



Crime, capitalism and the 'risk society':

Towards the same olde modernity?

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Abstract

The discourses of risk society and 'governmentality' have played a progressively more important role in criminological theorizing. Studies of carceral settings, the public and private police, and examinations of actuarial practices within the criminal justice system have increasingly relied upon risk society theory as an orienting strategy. We offer reservations about the utility of risk theory due to its lack of consideration of the history of probability and the practices of early modern contingency planning. Rather than view risk society as a late modern development that (a) is tied to 19th-century probability science, (b) is forward looking as opposed to retributive and (c) is an apolitical actuarial rationality, we link risk to the techniques, aims and interests of 17th-century English capitalists. By analysing correspondence between the English projectors and thinkers contained in the papers of Samuel Hartlib and his circle, and by examining the works of Sir William Petty on both criminality and risk, we argue that rationalizations of retribution and actuarialism are overlapping and tied to the emergence of capitalism.

Key Words

Foucault • governmentality • Marx • Petty • risk

Ulrich Beck (1992: 21) argues that in the early modern period of western history, risks were taken on a personal level and that calculations were engaged in on a strictly personal basis. Columbus, for example, despite the arguments he might have had to make for his financing, did not need to defend his adventurous practice with reference to minimal harm nor did he attempt to distribute risk to anyone else save his sailors. But Beck also claims that the more recent development of risk calculation and the 'risk society' entails a much more severe personalization of decision making than Columbus, in his much more collectively oriented environment, would have been capable of dreaming. An 'individualization of social inequality' (Beck, 1992: 87), according to contemporary risk theorists, compels persons in late modernity to manage their 'own political economy' (Ericson and Haggerty, 1997: 126).

Risk society relies on the mathematics of aggregate statistics to classify, order and 'know' populations. Expert systems adopt an 'insurance-based' managerial order so that institutional decisions become increasingly dependent upon the production of risk knowledge (Simon, 1988; O'Malley, 1996). Thus, while institutions collect individual information on prisoners, clients, consumers, patients, etc., they nonetheless use aggregate statistics to classify those that come into contact with their categorical schema. Risk theorists argue that the class basis of both conscious identification and the practice of ruling is disappearing in favour of the distribution of risks through multifarious institutions. In the process, abstract, crime-related knowledge of risk is disseminated to institutions covering fields such as health, insurance, public welfare, financial matters and education so as to control securities (economic exchange instruments), careers (life-course management) and identities (Ericson and Haggerty, 1997: 4). Risk management replaces punishment, and governance is based on *risk dispersal* rather than *class rule*.

In this article we take issue with the theories of risk society and actuarial justice inasmuch as risk calculation and its attendant capital accumulation projects are at least as old as the mid-17th century when it was the product of advancing bourgeois interests. Early and high capitalism, according to the risk society and actuarial justice scenarios, are marked by class rule for profit and expiatory punishment for the governance of the wayward individual. We suggest that the rationality of risk calculation was also a part of this earlier scenario. Thus, the history of risk management is older than described by contemporary risk and governmentality theorists. The panoptic impulses that risk management and 'accounting' accelerated were tethered to the economic needs of an emerging English mercantile class and the commensurate need to make 'known' those unruly masses that threatened it. Risk calculus has thus always been a political project—it is both foundationally and contemporaneously class-based. The 'ideology' of risk, therefore, is not an apolitical logic—fostering a late modern, cold, actuarial governmentality—that eschews 'primitive' retributionist sentiment. O'Malley (1992), for example, has argued that new risk ideologies

stand in stark contrast to older forms of punitivism and signal a revolutionary era in penology. Retribution, *we* argue, existed alongside the practices of early modern 'risk society' and continues to do so today.

The significance of our claim is not only that the advent of risk management and calculation is much older than risk society theorists allow but also that in locating such early origins for its theory and practice, many of the risk society and actuarial justice claims are sundered. At the basis of the theories of risk society and actuarial justice lies the assumption that high capitalism *once* regarded subjects as class members and thus had capital and profit, i.e. class interest, as its aim and foundation, whereas in post-industrial, fragmented, risk societies, institutions *now* engage in risk communication formats to avoid 'bads' rather than acquire 'goods', thus bringing daily reckoning and planning down to an individual as opposed to a class level. Today, this 'post-social', reresponsibilized sovereign individual (Rose, 1996a: 342–3, 1996b) acts merely to navigate a plethora of fractured postmodern identities (e.g. Gandy, 1993). If, however, it can be shown that at least by the mid-17th century schemes and practices very similar to those of risk management were engaged in for purposes of capital accumulation and for the victory of a manufacturing and 'projector' bourgeoisie, then risk communication will have been shown to have had class bases from its inception.

To be sure, risk society theorists are not unaware that some features of monitoring and calculation, usually referred to as 'governance', have a long history. Governmentality theorists, however, tend to privilege a version of history which locates a particular type of probabilistic thinking in the early 19th century (e.g. Defert, 1991; Ewald, 1991) or late 18th century (e.g. Ericson and Haggerty, 1997: 13). This thinking is about the management of populations through statistical knowledge and the erection of categorical representations of individuals. Thus, for Foucault, the employment of binary divisions to inform governmental control 'is [a] peculiarity of the nineteenth century' (1977: 199). It is our contention that the origin of the record-keeping schemes which are integral to modern governance and risk assessment are well over a century older than this and, more importantly, that the significance of such 'risk communication' bears not only upon decisions concerning utility, health and happiness but also upon capital accumulation which marks the ascendancy and establishment of bourgeois society and bourgeois interests.

Of course, the history of capitalism is contentious. But in keeping with Marxian formulations, we view the transition from feudalism to capitalism as a product of the progress towards urbanization, beginning in the Middle Ages where a division of labour between production and trade developed (Hobsbawm, 1964: 29). This accelerated, at first, a concern with trade between cities, but eventually would manifest itself in the 'crucial development . . . of the world market' (Hobsbawm, 1964: 30). Notwithstanding these deliberations, in this article, we are primarily concerned with systems

of knowledge that reify these mechanisms of exchange, and these Marx tells us, are to be located in the 17th century:

The economists of the seventeenth century, for example, always start out with the living whole, with population, nation, state, several states, and so on; but they always conclude by discovering through analysis a small number of determinants, abstract, general relations such as division of labour, money, value and so on. As soon as these individual moments had been more or less established and abstracted, there began the economic systems which ascended from the simple relations such as labour, division of labour, need, exchange value, to the level of the state, exchange between nations and the world market.

