault on actual consumption, on how people seek to produce and satisfy their desires through the market. Despite the focus on the birth of biopolitics and the establishment of the new science of political economy, there seems to be little attention given in his writings to what has been characterised as ‘the birth of the consumer society,’ which occurred in eighteenth century England (McKendrick et al, 1982). Especially as the expansion of colonialism, the new exotic imports and manufacture of consumer goods and the development of the science of economics, would seem to be connected (Venn, 2009). The growth of enterprise and the advocacy of greater freedom for the market, then, also entailed the capacity for larger numbers of people to go to actual markets and purchase an expanding range of consumer goods, to sample exotica and newly designed artefacts, to explore new types of social relationships mediated by consumption, to decide how to react to and judge the pursuit of new sensations and luxuries by the nouveau riche (Berg and Eger, 2003; Berg and Clifford, 2003; Sekora, 1977).

As noted above Adam Smith, Mandeville and Hume in the eighteenth century luxury debates had adopted a sanguine attitude towards the pursuit of new sensations and ‘vices,’ arguing that if the market is an efficient social mechanism deciding success and failure, it will work far better if it is de-regulated. The corollary is that consumption too would also work better without moral laws and prohibitions: let people consume luxuries for they too will stimulate trade and create employment (see Featherstone, 2013c; Secord, 1977). Market society, then encouraged enterprise, and as Adam Smith held, it effectively encouraged everyone to become a merchant, concerned to pursue their own self-interest and widen their network of interdependencies. It would thereby extend freedom, wealth and opulence to all people and result in the ‘betterment of all’ (Berry, 1994). Luxury and excessive consumption ceased to be associated with a decadent aristocracy, but now became seen as something socially beneficial, as encouraging innovation and promoting trade.

The case for the historical role of luxury in the formation of capitalism was argued by Werner Sombart (1967) whose emphasis upon the significance of consumption in court societies provides an influential counter argument to Max Weber’s Protestant Ethic thesis. Courts were centres of luxury and consumption, with court societies such as Louis XIV’s Versailles one of the best examples (Elias, 1982). Despite their aristocratic exclusivity and distinctiveness and often ruinous competitive consumption, court societies helped to stimulate consumption in the middle classes and lower orders (Elias, 1982; Featherstone, 2013c).[[17]](#footnote-17) Court modes of extravagant consumption became a referent point for rising merchant groups to emulate, but the middle classes also developed their own cultures and as financial and trade intermediaries were at the centre of the provision of new exotic goods, fashions and styles (Goody, 1986; Featherstone, 2009b).[[18]](#footnote-18) The advocacy of the positive effects of luxury by Adam Smith and others, then, resonated with the increased pursuit of fashion, display and more conspicuous forms of consumption occurring in the middle classes in eighteenth century England and points to significant links between liberalism, political economy and rising consumption.

In the nineteenth century there was a greater extension of consumer culture and the democratization of luxury. New consumption spaces such as the department stores which emerged in England, France and the United States, referred to as ‘dream worlds,’ by Walter Benjamin (2000) were established in the second half of the nineteenth and early decades of the twentieth century (Miller, 1981; Nava 2002; Tamari, 2006; Williams, 1982). Department stores not only displayed fashionable and luxurious goods, they also provided opulent and luxurious surroundings, evident in the use of carefully designed window and floor displays which provided aestheticized and glamorous settings for goods. There was also the additional capacity to not just look, but touch, to walk around, handle and try-on goods and clothing. The tendency to accentuate the visual was heightened in the twentieth century through the development of the cinema, television and advertising. The

Hollywood films which became a global force in the 1920s, and television which began to dominate in the post-war era, increased the interest in lifestyle, in part through the publicity given to the lavish lifestyles of stars and celebrities, featuring their homes, cars, swimming-pools, fashionable clothing and accessories. The expanding consumer culture in the twentieth century, then, provided a proliferation of images which fostered dreams of luxurious consumption and fulfilling lifestyles (Ewen, 1976; Featherstone, 2007). Consumer culture also provided new opulent and luxurious settings through the growth of sites for shopping, entertainment and leisure (department stores, hotels, dance-halls, resorts), which offered increased opportunities for pleasurable viewing, inspection and purchase. Both the ready availability of images along with the new sites of consumption, stimulated dreams of the consumer culture good life lived amidst luxurious abundance and style, rare and beautiful things and people.

It has become a truism, then, to say that consumer culture has helped to stimulate visuality and favours occularcentrism through the massive proliferation of images. Increasingly high resolution colour images have also helped foster the aestheticization of everyday life. Media have become mobile and ubiquitous, with the proliferation of screens on mobile devices such as portable computers, tablets and mobile ‘phones; this has further increased the number and availability of sophistication static and moving images (Featherstone, 2009a). Consumer culture had become no longer exclusively dependent on an expanding world of goods made available in city centre department stores or out of town malls, the new shopping spaces were now increasingly provided in the virtual world of the Internet and ubiquitous screens through ‘click and purchase.’ Yet whether in the windows and displays of city centre stores or malls, or Internet shopping, consumer culture features a profusion of photographic images of bodies, cut up and edited in a bewildering variety of ways (Featherstone, 1982; 2010a). Body images invite us to make comparisons to review who we are not and who we would like to be. While the consumer culture body maintenance, cosmetic, fashion and advice industries provide images of beautiful people enjoying the good life, the promise of transformation has become central, with ‘before and after’ images demonstrating proof of the value of the time, money and energy expended. The new body and ‘look’ is extolled as the passport to a more positive self-image, exciting lifestyle and better quality of life. It is therefore possible to trace back some of genealogies of contemporary consumer culture to the display of luxury in court societies, which stimulated trade and colonialism and middle class merchant entrepreneurialism. There are some continuities between the court display of luxurious consumption and the display of wealth and excessive lifestyles on the part of contemporary celebrities and the super-rich (Featherstone, 2013a, 2013c). At the same time there is an important affective dimension to the way in which images are encountered in consumer culture which provides an alternative powerful current to the rationalistic impetus of consumer culture advertising with its appeals to the before/after logic of transformation. Within consumer culture people have to learn to switch between careful scrutiny of the body as an alleged object and see themselves clearly and coldly as a lifestyle expert might do, and the affective body that moves through everyday life, which does not see in the same way and has far less concern for ‘the look’ and impression management.