(Marx, 1973: 100–1)

For Marx, the 17th century signals the ascendancy of a capitalist *system* supported by econometric constructions of ‘populations’, in support of bourgeois state interests.

In order to access the prevailing discourses of the 17th century, this article makes use of the (Samuel) Hartlib (c. 1600–62) and the Petty Papers as primary historical sources. These papers are widely recognized to be reflective of the logics of a developing rational governmental discourse in the 17th century. If we are to understand the rhetorics and paper realities of that era, we must begin with Hartlib and his circle. ‘Operating as a recognized “intelligencer”, Hartlib gradually became known as an important information broker’ (HP: 2) in the early to mid-17th century. He collected correspondence from a wide range of influential bourgeois thinkers including Milton, Komensky, Drury, Graunt and Petty. Sir William Petty’s (1623–87) seminal contribution to probability is well established, and he is often referred to as ‘the real founder and inventor of the science of Statistics’ (PP (Lansdowne, 1942): xvii). He is also partially attributed with the birth of ‘political economy’ and, along with John Graunt, is touted as the ‘Columbus’ of systematic demography and economics (Hacking, 1975: 103). The Hartlib Papers, held in Sheffield University Library, were released electronically in 1995 and encompass 20,000 pages of manuscript, 5000 pages of printed ephemera and 23,000 images. We used free-text electronic retrieval to access references to class, insurance, risk, projecting, penalties and punishment and other related terms.

This article is organized into four sections. Each section takes up a particular issue of modern risk society discourse and compares it with early modern thought. The first section deals with contextualizing the history of risk by describing the practices of the English projectors of the 17th century. We describe how probabilistic thinking helped organize responses for everything from economic uncertainty to poor weather. The second section, ‘risk and class’, begins the process of rethinking the modern assumptions of risk and the end of class as an object of investigation. If risk, in its like form, is to be found at the outset of capitalism, might we be better off asking not about the *death* of class but the method by which class

is ideologically and structurally recast and reorganized by actuarial practices in support of capitalism? Thus, the third section attempts to reveal risk as a political rationalization of capital. The final section examines the claims of risk theorists concerning the supplanting of retribution with risk in the operation of penal justice. We conclude with a discussion of the implications of our study, with particular attention to the issue of continuity versus discontinuity.

Risk, capital and the 17th-century English projectors

Although Petty himself was not, to our knowledge, involved in insurance schemes, he was one of a multitude of projectors around the circle of Samuel Hartlib, some of whom were involved in financial projects entailing risk assessment and insurance. 'The archives of the insurance industry are amongst the oldest and largest collections of business records in Great Britain' (Cockerell and Green, 1976: ix). According to Cockerell and Green marine policies begin in 13th-century Palermo and Genoa and were probably introduced to London in the 15th century; after 1547 they were 'exhibited in disputes in the High Court of Admiralty' (1976: 4). They point out, following Stow (1720, 12: 242), that the merchant brokers were 'sworn and bound with sureties in divers and sundry great sums of money for their honest and true dealings in their faculty' (1976: 4). Marine insurance involved assessment of the size and qualities of ships and cargoes as well as evaluations of routes and destinations. Premiums were set on these bases. These are the precursors of rationale risk assessment that comes to fruition in the 17th century.

But how do we know that we are best served by starting at the 17th century when discussing risk? Did probability not matter before then? Did no one speak of it before then? What is the difference between risk discourse and 'risk society'? We are fortunate that Hacking has already helped answer these questions for us:

In prehistory we are not interested in what is rare but in what is common. Common does not mean familiar—it may be utterly bizarre. For example, I say, with only very slight reservations, that there was no probability until about 1660. How do I know? I have not read every text . . . [but] I am talking about that time when this . . . emerges permanently in discourse. It is that event, and not the miraculous stroke of some secret hermit, that is our topic.

Hacking (1975: 17)

We must be careful here to pre-empt the obvious retort of apologist risk theorists that 'we are talking about two different types of risk discourse'. Our understanding of 'risk society' and treatment of risk discourse in the 17th century is identical to that of *fin de siècle* risk sociology. In short, we refer to risk as a form of governmental discourse that seeks to rationally inform administrative action on the basis of calculative foreknowledge

within an instrumental science. We also concede, much like risk theorists are now beginning to (O'Malley, 1999), that risk discourse may not always be able to overcome the irrational impulses of demagoguery and electoral politics (see Rigakos, 1999). Nonetheless, our object of analysis (risk) mirrors that of contemporary social theory (e.g. Castel, 1991; Defert, 1991; Ewald, 1991; Beck, 1992; O'Malley, 1992, 1996; Feeley and Simon, 1994; Ericson and Haggerty, 1997).

By the early 17th century, forms of probabilistic calculation are already being used for the management of ecological resources, including timber and grassland. Greengrass (1996) argues that 'contingency planning' had broad financial aims requiring the collection and analysis of statistical data—a process indicating the nominalist science which lay behind them. Already, there was ongoing evaluation of rational or 'structural' risks as well as natural disasters. Actuarial science was being put to use for 'the protection or policing of capital investment and traded commodities by "technical" or "financial" means' (Greengrass, 1996: 2). Lightning conductors, for example, were an established form of technical risk management by the 18th century, while insurance schemes were being advanced by thinkers such as John Drury, who in a letter to Hartlib wrote: '... now looke how the fish merchands are now secured of their stockes so a waye will be shewed more certain by an office of insurance for so much profit by yeare to bee certain wheras now their profit is not certain' (HP 3/13/19A–B).

In 1645, French forecasters Le Pruvost and L'Amy proposed a governance of the fishery which was modelled after the insurance of sea vessels:

To make in like manner an Ordinance concerning the Dressing of Fishes to this effect, namely that all such as will or shall practise the said dressing of Fishes shall be content with thirtie in the hundred yearlie profit so regulated & assured that they shall not need to feare any ill market, which is to bee understood according to usages & customes of risico at sea.