**Consuming and Governing Data**

Yet for all the consumer culture advice and advertising rhetoric on transformation of appearance to reinforce the ‘if you look good you feel good’ formula, for all the display of goods and possessions, to provide ‘evidence’ of the worthiness of the self, there is still the question of the calculus in the act of purchase. Shopping may well involve impulse buying, affective responses (Coleman, 2012), the dominance of drives over desire through the technical manipulation of neuromarketing (Stiegler, 2013; Barker, 2009). At the same time, consumption, as Foucault reminds us, can also be understood as enterprise activity, with consumers actively engaged in seeking to increase their own satisfaction. As part of this enterprising and maximising activity, it could be ventured that consumers are also encouraged to review their purchases in relation to their longer term investments in their own human capital. Consumer culture is not just a mindless hedonism, or dictated solely by impulse and desire, but also requires a calculating hedonism in which credit-rating, levels of debt and levels of satisfaction gained from particular purchases can be taken into account and evaluated. Consumption generates a good deal of waste and fleeting satisfactions as critics have long indicated,[[19]](#footnote-19) but it also leads to the accumulation of things, which can demand care, maintenance and disposal - and in addition time-money calculation in assessing their sense of value to us (Miller, 2008a, 2008b; Featherstone, 2013c).

At the same time very few people subject all their purchases to regular systematic review, evaluation and cost-benefit analysis. There are some who log all their purchases on their personal computer, yet this is currently considered to be eccentric behaviour. But the feasibility of this type of analysis is increasing with the greater availability of internet banking and shopping (not just buying consumer goods, but paying for vacations, air tickets, utilities and other regular bills). It is also increasing through the use of smart phones and other devices for ‘contactless payment,’ or credit card purchases via electronic scanning of bar code, QR code and other formats. Business enterprises, of course are constantly reviewing and evaluating the mass of data they accumulate on purchase patterns of materials, products, supply-chains along with evaluation of existing markets and emergent innovation and their own employees. Indeed it is possible in today’s digital world to accumulate detailed metrics on all aspects of business life. The consumer is, albeit more slowly, being encouraged to move down the same route.

Consumption then leaves traces. It entails recordings and the accumulation of data. The mass of production and transactional data can be broken down so that it is possible to follow the fate of particular batches of goods to know when, where and by whom they are bought, consumed and disposed of. In the supermarket or department store shelf-life of particular products can be noted. For those goods which are tagged electronically, which is increasingly the case via barcode, QR code and RFIDs (Hayles, 2009) not just time spent in the store or on shelves can be recorded, but even whether the goods have been speculatively lifted up, looked at and put back. This enables sophisticated comparisons and evaluation of similar or rival sets of goods, or individual items in a set. Patterns become evident through analysis of large sets and time series data, in similar ways to the earlier discussion of the eighteenth century birth of biopolitics addressed by Foucault (2008). The consumer world of goods, then, is itself a mass, a multiplicity which can be progressively known and made productive.[[20]](#footnote-20) It produces data which can be recorded, analysed and then re-organized and governed in a similar way to any other population set. This then is the reverse side to the visibility of goods, bodies and fashions and their endless duplication through images, as it amounts to a new world of invisibility: one whose parameters are in the process of elaboration and discovery.[[21]](#footnote-21)

Today consumption takes place in a milieu which is increasingly digitalised, but this does not mean home internet shopping is completely destroying city centre stores. Sophisticated digital devices are also being installed in the high streets and malls which offer a range of new experiences and facilities via screen connectivity. Rebecca Coleman (2012) has discussed the use of digital screen/mirrors in changing cubicles which enable women to see not only the dress they are wearing, but their previous saved collection of items on the stores website, with an additional Facebook link to enable them to post the composite digital images to solicit the views of friends and family. Again we have the coupling of visibility and digital network invisibility, in this case designed to provide extra affective benefits (the enhanced experience of shopping as enjoyable entertainment) with internet data back-up in the form of one’s own personal set of images and price-comparison databases available through the store’s internet website and Facebook links. In response to the expansion of internet shopping from the home, department stores and others are responding by enticing shoppers to their stores to use their own digital screens (iPhones, iPads etc.), as well as to use the store’s additional digital resources such as the full-length smart digital mirror/screen, and to see this as part of a new enhanced shopping experience. Younger people especially are enthusiastic about the hybrid city/screen world involving multi-tasking. A world which increasingly has embedded digital devices which can provide extra information about a restaurant or urban locale which comes immediately to hand on the screen of the digital device as one walks past, or within one’s potential field of vision as is the case with Google Glass and other forms of wearable augmented reality technology.[[22]](#footnote-22)

Yet there is another side to this process. Mobile devices such as digital phones are not just communicative devices for us, they are enabled to facilitate the constant tracking of our movement in space and time and also carry information about who we call or text and for how long. In addition, objects are also becoming more trackable. This is evident in the increasing use of RFIDs (radio-frequency identification devices) which were first attached to containers, and are now attached to more and more consumer items (Hayles, 2009). They send back information to their home base about their present location and state of affairs – for example, whether a wine bottle is in the supermarket, at home on the shelf, has been put in the garbage, or is in the rubbish dump. As the unit cost diminishes this type of computer chip is becoming ubiquitous – every object will have a trackable digital identity and can interact with, or ‘talk to’ other devices and the urban infrastructure. Increasingly RFID tags are becoming embedded into personal items and identity documents, including office key cards, school IDs, credit cards, passports, driver's licenses, clothing, phones, groceries, transport and toll passes. The use of biometrics also means chips are inserted into pets and human bodies. Such information helps agencies to better understand mobility patterns to enable cities plan their transport infrastructure and surveillance needs (Crandall 2010).

At the same time it is not just local city or state authorities who gather the information. This is something which is being carried out by numerous private businesses and global corporations. The internet in particular is a rich site for data gathering and there are a growing number of web analytics firms that amass information on Internet website users via computer algorithms. In effect categories of identity are being inferred and individual profiles created, stored and analysed in real time, based upon their web use.

Through the use of software algorithms, commonalities between data patterns are identified to enable real-time access and matching (Cheney-Lippold 2011). Users’ profiles can be continually updated as with each piece of information on new preferences or changing tastes and the set of recommended purchases altered accordingly (cf. Amazon Books). It is clear that there now exists a new social life of methods outside the academy, with social science quantitate data techniques such as sampling and census surveys seen as far inferior in terms of energy expended, completeness of data sets and a host of other factors (Ruppert et al, 2013). Many of these databases are now vastly superior to those constructed by social science research in terms of their extent, scope and real-time updating, and provide much more fine-grained information about the consumption, lifestyle and cultural values of different groups (Burrows and Gane, 2006; Beer and Burrows, 2013).

In terms of visibility and invisibility, it is possible to see the new Internet medium as favouring deregulation and the open capacity to exploit the digital field in a similar way to that described by Foucault with reference to eighteenth century biopolitics and the birth of economics. Certainly there are many aspects of the internet which fit the model of opening up a new competitive market, in which businesses compete and strive to amass data sets about different populations and make these productive for their own ends. Increasingly, it would seem that it is not only the state that is interested in making mass populations productive, but corporations and other private bodies that engage in ‘data-mining.’ Some would see this as evidence that we are moving from disciplinary societies to ‘societies of control’ (Deleuze, 1992), in which control ceases to be primarily normative, inculcated through disciplining the body through lengthy education processes and panoptic surveillance, but occurs through more open mechanisms, in which our fragmented virtual identities constructed in the digital databases become assimilated into categorical groupings through statistical regulation. Yet the data would seem to be producing, or is based on, a more complex taxonomy of tastes and lifestyle differences than previously thought, to produce a more complex patchwork.

Yet does this mean there has been a switch in the mode of the regulation and move from disciplinary normalising techniques inscribed onto bodies, to more open forms of control through the modulation of digital identities in databases, which operate modes of inclusion and exclusion, through tagging and tracking, enabling governance at a distance? Such large descriptors can be suggestive, but often lack purchase when put against the complexities of social and digital life. It would seem that the architectural possibilities of the internet could favour new forms of panoptic control and discipline. This has been suggested to occur in the case of social media networking sites such as Facebook and this can provide an interesting insight into the discussions of visibility and invisibility. Bucher (2012) argues that Foucault’s panoptic architecture with its emphasis on the visibility of the incarcerated and the invisibility of the supervisor or guard, has effectively been reversed in the new forms of visibility encouraged by the internet. With Web 2.0, what can be seen largely becomes a function of the filtering and sorting capacities of algorithms which determine what each individual user will encounter online (Beer, 2009). One influential source is Google’s PageRank algorithm, which rank orders the things we search for in terms of the amount of incoming links by other websites along with their perceived authority. Likewise Facebook’s News Feed feature operates with a particular algorithm which favours and weights certain type of activities.

Under panopticism, as discussed above, the architecture of buildings such as prisons, schools and hospitals was constructed to ensure that then inmates were under permanent visibility and surveillance, which forced them to develop the awareness and attentiveness to the constant possibility of inspection. In the Facebook News Feed, it is not the threat of visibility, but rather the threat of invisibility which is to be feared and consequently governs the actions of subjects (Bucher, 2012:1171). It is not the possibility of constantly being observed, but of permanently disappearing which becomes the fear built into the architecture. But this visibility-invisibility dynamic, operates in ways which are not totally transparent to users. Inscribed into the algorithm logic of the Facebook News Feed is the idea that visibility functions as a reward for providing the type of news items favoured and relates to having a large number of friends commenting that the like a particular post. In effect there is a disciplining process which makes subjects monitor their own behaviour and train themselves to perform as required. From the Facebook perspective a useful individual is seen as one who ‘participates, communicates and interacts,’ with the big danger being the threat of invisibility (Bucher, 2012: 1175). Yet the flexible processual and interactive algorithmic logic used in the internet creates modes of visibility that are modulated and temporary, that oscillate between making people appear and disappear, adding to the uncertainty and thereby demanding attentiveness from users.