(HP 53/14/1A–10B)

According to Greengrass (1996: 3–4), the later 17th century saw new elements of contingency planning shape an emergent, capitalist 'risk society'. Public forums provided the promotional platform for a local 'psychology of risk analysis' in which actuarial schemes could help maximize profits. A scientific view based on prediction through the understanding of causal laws and the rise of mathematics, statistics and mechanics provided contingency planners with both the requisite backdrop and tools to hone their tables. Finally, and perhaps most importantly, a rationalistic political science viewed contingency planning as a necessary and fundamental function of states and their citizens.

The augmentation of risk calculation into the later 17th century allowed for an institutionalized framework of contingency planning. Individual projectors became something akin to trustees or fund managers based out of a central office. The Offices of Address of Théophraste Redaudot in France and Samuel Hartlib in England, in addition to being the precursors

of their respective scientific academies, envisaged the offering of insurance policies in a number of areas. These were financial schemes designed to earn both the projector and client a profit. From its inception, risk calculation was a money-making, capital-accumulating logic. Behind Petty's projecting for a central organism of state which would collect statistical information on every aspect of economic and social life, lay the plan that it would also produce a vast array of statistical data on crucial problems such as migration, occupation, fertility, militia enrolments, illegitimate births, economic relationships, national wealth, agricultural productivity and the correlation between mortality, disease and weather patterns.

Risk and class

Many of the schemes communicated to Hartlib combined elements of contingency planning, insurance, guaranteed profit, technical innovation and risk ('risico') avoidance. As mentioned, Hartlib's papers contain a copy of a petition concerning one such scheme from Peter Le Pruvost and Hugh L'Amey. It promises vast increases in state revenues from technical and social/organizational innovations in fisheries and husbandry. After advising 'forraigne assistance & alliances at least for Intelligence', and suggesting that plantations furnish the twelfth and sometimes every sixth man for naval service, the petition claims that by such measures 'The Employment of mariners by this meanes will be greatly increased and the Kingdome in a few years relived of all the poore' (HP 55/10/3A–B). There is also provision to monitor the usage of advanced means of husbandry by providing fees to informers and fines to violators, as well as schemes for guaranteeing profits in fishing and plantation (HP 55/10/3B–4A). Although the technical innovations are kept secret by the projectors for purposes of securing their own gain, those investing in Fisheries are to be helped 'by an office of Insurance to secure the Adventures of their certain yearly profit, which shall be at least 30. per 100' (HP 55/10/23A). A copy of a letter patent dating originally from 1611 suggests a scheme for protecting commercial and financial transactions against unscrupulous dealers. It offers sureties against theft and misuse (HP 48/2/6B).

These designs for minimizing loss and guaranteeing profit mirror the cameralist 'police science' mentioned by Gordon that receives modern expression by Georg Obrecht at the beginning of the 17th century. Pasquino points out that Obrecht was concerned with:

the constitution of a science, equipped with adequate practical means, of augmenting the annual income of a state, at a time when one of the central problems in Europe was that of war and all that war implied in terms of armies, discipline, the need for a numerous population, and above all the relentless demand for money.

(Pasquino, 1991: 112)

For Obrecht and others in the period, measures designed to generate wealth were necessary accompaniments to taxes and levies (Pasquino, 1991: 112–13). This orientation led to the use of the term, ‘population’, thus indicating a retreat from the concept of ‘estates’ and an advance towards ‘individuals’. This does not mean, however, that class is not at issue. The move, we might suggest, is away from estates and towards classes. As Marx notes, the:

original formation of capital does not, as is often supposed, proceed by the *accumulation* of food, tools, raw materials or in short, of the *objective* conditions of labour detached from the soil . . . All these elements are already in existence . . . It is certainly not by *creating* the objective conditions of such labourers’ existence, but rather by accelerating their separation from them, i.e. by accelerating their loss of property.

(Marx, 1964: 110; emphases in original)

In this way, the administrative, organizational, and governmental logics of risk are already being crafted at the epochal cusp of bourgeois ascendancy and the decline of feudalism.

Peter Buck (1977) has persuasively argued that William Petty and John Graunt shared Obrecht’s and Hobbes’s concern with ‘Civil Strife’. Graunt’s *Natural and Political Observations . . . upon the Bills of Mortality* and Petty’s voluminous writings on political economy and political arithmetic share a quantitative, mathematical bent designed to provide apolitical and religiously neutral language to ensure consensus and establish polite discourse about political and economic order. How different is this from the modern risk and governmentality discourse? The same political imperatives that drove the ‘rationalistic’ desire for a political arithmetic may also drive institutional needs for actuarial knowledge. Risk theorists concede that while managerial templates may ‘appear’ amoral, they are nonetheless highly moral because they represent the ‘encoded’ norms and expectations of society. In this way, they argue, moralities become part of the technological and expert systems of actuarial, risk management (e.g. Ericson and Haggerty, 1997: 123). But should the problematic end there? What of the politics of risk (O’Malley et al., 1997; Rigakos, 1999)? Deviation from the norm is both statistically and socially significant, true, but what is the political nature of the ‘panoptic impulse’ in the first place?

The philosophy of peace (Hobbes) was never completely separate from the philosophy of plenty (Petty). Concerns about civil strife, vital statistics, taxation, risk and contingency planning went hand in hand. Bourgeois schemes about these concerns abound, although few were implemented owing to the fact that the bourgeoisie was not *yet* the ruling class. In mid-17th-century England the Irish rebellion, English Civil War and other such concerns were firmly linked to statistical and record-keeping schemes to aid the cause of peace and plenty.

The accurate surveillance of society could lead to proposals to balance out factions within society or to ensure that the army is sufficient to deal with

existing levels of heterodoxy. Petty and Graunt did much to shift philosophy on behalf of the state from an abstract concern with the nature of political obligation to a 'political arithmetic' realistically assessing the potential threats to civil order and actively promoting rational trade, taxation, religious and military policies.