**References**

Barker, Stephen. (2009) ‘Transformation as an Ontological Imperative: The [Human] Future According to Bernard Stiegler,’ *Transformations* 17. <http://www.transformationsjournal.org/journal/issue_17/article_01.shtml> ; accessed 21.7.2013.

Beer David (2009) ’Power through the algorithm? Participatory web cultures and the technological Unconscious,’ *New Media & Society* 11(6): 985–1002.

Beer, David and Burrows, Roger (2012) ‘Consumption, Prosumption and Participatory Web Cultures,’ *Journal of Consumer Culture*,’ 10(1):3-12.

Beer, David and Burrows, Roger (2013) ‘Popular Culture, Digital Archives and the New Social Life of Data.’ Special issue on the Social Life of Methods, *Theory, Culture & Society* 30(4):47-71.

Benjamin, Walter (2000) *The Arcades Project.* Cambridge, Mass: Harvard University Press.

Berg, Maxine and Helen Clifford (eds) (1999) *Consumers and Luxury: Consumer Culture in Europe 1650-1850.* Manchester: Manchester University Press.

Berg, Maxine and Eger, Elizabeth (eds) (2003) *Luxury in the Eighteenth Century: Debates, Desire and Delectable Goods. Basingstoke:* Palgrave Macmillan.

Berry, Christopher .J. (1994) *The Idea of Luxury.* Cambridge: Cambridge University Press.

Birchall, Claire (2011) ‘Introduction to Secrecy and Transparency,’ *Theory, Culture & Society 28*(7-8):7-25.

Brigstocke, Julian (2013) ‘Artistic Parrhesia and the Genealogy of Ethics in Foucault and Benjamin,’ *Theory, Culture & Society* 30(1):57-78.

Brighenti, Andrea. (2010) *Visibility in Social Theory and Social Research*. London: Palgrave Macmillan.

Burrows, Roger and Gane, Nicholas (2006) ‘Geodemographics, Software and Class,’ *Sociology* 40(5):793-812.

Bucher, Taina. (2012) ‘Want to be on the Top? Algorithmic Power and the Threat of Invisibility on Facebook,’ *New Media & Society* 14(7):1164-1180.

Cheney-Lippold, John (2011) ‘A New Algorithmic Identity: Soft Biopolitics and the Modulation of Control.’ Special Issue on Code and Coding in Crisis, *Theory, Culture & Society* 28(6):164-181.

Chun, Wendy Hui, Kyong (2011) ‘Crisis, Crisis, Crisis, or the Temporality of Networks.’ Special Issue on Code and Coding in Crisis, *Theory, Culture & Society* 28(6):91-112.

Coleman, Rebecca (2012) *Transforming Images: Screens, Affects, Futures.* London: Routledge.

Copeman, Jacob and Street, Alice (forthcoming) ‘Social Theory after Strathern: an Introduction.’ Special Issue on Strathern, *Theory, Culture & Society.*

Crandall, Jordan (2010) ‘The Geospatialization of Calculative Operations: Tracking, Sensing and Megacities,’ *Theory, Culture & Society* 27(6):68-90.

Crary, Jonathan (1990) *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century.* Cambridge, Mass.: MIT Press.

Davies, William (2013) ‘When is a market not a market? 'Exemption', 'Externality' and 'Exception' in the case of European State Aid rules,’ *Theory, Culture & Society* 30(2):32-59.

Debord, Guy (1970) *Society of the Spectacle.* Detroit: Red and Black.

Deleuze, Gilles (1992) 'Postscript on the Societies of Control', *October* 59: 3-7.

Durkheim, Emile (1965) *The Elementary Forms of the Religious Life.* Glencoe: Free Press.

Elias, Norbert (1983) *The Court Society.* Oxford: Basil Blackwell.

Elias, Norbert (1984) ‘On the Sociogenesis of Sociology,’ *Sociologisch Tijdschrift* 11(1).

Elias, Norbert (1994a) *The Established and the Outsiders.* 2nd Edition. London: Sage.

Elias, Norbert (1994b) *The Civilizing Process.* Oxford: Blackwell.

Ewen, Stuart (1976) *Captains of Consciousness: Advertising and the Social Roots of the Consumer Culture*. New York: McGraw-Hill.

Featherstone, Mike (1982) 'The Body in Consumer Culture,' *Theory, Culture & Society* 1(2):18-33; reprinted in Mike Featherstone, Mike Hepworth and Bryan S. Turner (eds) *The Body*. London: Sage, 1991.

Featherstone, Mike (1995) *Undoing Culture: Globalization, Postmodernism and Identity.* London: Sage.

Featherstone, Mike (2006a) ‘Genealogies of the Global,’ in special issue on Problematizing Global Knowledge (edited by M. Featherstone, C. Venn, R. Bishop and J. Phillips), *Theory, Culture & Society* 23(2-3):387-92.

Featherstone, Mike (2007) *Consumer Culture and Postmodernism, 2nd Edition.* London: Sage.

Featherstone, Mike (2009a) ‘Ubiquitous Media: An Introduction,’ *Theory, Culture & Society* 26(2-3):1-22.

Featherstone, Mike (2009b) ‘Introduction to Jack Goody: Occidentalism and Comparative History,’ *Theory, Culture & Society* 26(7-8):1-15.

Featherstone, Mike (2010a) ‘Body, Image and Affect in Consumer Culture.,’ Special issue on Affect edited by Lisa Blackman and Couze Venn. *Body & Society* 17(1):193-221.