(Lynch, 1996: 403)

Mykkänen (1994) discusses Petty's schemes for a 'governmental science of statistics'. His schemes are for registering and regulating trades, public expense, the poor, criminals and general characteristics of the entire population. The design is 'to Methodize and regulate them to the best advantage of the public and of particular persons' (PP I, IV, 25: 90). The work of figures like Petty and Graunt had made such calculation possible.

These are offered as 'helps' to the detection of offences and their perpetrators. That this is no aberrant concern of Petty's may be witnessed by the plethora of registries and information schemes which he suggested including 'That hee may be Accomptant generall for ye Lands & Hands in all his Ma'ts Dominions' (BL ADD 72866 f. 93). These registries grew quickly from crude accounts of christenings and burials to more sophisticated categories and classification schemes aimed at extracting considerably more social knowledge. Very early, Petty was organizing data by 'Forecasting and computeing' (PP I, IV, 30: 103, as cited in Mykkänen 1994: 70) so that the statistics became a strategic field of manipulation of individuals. While Petty was not party to insurance projects, he recommended the reduction of customs to insurance premiums. His political arithmetic 'was a means by which civil stability could be achieved by persuading individuals to discipline their own behaviour, and accept social controls freely and of their own volition' (Greengrass, 1996: 17). This, recall, is for the benefit not merely of the 'public' but also of 'particular persons' (PP I, IV, 25: 90). Dare we say 'class'?

Long before the Benthamite prison attempted to render the symbolic individual into something always panoptically transparent, manageable and contained, Petty had envisaged a similar panoptic format as economic necessity. In his notes from the 1670s and 1680s, Petty attempted to improve London by what Mykkänen (1994: 75) regards as 'technical cluster' of actuarial ideologies. Petty's 'London Wall' was to encircle the entire city and be '100^m foot in circumference, 11 foot high, 2 brick thick, in fortification figure, with 20 gates, worth 20^m£' (PP I, II, 11: 32). For us, what is remarkable is Petty's unproblematic leap from article to article concerning 'criminality' and 'economy'. It is here that binary social constructs of 'insider' and 'outsider' manifest themselves not only symbolically but physically—wherein segregation becomes a natural arm of capital accumulation, governmentality and bourgeois planning.

The wall, for Petty, was a means for concentrating commerce by channelling it through planned choke-points, where all movement could be

made visible and all trade accountable. Petty's utopian city places the statistical and human grid in constant 'telematic' (Bogard, 1996) awareness, allowing for the immediate identification and separation of productive and unproductive elements. Petty is not only anxious 'To take in account of all persons and things going in and out of the City' but also wants 'Men for crimes may be put out of it', and to 'Ban within the wall, who to beg or perish (?)' (PP I, II, 11: 32–3). Perhaps this is the first instance in which city gates were 'guarded not by sword but by pen' (Mykkänen, 1994: 75). Indeed, the structure of the city, in Petty's vision, is best regarded as a monolithic, panoptic, instrument of data collection designed to measure, calculate and accrue wealth.

The London wall signals four important aspects of 17th-century risk society. First, it is a schematic forebear of the panoptic Benthamite prison (Foucault, 1977). As such, the wall is imagined to keep a perpetual watch and to make known at all times anyone or any goods that make contact with it. Every movement is to be recorded and encoded as a 'knowledge' for future 'computeing' and the best management of the city. Second, we have in the London wall, a clear *structural* schematic of the early modern need to amass information on the 'publick' while at the same time acting as a 'visible boundary of property and impositions' (PP I, II, 11: 32). Third, and relatedly, Petty's London wall is a metaphor for the early modern risk society. It is at once about knowing and reconfiguring—an expression of actuarial management and the need to control dangers. Finally, this schema entails the construction of binary opposites, of 'ins' and 'outs' (productive and unproductive peoples), and sets about separating, hierarchizing and banishing in a 'calculative' fashion. In all cases, the decisions of Petty's gatekeepers reflect unabashed, class-based, decision making.

The city of London is imagined to be an enclave of managerial effectiveness, a schema for promoting prosperity in the same manner we have come to expect institutions to monitor and 'know' individuals in late modernity. Save the use of computers, how different is Petty's entreaty that men carry 'uncounterfitable' identification in 1650 from modern private and governmental requirements? In either case, the binary outcome reflects the need of the surveillance system to 'know' who is coming into contact with it: one is either allowed in through the gate, door, lobby or sent on one's way.

As a student of Hobbes, perhaps it is no accident that Petty should be transfixed with the practical application of the metaphysics of 'sovereignty' and governance. In the end, the aim which unifies all these schemes and concerns is to teach people how to 'ord'r their Husbandry Manufacture and Commerce to their best advantage' (BL ADD 72866 f. 37v) and by extension to increase the wealth of the emerging bourgeois state. The necessary philosophical underpinnings for a bourgeois state reflect the need symbolically to disaggregate classes and give birth to the idea of a contest of individuals. It is to this assertion, and the assertions of the new social theorists of risk that we now turn.

Political arithmetic

As Gordon suggests: 'Police science, or "Cameratism" is also, in conjunction with the allied knowledge of mercantilism and political arithmetic, the first modern system of *economic sovereignty*, of government understood as an economy' (1991: 11). Following Foucault's discussion of the transition from government as 'pastoral power' to 'a form of political sovereignty which would be a government of all and of each, and whose concerns would be at once to "totalize" and to "individualize" ', Gordon (1991: 3) proceeds to outline the much discussed development of Foucault's analysis of practices of biopower.

The grounding and forms of early modern sovereignty alluded to by Gordon and Foucault are, indeed, subjects germane to contemporary thinkers, but whose discourse appears to have eluded the scrutiny of Foucauldian analysts. While Ericson and Haggerty (1997; see also Giddens, 1991) view risk management strategies as turning life into what Weber believed it to be—deliberate, systematic, impersonal, bureaucratized, predictable, etc.—Ericson and Haggerty seem to take as ontologically real what Hobbes himself viewed as a *factio juris*. In the same passage where they refer to risk management strategies as establishing what Weber saw as formal (instrumental) rationality, Ericson and Haggerty favourably cite Hobbes's nominalism; strict causality is rejected as an epistemological and ontological approach to society and nature in favour of a law-like regularity which can ensure predictability and certainty and thereby 'point to preferable courses of action' (Ericson and Haggerty, 1997: 87). They also cite Machiavelli's brand of empiricism as providing the kind of knowledge that allows one 'to choose the least bad as "good" ' (1997: 90). Other modern social theorists have followed a similar path, arguing that the hegemonic risk apparatus has triumphed in undermining the very idea of class (Beck, 1992), or that any form of resistance can inevitably be accounted for and subsumed within a society that is governed by a totalizing system of actuarial governance (Bogard, 1996).

In the century from Machiavelli through Francis Bacon to Thomas Hobbes, William Petty and Robert Boyle, the sorts of nominalism, empiricism and rational calculation which developed were instituted, in part, for the avoidance of risk, to begin with the risk of civil war. From the Counter Reformation through the Thirty Years War to the English Civil War, all of this pragmatic social/political *and* natural philosophy was proffered as the best way to promote peace and plenty. The biggest threats or risks involved were sectarian beliefs and practices and the kind of preferments and prebends offered to older feudal nobility and their allies. Unity of belief and commercial/industrial practice were seen as the ways to promote peace and prosperity in the sovereign nation state.

The fact that Petty was a student and advocate of Hobbes, and that Ericson and Haggerty use Hobbes as a launching point for their advancement of a description of 'risk society' is fortuitous for us since it exposes a

more direct philosophical link between early modern and late modern risk discourses. Hobbes was one of the first consequential, bourgeois philosophers, although the concept of an absolute monarch is not itself a bourgeois concept but is, rather, a result of the balance of forces between feudalism and capitalism. He is the sovereignty theorist of Strafford's absolutism, the Presbyterian Parliament and, especially, the Cromwellian Protectorate.

Franz Borkenau's (1976 [1934]: 439–82) treatment of Hobbes's theory of sovereignty focuses on the class basis of the antinomies of this theory. Most especially for Borkenau (1976 [1934]: 460) the theory and practice of state sovereignty derive from class struggle, whereas for Hobbes himself it is the outcome of the mutual hostility of individuals. Although the state is the organ of repression of party (i.e. class) struggles, it is represented by Hobbes as the adjudicator of the individualized quest for power (Borkenau, 1976 [1934]: 461–2). Personal interests are seen to lie behind all party struggles.

The need for a theory of sovereignty arises where a disharmony of interests becomes apparent. Liberalism, on the other hand, presupposes a harmony of interests with economic interests in the foreground. For Hobbes, Machiavelli's concept of the striving for power is most accurately ascribed to individuals.

Hobbes's *bellum omnium in omnes* emerges from a mixture of the strains of competitive struggle with class struggle. Unlimited striving for power is left over from the class struggle, but the class struggle is brought down to the level of competitive struggle, where there are only individual interests and, indeed, only individual material interests. For the theory of sovereignty needs two kinds of uppermost presupposition: The unsublatability of power struggle, otherwise it [sovereignty] would be superfluous; and the pessimistic condemnation of its motive, the denial of every possibility of idealism, otherwise this could be summoned against it. It knows only the egoism which strives for power and knows only one difference: that between its permissible and its impermissible manifestation.

(Borkenau, 1976 [1934]: 463)

While Machiavelli had already determined that all world-views were the result of the 'interested calculation of the statesman', Hobbes decided that any idealistic interpretation was 'the product of interested calculation in the service of the striving for power' (Borkenau, 1976 [1934]: 463).

As this individualistic, inner-worldly interpretation of the grounds of sovereignty proceeds, its reduction of class struggle to competitive struggle results in a theory of the natural equality of humans, an equality, i.e. in terms of drives and basic strength. That these drives are seen to unite into a unified will undergirding sovereignty, Hobbes himself regards as a *factio juris*. The power of the sovereign, which is in itself a legal fiction, exists because subjects are convinced of its necessity. 'If, however, society is held together through the consciousness of members of its necessity, then the

necessity of sovereignty disappears, which was based on the lack of any consciousness of natural right' (Borkenau, 1976 [1934]: 466).

The end purpose for Hobbes's legal fiction lies in its legitimation of the status quo and its undermining of class interests—this is specifically written out of the possibility for legal intervention and lays the foundation for an individualizing social ether: the contract. It 'invents' a new discourse for a rational, stable and uncontested social order. It attempts to overcome the illegitimate, the irrational impulses of group action: whether religious or class-based. This is the same distinction that Weber made between formal and substantive rationality; formal rationality is what Husserl and Horkheimer later dubbed as instrumental rationality. Although they are mutually dependent (Beck, 1992: 29–30), the one cannot provide answers to the concerns of the other. Scientific rationality cannot decide the merits of conflicting, desirable states of affairs and social rationality is helpless in the face of factual contingencies. At the same time, risks provide market opportunities to equip people for risk avoidance (Beck, 1992: 46). Scientific language and protocol were developed in the 17th century for the precise purpose of softening the rancour that a limitation to 'social rationality' could produce.

In the same way, the modern epistemic relationship between people and their representation as 'data' or populations to be managed and controlled serves multiple purposes. These are implicitly ideological. The fiction of 'individualism' existed as a form of bourgeois state legitimacy in the 1600s and can be viewed similarly today. As a world-view it serves a hegemonic purpose. While risk theorists argue that late modernity has moved from class to individual identities—representing a 'new' relational fabric for society—the reality of class and the rhetorics of individualism have always existed in parallel. Based on the descriptions proffered about the end of class as an object of analysis by some contemporary theorists of risk, we cannot but draw comparisons to liberal apologists, both philosophical (Hobbes) and economic (Malthus), of the sort Marx opines against. One might argue that late modernity is thus as much (or as little) about class as it ever has been.