Featherstone, Mike (2010b) ‘Luxury: Consumer Culture and Sumptuary Dynamics.’ Special issue on Le Luxe, *Les Cahiers Européens de l'Imaginaire,* No. 2,CNRS Editions, Mars 2010:166-72.

Featherstone, Mike (2010c) ‘Ethical Consumption: Some Prefatory Remarks,’ in Tania Lewis and Emily Potter (eds) *Ethical Consumption: A Critical Introduction.* London: Routledge, 2010.

Featherstone, Mike (2013a) ‘Super-Rich Lifestyles,’ in Birtchnell, T. and Caletrío, J. (eds.) *Elite Mobilities*. Oxford: Routledge.

Featherstone, Mike (2013b) ‘Mass Culture,’ in Masamichi Sasaki, Ekkart Zimmermann, Jack Goldstone, Stephen and A. Sanderson, (eds) *Concise Encyclopedia of Comparative Sociology.* Leiden: Brill Publishers.

Featherstone, Mike (2013c) ‘The Rich and the Super-Rich: Mobility, Consumption and Luxury Lifestyles’ in Nita Mathur (ed) *Consumer Culture, Modernity and Identity*. New Delhi: Sage.

Featherstone, Mike and Burrows, Roger (1996) ‘Cyberspace, Cyberbodies and Cyberpunk: an Introduction,’ in Mike Featherstone and Roger Burrows (eds) *Cyberspace/Cyberbodies/Cyberpunk.* London: Sage.

Foucault, Michel (1988) *Madness and Civilisation*. New York: Vintage Books.

Foucault, Michel (1972) *Archaeology of Knowledge*. London: Tavistock.

Foucault, Michel (1973) *The Birth of the Clinic*. London: Tavistock.

Foucault, Michel (1979) *Discipline and Punish: the Birth of the Prison*. Harmondsworth: Penguin.

Foucault, Michel (1991) ‘What is Enlightenment?’ in P. Rabinow (ed) *The Foucault Reader.* Harmondsworth: Penguin.

Foucault, Michel (2002) ‘Lives of Infamous Men,’ in J. D. Faubian (ed) *Essential Works of Foucault 1954-84: Volume 3 Power.* London: Penguin Books.

Foucault Michel (*2005*) *The Hermeneutics of the Subject: Lectures at the Collège de France 1981–1982*, *Basingstoke*: *Palgrave Macmillan*.

Foucault, Michel (2007) *Security, Territory, Population. Lectures at the College de France 1977-1978.* Edited by Michel Sellenart, translated by Graham Burchell. Basingstoke: Palgrave Macmillan.

Foucault Michel (2008) *The Birth of Biopolitics: Lectures at the Collège de France, 1978–1979*, *Basingstoke*: *Palgrave Macmillan*.

Foucault Michel(*2010*) *The Government of Self and Others: Lectures at the Collège de France, 1982–1983*, *Basingstoke*: *Palgrave Macmillan*.

Foucault Michel (*2011*) *The Courage of Truth: The Government of Self and Others, vol. 2: Lectures at the Collège de France, 1983–1984*, *Basingstoke*: *Palgrave Macmillan*.

Gane, Nicholas (forthcoming) ‘The Emergence of Neoliberalism: Thinking Through and Beyond Michel Foucault’s Lectures on Biopolitics,’ *Theory, Culture & Society*.

Gill, Rosalind and Pratt, Andy (2008) ‘Introduction to Precarity and Cultural Work,’ *Theory, Culture & Society* 25(7-8):1-30.

Graeber, David (2011) *Debt: the First 500 Years.*  London: Melville.

Goffman, Erving (1971) *The Presentation of Self in Everyday Life*. Harmondsworth: Penguin.

Hayden, Cori (2012) ‘Population’ in Celia Lury and Nina Wakeford (eds) *Inventive Methods.* London: Routledge.

Hayles, N. Kathleen(2009) ‘RFID: Human Agency and Meaning in Information-Intensive Environments,’ *Theory, Culture & Society* 26(2-3):47-72.

Hook, Derek (2001) ‘Discourse, Knowledge, Materiality, History: Foucault and discourse analysis,’ *Theory and Psychology* 11 (4): 521-547.

Horkheimer, Max and Adorno, Theodor (1971) *Dialectic of Enlightenment*. New York: Herder and Herder.

Jay, Martin, 1995, *Downcast Eyes.* Berkeley, L A: University of California Press.

Jimenez, Alberto Corsin & Willerslev, Rane. (2007). “An anthropological concept of the concept”: reversibility among the Siberian Yukaghirs. *Journal of the Royal Anthropological Institute, 13*(3), 527–544.

Jütte, Robert (2005) *A History of the Senses.* Cambridge: Polity Press.

# Lazzarato, Maurizio (2012) *The Making of the Indebted Man: Essay on the Neoliberal Condition.* Cambridge, Mass.: MIT Press.

McKendrick, Neil, Brewer, John and Plumb, J.H. (1982) *The Birth of a Consumer Society: the Commercialization of Eighteenth-Century Century England.* London: Hutchinson.

MacKenzie, Donald (2008) *Material Markets: How Economic Agents are Constructed.* Oxford: Oxford University Press.

Mackenzie, Adrian and Vurdubakis, Theo (2011) ‘Introduction to Code in Crisis,’ Special Issue on Code and Coding in Crisis, *Theory, Culture & Society* 28(6):3-23.

Mackenzie, Adrian and McNally, Ruth (2013) ‘Methods of the Multiple: How Large-Scale Scientific Data-Mining Pursues Identity and Differences,’ *Theory, Culture & Society* 30(4):72-91*.*

Marcuse, Herbert (1964) *One-Dimensional Man.* London: Routledge.

Miller, Daniel (2008a) *The Comfort of Things.* Cambridge: Polity Press.

Miller, Daniel (2008b) *Stuff.* Cambridge: Polity Press.

Mills, C. Wright (1956) *The Power Elite.* Oxford University Press, New York.

Mirzhoeff, Nicholas (2007) ‘On Visuality,’ *Journal of Visual Culture* 5(1):53-70.

Munster, Anna (2011) ‘From a biopolitical ‘will to life’ to a noopolitical ethos of death in the aesthetics of digital code,’ Special Issue on Code and Coding in Crisis, *Theory, Culture & Society* 28(6):67-90.

McNay, Louis (2009) ‘Self as Enterprise: Dilemmas of Control and Resistance in Foucault’s *The Birth of Biopolitics*.’ Special issue on Michel Foucault. *Theory, Culture & Society* 26(6): 55-77.

Miller, Michael B. (1981) *The Bon Marché: Bourgeois Culture and the Department Store 1869-1920.* Princeton, New Jersey: Princeton University Press.

## Papoulias, Constantina and Callard, Felicity (2010) ‘Biology’s Gift: Interrogating the Turn to Affect,’ Special Issue on Affect, *Body & Society* 16(1):29-56.

Peck, Linda Levy (2005) *Consuming Splendour: Society and Culture in Seventeenth-Century England.* Cambridge: Cambridge University Press

Phillips, John (2011) ‘Secrecy and transparency: An Interview with Sam Weber,’ *Theory, Culture & Society 28*(7-8):158-72.

Rajchman, John (1988) ‘Foucault’s Art of Seeing,’ *October* (44): 89–107.

Raunig, Gerald, Ray, Gene and Wuggenig, Ulf (eds) (2011) *Critique of Creativity.* London: May Fly Books.

Ritzer, Georg and Jurgenson, Nathan (2010) ‘Production, Consumption, Prosumption: The nature of capitalism in the age of the digital ‘prosumer,’ *Journal of Consumer Culture* 10(1):13-36.

Ruppert, Evelyn, Law, John and Savage, Mike (2013) ‘Digital Devices: reassembling social science methods.’ Special issue on the Social Life of Methods, *Theory, Culture & Society* 30(4):22-46.

Sekora, John (1977) *Luxury: the Concept in Western Thought, Eden to Smollett.* Baltimore: Johns Hopkins University Press.

Siisiainen, Lauri (2013) ‘From Global Vision to Short Sight: Foucault and the Neo/Liberal Turn in Political Optics,’ unpublished paper.

Simmel, Georg (1997) ‘Sociology of the Senses,’ in Frisby, David and Featherstone, Mike (eds) *Simmel on Culture*. London: Sage.

Sombart, Werner (1967) *Luxury and* Capitalism. Ann Arbor: Michigan University Press.

Stiegler, Bernard (2013) ‘Overconsumption and the Economy of Contribution; an Interview,’ <http://www.samkinsley.com/2013/01/02/overconsumption-economy-of-contribution/> accessed 14.7.13.

Tamari, Tomoko (2006) ‘The Rise of the Department Store and the Aestheticization of Everyday Life in Early Twentieth Century Japan,’ *International Journal of Japanese Sociology* 15:99-118.

Taussig, Michael (1991) 'Tactility and Distraction,' *Cultural Anthropology* 6(2.): 147-53.

Thompson, Kenneth A. (1998) ‘Durkheim and Sacred Identity,’ in Allen, NS, Pickering WSF and Watts Miller W (eds) *Durkheim’s Elementary Forms of Religious Life.* London: Routledge.

Thompson John B. (2005) ‘The New Visibility,’ *Theory Culture & Society* 22(6): 31–51.

Toscano, Alberto (2012) ‘Seeing It Whole: Staging Totality in Social Theory and Art,’ *Sociological Review.* 60(1): 64–83.

Urry, John (2010) ‘Consuming the Planet to Excess.’ Special Issue on Changing Climates. *Theory, Culture & Society* 27(2-3):191-212.

Venn, Couze (2009) ‘Biopolitics, Political Economy and Power: A Transcolonial Genealogy of Inequality,’ Special Issue on Michel Foucault,’ *Theory, Culture & Society* 26(6): 206-33.

Williams, Rosalind H. (1982) *Dream Worlds: Mass Consumption in Late Nineteenth Century France*. Berkeley: California University Press.

Wittel, Andreas (2001) **‘**Towards a Network Sociality,’ *Theory, Culture & Society*18(6):51-76.