In their wide-ranging review of Beck's risk hypothesis, Engel and Strasser argue that '[r]isk societies do not really overcome class conflicts but add new sources of conflict to already existing status arrangements' (1998: 100). Perhaps we are best served by halting our theoretical reliance on a misplaced trust in the perceived historical *schism* between the 'acquiring of goods' and the 'management of bads'. Rather, our analysis demonstrates that, since the 17th century, these governmental logics can best be expressed as a *continuing* concern with the minimizing of bads *against* goods—and by extension the safeguarding of elite interests. While class may be complicated by new risk inequalities, such as global ecological fallout, we must also take care not to construct ordinary people as 'cultural dupes': '[If] the dangerous classes could come to recognize themselves

under disciplinary regimes, so too may those grouped under the actuarial categories of risk' (O'Malley, 1993: 164).

With a few exceptions (e.g. Pasquino, 1991) risk theorists come to 'discover' actuarial logics in late modernity, first, because of a historical myopia (and an over-emphasis on artificial, non-materialist, epochal schisms) and, second, because they mistake law and insurance as heterogeneous regimes. Indeed, with respect to the first point, when McMullan analyses the rise of the police surveillance 'machine', he notes: 'we ought not to take Foucault's schematic, sequential periodizations at face value' (1998: 109). Rather than assuming stark time divisions, or that there is some identifiable form of 'pre-liberal' governance, 'there is far greater continuity between early modern modes of governance and modern liberalism than is often recognized' (1998: 109). He offers strong evidence that the organization of policing reflects a greater degree of constancy than Osborne (1996) or Rose (1996b) allow, arguing that 'an all enveloping police State' did not exist in early modern administration. In fact, most controls were primarily accomplished through 'commercial negotiation' as well as 'administrative fiat'. Any interpretation which assumes the organization of a typical governmental form resulted in a police state in early or pre-modernity 'is a crude caricature' (McMullan, 1998: 109):

In so far as the liberal governance of the poor was to be constructed around an economy symbolized by the independent citizen with rights, producing in a self-governing market, it did not lead to a minimal State as might be expected . . . The liberal poles of power over life—the 'disciplining of the body' and the 'bio-politics of the people'—meant that the economy was self-regulating and the poor were free-wage labourers, but only in the space defined between the dragnet of crime and the shadow of the workhouse.

(McMullan, 1998: 109–10)

As far as the second point, some risk theorists (e.g. Ewald, 1991) have maintained that insurance and juridical responsibility are two mutually exclusive schemas—that 'as technologies they are independent of the political policies that utilize them' (1991: 201). In fact, a strong case can be made to argue the opposite: that, at least since the 17th century, their relationship has been rather fixed. Ewald (1991) argues that different political movements (such as socialism or liberalism) can alternately make use of insurance logics for specific governmental concerns. These discussions, of course, have been largely confined to descriptions of advanced western *capitalist* economies. Should it be a surprise, however, that after the collapse of communist Russia, there were no actuarial training programmes in existence, and that a major occupational demand for western actuaries resulted? While it is true today that different political regimes may make use of risk management techniques in slightly different ways (O'Malley, 1996), these are mere variances upon the original union between political arithmetic and the emergent bourgeois state: In short, risk

governance is anchored juridically, philosophically, politically and economically to capitalism. It is the formative logic behind this original template that is most important to us, because it is it, and not some cosmetic vicissitudes in risk logic, that actually sets the structure for the management of classes. The works of Petty, Graunt and the English projectors around the circle of Samuel Hartlib in the 17th century are testimony to the fact that penology, sovereignty and insurance are often overlapping issues that find their rationality in economic concerns about the protection of property and the construction of a quintessential bourgeois state. While Beccaria and Bentham later came to articulate a 'classic' understanding of responsibility and sovereignty which focused on both the structures of risk management (the calculus of hedonism) and the technologies of loss prevention (street lights, a police watch, etc.) in the 18th century, these same concerns had long before been articulated as part of a comprehensive actuarial system based on disciplining the poor.

Walk softly and carry a big . . . calculator

Perhaps the most interesting development in the new risk and governance discourse is its attention to an emerging 'actuarial justice' model. It is here that the most venturesome theoretical claims are articulated about the changing nature of penalty: ' . . . the New Penology has a radically different orientation. It is actuarial. It is concerned with the techniques for identifying, classifying and managing groups assorted by levels of dangerousness' (Feeley and Simon, 1994: 173). Of course, we have already demonstrated that actuarialism, as a governmental technology, is nothing new. But what about actuarial *justice*? The 'New Penology', it is argued, rejects 'ascertaining responsibility' or 'making the guilty pay', but now 'seeks to regulate groups as part of a strategy of managing danger' (Feeley and Simon, 1994: 173). We are thus left with a description of actuarial justice that eschews individual responsibility and retribution; instead, our current penal practices reflect a 'new', cold and calculative logic tethered to notions of insurance, predictability and management. Thus, the actuarial justice hypothesis rests on two claims: first, that a new criminal justice logic has sprung forward, and second, that older penal logics have been supplanted. For such a claim to be true, we would first need to find a dearth of evidence that early modern thinkers were wedding penal logics to actuarial considerations, and second, that early modernity (in contrast to late modernity) was dominated by retribution rather than 'regulating groups' in order to 'manage danger'.

Any notion that the regulation of groups as a fundamental rationale of justice is a late modern invention, is quickly dispelled when one investigates the writings of Petty. In his main economic work, *Treatise of Taxes and Contributions* (1662), Petty devotes a small chapter to a discussion of 'penalties'. He insists most on 'pecuniary mulcts' in lieu of 'Death, Mutilations, Imprisonment, Publick disgrace, Corporal transient pains, and great

tortures' (Hull, 1986 [1899]: 67). Why? Because while 'smaller Corporal pains serve to punish those who can pay no pecuniary mulcts', the state punishes itself 'by killing, mutilating, or imprisoning their members' and these 'ought (as much as possible) to be avoided and commuted for pecuniary mulcts, which will increase labour and publick wealth' (Hull, 1986 [1899]: 68). Even slavery is thought to be a more fit punishment for thieves than death, but 'solvent Thieves [should] . . . be rather punished with multiple Restitutions then Death, Pillory, Whipping?' (1986 [1899]: 68–9). Is Petty a humanitarian? Mykkänen (1994: 84–5) points out that his is a fundamentally economic concern and does not indicate any humane sentiment. Petty's central motivation lies in accruing wealth for the Kingdom (PP I, VII, 55: 184–6). And even in his recipes for the treatment of thieves a class-based differentiation, on the basis of ability to pay restitution, is advanced.

More importantly for us, can Petty really be describing a model of actuarial justice? Even more telling than his discussion of 'penalties' are his thoughts on 'Bankrupts'—which deal with all forms of crimes and punishments. The purpose of these prescriptive 'helps' are so that 'Persons guilty of all and every . . . Crimes, may bee known and detected' (PP II, XXIII, 146: 211). In the very preamble to his thoughts on 'Bankrupts', Petty sets out the two underlying logics behind his treatment of criminality: retribution and calculation (read: actuarialism). Petty maintains that the methods of punishment shall be both 'Proper and proportionable' in order to exact 'Right and Reveng' (PP II, XXIII, 146: 211).

Petty's 'helps' for crimes such as bankruptcy, 'Robbing upon the Highway', 'Burglary and Burning of Howses', 'Stealing Horses' and other livestock and goods, and of 'Forging Deeds' (PP II, XXIII, 146: 211) run from restitution to torture and death. Like the actuarial criminologies of today (see Rigakos, 1999) (e.g. CPTED, Situational Crime Prevention, Environmental Criminology), Petty outlines his preventive penology for the 1600s—his technique for making 'risky' populations 'known'.

- 1 That all men bee bound to keep Accompts of their Receipts and Issues, Gayn and Losse, Debts & Credits, in mony, Cattle & Goods, and where they were at noon and at night every day in the yeare; with mention of what deeds hee hath made or witnessed.
- 2 That no howse stand alone, nor without call of some other howse. But that 10 Howses may stand neer together, and neer as may be in some High-Way; and that one of the said Howses be an Inn, and the Keeper thereof a Cunstable, tything man or other officer, with good security for his good behaviour.
- 3 That every man have and cary about him an uncounterfitable Tickett, expressing his name, the numero of his Howse, his Age, Trade, Stature, Haire, eye, and other peculiar marks of his Body.
- 4 That every man of — have a peculiar Seale.
- 5 That the High-ways be guarded (PP II, XXIII, 146: 212).

What would the product of such a schematic be? How would those caught within its snare be treated? We have noted that within a modern loss prevention mentality, retribution is avoided, individual responsibility supplanted with managerial mechanisms, and control maintained through panoptic measures. As a demonstration of the divergence between retributive and actuarial logics, Shearing (2000) provides us with two parables. The first describes a young stable boy who is killed by a prize bull in Zimbabwe. Despite pleas from the community that the owner not kill the bull in response, he nonetheless destroys it because he believes in 'an eye for an eye, a tooth for a tooth'. For the farmer, something had been unbalanced at a cosmic level, and only after the bull was killed could this 'mystical balance' be reset.

Shearing's (2000) second parable describes how a security director was tasked with stopping employee theft of power tools at a steel mill. The CEO of the company harshly rejected his initial proposal because it was based on state interventions, such as investigation and prosecution in the criminal courts, which would cost the company considerable moneys. The company would have to replace the workers fired and prosecuted, absorb the cost of overtime, retraining and even deal with the costly consequences of declining morale and complications at collective bargaining. In response, the security director proposed that a power tool library be created so that, in the future, workers could legally use equipment and be able to return it. The library would also make use of community peer pressure so that the tools were used responsibly.

The mentality that infuses the second story is quite different. In this story punishment is not accorded any special privilege. Our CEO is deeply skeptical of the claim that the wrongs of the past must be symbolically corrected before one can go on . . . Efforts devoted to symbolically reordering the past makes no sense to him. Indeed, he views a concern with expiation and denunciation as counter-productive.

(Shearing, 2000: 4)

For Shearing (2000) the mentalities of each story revolve around the priority given to the past versus the future. When one becomes consumed by the future, one is forced to take control of it through probability and prediction—risk society infuses institutions and persons with an actuarial mindset. This mindset then comes to determine responses to harms. For risk theorists, actuarialism is a 'new' justice philosophy tethered to broader late modern social changes: 'modernization today is dissolving industrial society and another modernity is coming into being' (Beck, 1992: 10). While risk theorists are correct to point out that retribution is much older than capitalism, perhaps as old as human existence, this does not mean that it is part of a regime that is detached from modern social relations and economic structures. We have argued that these logics can be understood under capitalism. More than this, however, actuarial justice, itself, dates at least to the 17th century. While retribution exists alongside actuarialism

today, it also did so in Petty's day. We need not maintain a philosophical schism between actuarial and retributive thought when we see them fashioned interchangeably at the outset of capitalism—both making sense under a Hobbesian rubric of individual sovereignty advanced by Petty, and both ideologically supporting an emergent bourgeois state.

Even today, when we speak of actuarial practices in large corporations, we might naturally expect that all security measures are understood with reference to an economic model—the managerial exemplar. Contract security services would thus operate under this logic, providing technologies of loss prevention or responsabilizing workers to avoid future thefts and losses (Shearing and Stenning, 1982), but this is not the entire picture. Many privately contracted security services also sell the symbolic product of retribution and 'law enforcement' alongside community or 'informal' social control. Corporations and elected tenancy boards hire security firms that promise to 'crack down' and make arrests (Rigakos, 2001) above any loss prevention or actuarial assignment. Retribution is also for sale.

If punishment should follow a strictly rationale economic model as based upon both the philosophy of Hobbes and/or the calculus of bourgeois capitalism, we might expect that Petty's discourse should shun the primitivism of an 'eye for an eye'. But Petty has already forewarned us that it will not do so (PP II, XXIII, 146: 211). He continues by offering the following list of punishments for various lesser deviations:

- 1 Pecuniary mulcts } for damage to the public.
- 2 Forfeitures }
- 3 Banishment—for useless persons and cowards (PP II, XXIII, 146: 212).

He then moves on to more corporal forms of punishment, including slavery and public humiliations for other offences:

- 4 Servitude & Slavery—for spendthrifts, bankrupts, debauchers.
- 5 Corporall paynes—for fornications, quarellers, cheates.
- 6 Exposed to shame & ridiculous habits—for Lyers, cheates, bawds, pimps.
- 7 Secluding Imprisonment—for plotters, heretics (PP II, XXIII, 146: 211–12).