1. In neurophysiological terms the eyes take up by far the larger part of the brain’s processing power, giving a physiological basis to the dominance of the ocular dimension in social life. This overreliance on sight has been designated as ‘occularcentrism’ and generated a good deal of critique (see Jay, 1996; Taussig, 1991). The way the sense are held to interrelate and questions of ‘synaesthesia ‘or sense differentiation is an important area there is not the space to go into here; see Crary (1990:27) for a discussion of the separation out of the sense of touch from vision in the nineteenth century. [↑](#footnote-ref-1)
2. Debates around Wiki-leaks, or the recent case of Edward Snowden revealing the extent of US CIA Internet surveillance and other forms of espionage sharpen these issues. Governments often justify spying in terms of national defence security. Such realpolitik positions as recently endorsed by President Obama, come down firmly on the side of the need for secrecy. Yet the theoretical issues arising from the contrast between secrecy and transparency are complex (Birchall, 2011; Phillips, 2011). There are also debates about professional ethics in relation to how far a person is entitled to have full information about what is happening to them – as for example with medical disclosure to a terminally ill individual, especially if they are old, very young, or categorised as less than a fully-fledged person or citizen in some way. Similar ethical questions are evident in the law and other professions, where visibility and transparency can be sacrificed in a trade-off driven by the assumption of taking the client’s best interests at heart, in relation to a wider sense of professional accountability. [↑](#footnote-ref-2)
3. There is not the space here to discuss the important work of Jonathan Crary (1990) on the way the development of the spectacle in the early nineteenth century can be related to major changes in techniques of observation and vision. A perspective which opens up a very different genealogy of the visual to that developed by Michel Foucault (1979) in his discussion of the role of surveillance; Foucault’s work is discussed in detail below. [↑](#footnote-ref-3)
4. There is not the space here to discuss the important relationship between visuality and affect (see Papoulias and Collard, 2010, Featherstone, 2010a), and the way the apparent dominance of the visual through photographic and moving images in consumer culture is encountered affectively. For an approach which emphasises the importance of the aesthetic qualities of affective power drawing on the work of Marilyn Strathern see Copeman and Street (forthcoming). Their discussion of affect also develops a critique of Foucault’s use of the visual as a technique of governance. [↑](#footnote-ref-4)
5. A good deal has been written on the relationship of language and the visible, image and the word, the visible and the symbolic and the various ways to think their separations and entwinements ( see for example: Brighenti, 2010; Jimenez and Willersley, 2007; Mirzhoeff, 2007). [↑](#footnote-ref-5)
6. See more extensive discussion of the discovery of population regularities, such as the establishment of constant numbers of deaths from various diseases and other regularities in seventeenth century England by John Graunt and others is in *Society, Territory, Population* (Foucault, 2007:74ff). [↑](#footnote-ref-6)
7. See Elias (1984) on the birth of economics as the first social science which made the development of sociology possible in his paper ‘The Sociogenesis of Sociology,’ (see also discussion in Featherstone, 2007: ch 3). [↑](#footnote-ref-7)
8. See the extensive discussion of the police state in Foucault (2008, 2007). [↑](#footnote-ref-8)
9. The assumption being that the all-seeing gaze derives from that of the shepherd whose totalizing gaze comes from the need to look after the whole flock, to find and save the ‘lost sheep,’ and steer everyone on the road to salvation. Foucault (XXX STP) discusses this pastoral form of power and pastoral optics. This legacy from Christianity was influential from the late 16th to 18th century with *raison d’Etat* and the police seen as secularization of the pastorate and the model of the convent (Siisiainen, unpublished; Foucault, 2007). [↑](#footnote-ref-9)
10. This argument is usually ascribed to critical theory and elements of it can be found in the writings of Horkheimer and Adorno (1972), Marcuse (1964), C Wright Mills (1956) and others. See the discussion of consumption in relation to mass society in Featherstone (2013c). [↑](#footnote-ref-10)
11. Foucault (2008:232) discusses the neoliberal take up of the problem of innovation and the view that the growth of Western countries and Japan since the 1930s has depended on the ways in which human capital has been formed, augmented and invested in. Likewise the economic take-off of the West since the sixteenth century and the problems of Third World economies in the late twentieth century are seen in terms of human capital accumulation. The extent to which Foucault position was close to and sympathetic to human capital theories of neoliberalism is a highly contentious question. François Ewald and Gary Becker in a May 2012 symposium ‘American Neoliberalism: Michel Foucault's Birth of Biopolitics Lectures,’ at the University of Chicago, were content to explore communalities (see <http://vimeo.com/43984248> ); others might find this more difficult to assimilate. [↑](#footnote-ref-11)
12. The significance of consumption to the global economy is underlined by the recent figures that 70percent of US GDP is now based on consumption. The consumer goods produced in China and other places increasingly end up not only in Europe and North America, but many parts of Asia and the emergent BRIC countries (Brazil, Russia, India, China) and more recently the emergent tiers of countries just behind (Turkey, Nigeria, Egypt etc.). [↑](#footnote-ref-12)
13. See also the debates around active/ inactive, productive/ non-productive consumption by Toffler, Ritzer and others,’ especially the discussion of the ‘prosumer’ (Ritzer and Jurgensen, 2012; Beer and Burrows, 2012). [↑](#footnote-ref-13)
14. It may be the case that although Foucault was very interested in techniques of normalization and control of transgression, those who some deem normal, or ordinary people and the workings of mundane everyday life, offered little interest when compared to the those who displayed stubbornness, inventiveness as in his discussion of the ‘lives of infamous men,’ (Foucault, 2002). It would seem his sympathies both practically and theoretically lay with outsider groups and the victims of injustice, be it individuals in sovereign societies, or those subjected to panopticism by emerging state governmentality. He would seem to have had a general interest, without using the term in lifestyle construction, ‘self-invention,’ the ‘care of the self’ and developing an ‘aesthetics of existence,’ and ‘art of living,’ but seemingly little concern for the fate of ordinary people with conventional values. Part of what some would see as Foucault’s ambivalence towards neoliberalism could be located in its advocacy of enterprise and the way it built on liberalism’s advocacy of ‘living dangerously’ in a society in which the state rolled back panoptic controls in favour of the market. Although as we have seen above, he decidedly resisted any attempt to dichotomise panopticism and biopolitics, or view them in a historical series. [↑](#footnote-ref-14)