Petty then proceeds to more 'serious' offences, including thievery and murder.

- 8 Castration . . . []
- 11 Branding and Stigmatizing—for Thieves, rogues, blasphemy.
- 12 Simple death of severall kinds—for murther, great robbery, burglary, bankrupts (?).
- 13 Dismembering—hands, eyes & eares. Thumbs for forgers, Testicles [for] P . . . eyes [for] adultery Eares for Plottes sedition.
- 14 Torture and death—for repeated murthers (PP II, XXIII, 146: 213).

Now, quite clearly the level of retribution exercised today by the criminal justice system does not compare in its *severity* to the time of Petty. But we

are more interested here, in keeping with other social theory we have examined, in the logic, legitimation and organization of punishment rather than its specific physical manifestation.

The notion that actuarial thought, as it affects the criminal justice system, is a late modern invention is not supported by the evidence. Economic thinking, as it pertained to the punishment of offenders has a history as old as the 1600s, when it was part of the bourgeois logics of English projectors and an emerging 'rational' state. Actuarial justice is new only insofar as it has been recently described. Much as it is today, however, retribution is not ruled out of criminal justice recourse. The death penalty, for example, has not been abolished in the United States, while boot camps are spreading to Canada. In a 1991 CNN/Gallup poll, only 13 percent of Americans cited deterrence as their reason to support the death penalty while 50 percent cited 'revenge'. It should be no surprise that descriptions of the triumph of neo-liberal risk society have recently been tempered by social theorists (O'Malley, 1999) who point to the rise of irrational antagonisms against actuarial practice. One major obstacle cited as hampering the realization of an actuarial, risk model is the American, right-wing religious coalition. Ironically, it was against the complications of religious and class-based fervour that, in large part, led to the establishment of rational risk discourse in the 17th century.

Conclusion

The goal of this article has been critically to assess current theory on risk and governmentality by investigating the works of Petty and other contingency thinkers operating from the middle of the 17th century. We have argued against the view that the insurance practices of loss prevention are a development of late 18th- to early 19th-century thought, only accelerated in late (or post) modernity and currently tied to neo-liberalism. Rather than creating an image of risk that radically deconstructs social classes into a system of individualized personal biography management (risk categorizations), we argue that these tendencies are not new and that they are a product of bourgeois thinking.

Of course, there are many respects in which we are living in new times. There has been a rise in the service sector economy (Bell, 1973); an increasing perfection of bureaucratic forms (Dandeker, 1990); radical changes in the mode of communication and dissemination of information (Poster, 1990); and even the continued refinement of risk technology (Beck, 1992). So, in some respects our present era may stand in discontinuity with the past. Yet as Smart points out 'amidst the differences there remain familiar traces, signs of continuity . . . if we are living in new times we also appear to be encountering old troubles, familiar possibilities and pleasures' (1995: 15). Notions of continuity versus discontinuity should have a particular

resonance with many Foucaudian theorists. In answer to a question regarding discontinuity in his own work, Foucault retorted:

[t]his business of discontinuity has always bewildered me . . . the important thing here is not that such changes can be rapid and extensive . . . [it is that] the extent and rapidity are only the sign of something else: a modification in the rules of formation of statements which are accepted as scientifically true.

(Foucault, 1984: 53–4)

Alas, there is rarely a reflexive compulsion on the part of many Foucaudian theorists to examine their own constructions of governmentality—frequently relying on epochal schisms to overstate the case of neo-liberal risk rationales. Foucault touches on this ‘*ligne de conduit*’ when developing his suppositions on pastoral power—arguing that ‘to look at nascent state rationality, just to see what its first policing project was, makes it clear that, right from the start, the state is *both* individualizing and totalitarian’ (1988: 84; emphasis added).

One of the most important respects in which there is far more continuity than change is in the development of the prevailing economic system. ‘The long-term development of western “industrial society” will continue to be governed by the laws of motion of the capitalist mode of production discovered by Marx. The contemporary economic and social order remains indisputably *capitalist* in nature’ (Mandel, 1975: 527; emphasis in original). As if to divine our critique of the ideology of risk society from the 17th century to the present, Marx warns that the concept of:

population is an abstraction if [one] leaves out, for example, the classes of which it is composed. These classes in turn are an empty phrase if [one is] not familiar with the elements on which they rest. E.g. wage labour, capital, etc.

(Marx, 1973: 100)

Technocratic ideology under capitalism (Mandel, 1975: 525) seeks to overcome all explosive conflicts and integrate antagonistic social classes: ‘it is a constitutive precondition of the capitalist mode of production in the modern epoch’. Much as it did at the outset of capitalism, ‘rational’ discourses of risk, probability and insurance seek to overcome these antagonisms, these tensions. Most often, economic decisions based upon actuarial judgement merely technocratically reinforce the status quo (Rigakos, 1998). As a technical discourse, it has limited ‘transformative’ capability, it is tied to its present epoch.

We wish, therefore, to amend current thinking about governance by recasting attention to the question of ‘risk for whom?’. What hegemonic practices are rationalized, legitimized, who are the ‘risky’ populations and why? Now, we are *not* saying that all social relations can be traced back to the rise of capitalism—this is a vulgar Marxian orientation we reject. But we do mean to add insight to the evolving risk discourses through our

historical examination. We do so as an aid to theory building by problematizing sweeping historical constructions and untenable maxims about the 'end of class' as an object of administrative regulation.

Note

Dr Richard W. Hadden passed away suddenly before this article could be edited into its final form. Rick was a dear friend and an award-winning, international scholar in the sociology of knowledge and science studies. He will be greatly missed. Wherever possible, Dr Hadden's original notations for the article were used. Dr Michael Overington, Hadden's appointed literary executor, requested that the ordering of authorship not be altered. Any mistakes, of course, are mine alone. Dr Hadden's contribution to this article was, in part, financially supported by a Social Sciences and Humanities Research Council of Canada grant (SSHRC No. 410-97-0076). The authors would like to thank Clifford Shearing and John McMullan for their thoughtful and challenging commentaries on an earlier version of this article.

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