15. Since the 1980s with the take up of neoliberal ideas in the West, the programme of investment in enterprise has grown markedly with terms such as ‘the enterprise society,’ ‘creatives,’ ‘creative cities,’ ‘cultural entrepreneurs,’ ‘creative industries,’ ‘the creative class,’ being taken up by policy makers, politicians and others as part of a series of strategies designed to promote an expansion of the cultural sector, along with arts-led social regeneration and a closer relationship between business and the arts (Raunig et al, 2011; Gill and Pratt, 2008). [↑](#footnote-ref-15)
16. Foucault’s (2005, 2010, 2011) final writings on Ancient Greece focused on the government of the self, aestheticization of life, the art of living and ‘artistic *parrhesia* (truth-telling); see also Brigstocke (2013). [↑](#footnote-ref-16)
17. Royalty, as Foucault (1979) and others have argued, regularly sought to display their sovereign power through public visible ceremonial such as executions (cf. the execution of the Regicide Damiens, with which the book *Discipline and Punish* opens). They likewise demanded splendour on formal court ceremonial occasions, which required carefully arranged sumptuous settings, opulence and luxury, to impress people with the monarch’s magnificence. In effect, they valued the display of spectacle and aestheticization. All this public and semi-public display of sovereign power on the part of the monarch required training and the accumulation of a series of body competences, performative skills and controls. The power of the sovereign because it generally (as in the divine right of kings’ doctrine) was assumed to embody special qualities and charisma, was such that it had to be displayed, performed and demonstrated. The prime mode of power in society had to be made visible in a way which was not the case with biopolitics, political economy and neoliberalism. [↑](#footnote-ref-17)
18. It is interesting to note that changes in merchant consumption in China and Japan paralleled those of Western Europe with upper class homes in Ming Dynasty China (1368-1644) full of luxury items such as paintings, sculpture and fine furniture etc. (Burke, 1993; Clunas, 1991; Featherstone, 2007: ch. 11). In both Western Europe and East Asia consumption increased as sumptuary laws gave way to fashion systems with a more rapid turnover of new fashionable goods for the middle classes and lower orders (Berg and Clifford, 1999; Berg and Eger, 2003). [↑](#footnote-ref-18)
19. Critics of the dangers of luxury and over-consumption have occupied a central position in the Jewish and Christina religious thought. There were strong critiques of luxury and excessive consumption in the ancient work in the writings of Plato, Socrates, Diogenes, Cicero, St Augustine and many others (Sekora, 1977). It was only in the eighteenth century with the writings of Mandeville, Hume and Adam Smith that we find a more positive attitude towards luxury as encouraging emulation and industriousness. One of the central figures in the foundation of sociology, Emile Durkheim, was also strongly critical of the pursuit of consumer pleasures and happiness as leading to anomie. Today over-consumption is additionally linked to climate change and planetary destruction (Urry, 2010). For a discussion of ethical consumption see Featherstone (2010c). [↑](#footnote-ref-19)
20. Attempts to explore and harness the productive potential of masses continue apace. Scientific digital devices have become increasingly used to grapple with large-scale multiples – of molecules, species, particles and people – which they see to measure, count and classify (Mackenzie and McNally, 2012). Also important is the analysis of populations not just as a ‘biological multiplicity,’ (an aggregate with a pulse) as Foucault advocated, but on the chemical multiplicity, with the current focus on new forms of reproduction such as cloning which facilitate ‘fissiparous’ reproductions and the non-genealogical copy (Hayden, 2012). This process also leads to the multiplication of methods which in turn make reality itself appear to multiply into different sets and worlds along with a focus on the singularity of each case. This suggests research into masses of various types, offers interesting insight into the perennial struggle to decide what is identity and difference, singularity and multiplicity, the specific and the generic. [↑](#footnote-ref-20)
21. This is similar to the problem of pinning down and making more productive our knowledge of a multiplicity identified by Foucault (2008). At one point he captured the need to conceptualise this newly discovered aspect of social life that emerged in the eighteenth century, by suggesting that it amounted to the discovery of ‘a new body, a multiple body, a body with so many heads that, while they might not be infinite in number, cannot necessarily be counted’ (Foucault 2004: 245). Today the object of government for political economy continues to shift away from the economy conceived as a specific domain of nation-states, as the population mass which is relevant for the working of any economy is increasingly deterritorialized, as we find in the current phase of globalization in which the financial markets and new information technologies such as the Internet link together people and technologies into a new mass. The neoliberal integration of the global markets in the late twentieth century initiated a new era with a rapid increase in the size and volume of trading. The proliferation of ratings agencies using sophisticated digital technologies and metrics is an important part of this process, which can be used to govern and discipline nation-states. The impulse to measure and evaluate performance, to manage risk, is evident in the invention of new types of financial instruments such as derivatives, hedge funds, short-selling, etc., which have flourished with the globalization and computerization of the financial markets (Knorr-Cetina & Bruegger 2002; MacKenzie 2008; Davies, 2013). [↑](#footnote-ref-21)
22. This is not far from the science fiction world described by William Gibson in his *Neuromancer* novel series which stimulated a good deal of speculative interest about cyberspace in the 1990s (see Featherstone and Burrows, 1996). [↑](#footnote-ref-22)