PUBLIC HEALTH PAST AND PRESENT

Food panics in history: corned beef, typhoid and "risk society"

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An outline of the "risk society" thesis of the German social theorist Ulrich Beck is given, and some points that he has taken from food safety examples are discussed. The potential for exploring the viability and utility of the thesis, via a comparative study of historical food safety episodes is illustrated through an account and discussion of the large corned beef-associated typhoid outbreak which occurred in 1964 in Aberdeen, Scotland. The outcome of the Aberdeen affair, in terms of public and political interest in food safety, and impact on the official food safety system, is compared with the outcome and impact of the series of food safety episodes of the 1980s and 1990s. The interactions between the latter episodes and the new food movement, the proactive responses of corporate interests, and the dramatic changes in the food safety regime represented by the formation of the Food Standards Agency in Britain, are contrasted with the relative lack of impact of the Aberdeen outbreak. Despite criticisms of Beck's thesis, this comparative study highlights, in particular, the value of his concept of "subpolitics", and his expectation that the transition to risk society will involve the emergence of new social institutions. Such insights may help orientate epidemiologists and community health specialists who are currently active in food safety and regulation.

are generated via social interests and vary with social position, but he is also a realist who regards hazards as real, underpinning his support for the green movement (Lupton,⁶ p 60).

Risk society, Beck claims, is characterised by "reflexive modernisation", modernisation that threatens the foundations of industrial society, coupled with the growth of awareness of this situation, a process via which modernity confronts and transforms itself (Lupton,⁶ pp 66–7). It is difficult to operationalise reflexive modernisation with a view to empirical study, but a phenomenon that Beck associates with the concept—namely, the emergence of "subpolitics"—holds greater promise. Subpolitics, as discussed by Beck and others, are new forms of politics, outside conventional representative democracy, and include the activities of non-governmental organisations (NGOs), and corporate subpolitics, such as the adoption of environmental standards by multinational corporations in advance of, or beyond, the requirements of official regulations. Subpolitics address new issues, eschewing concerns with wealth distribution associated with classical industrial society, and create novel coalitions and alliances.^{8–9}

Beck included some mention of food in his original book, when arguing that conventional risk analysis is unable to account for complexity—in terms of synergistic interactions between pollutants and the variability of consumers (Beck,² pp 25–6, 55). He made no mention of food infections, but soon after the publication of the book there was a series of food infection crises in Britain: including *Salmonella*, *Listeria*, *Escherichia coli* 0157 and bovine spongiform encephalopathy (BSE) (Smith *et al.*,¹⁰ pp 300–6). Later, a different food safety issue, genetically modified foods (GMF), became controversial. During the 1990s, Beck began to use such examples to illustrate his arguments.

In *World Risk Society*, a collection of essays published in 1990–99, Beck made several references to food, especially the BSE crisis, which he dated to 1996—when a British minister acknowledged a link between BSE and variant Creutzfeldt–Jakob disease. Beck used the example to answer critics who claimed that the risk society thesis was not applicable beyond Germany. The crisis, he claimed, amounted to a "textbook example" of the risk society phenomenon, as the affair "highlights

Beck's "risk society" thesis, published in German in 1986, and in English in 1992, and expanded in a series of further books, has stimulated much debate.^{1–7} Beck argues that the historical development of society could be interpreted in terms of changes in the predominant forms of hazards confronting humanity. In early societies, hazards outside human control, attributed to fate or supernatural causes, predominated. Later, in "classical industrial society", hazards mainly associated with industrial development and human decision making were relatively circumscribed and calculable. Now, however, we are moving into a new epoch—an industrial risk society—in which the potential impact of some incalculable, uninsurable risks threaten everyone, including future generations, or human survival. Growing awareness, from the mid-20th century, of the threat of nuclear annihilation provides the first example. The currently much-discussed issue of global warming provides another. It should be noted that Beck is a social constructionist who acknowledges that perceptions of risk

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Abbreviations: ATO, Aberdeen typhoid outbreak; BSE, bovine spongiform encephalopathy; FSA, Food Standards Agency; GMF, genetically modified foods; LFC, London Food Commission; NGOs, non-governmental organisations

Figure 1 Front cover of a booklet produced during the Aberdeen Typhoid Outbreak.

the growing importance of “aware unawareness” in risk production and definition because the precise mode of its transmission across species is a mystery and it may have a long gestation period”. He also emphasised the massive economic costs and international impact (Beck,⁵ pp 50–1). The meaning of “aware unawareness” was clarified elsewhere, where Beck listed five aspects of unawareness in risk definition as “selective reception and transmission of the knowledge”, “uncertainty of knowledge”, “mistakes and errors”, “inability to know” and “unwillingness to know” (Beck,⁵ pp 122). In other words, Beck claimed that the BSE crisis made evident the extent to which reassurances of safety may be based upon inadequate knowledge. The evidence given to the BSE enquiry confirms that such inadequacies had been involved in the generation of public statements regarding the safety of British beef^{11 12} (<http://www.bseinquery.gov.uk/>).

Beck also used the BSE (and GMF) examples to illustrate the part he believes the media play in the “subpoliticisation” of food safety. In the BSE crisis, he remarked, television played a role in connecting “science, politics and popular consumer culture”, by screening computer simulations making the invisible cause of BSE (the defective prion protein) visible to the public (Beck,⁵ pp 136–7). Similarly, he considered the controversy surrounding the unforeseeable consequences of GMF as an example of the “self-reflection” that arises from the “recognition of the incalculability of the hazards produced by technical-industrial developments”, stimulated by press coverage (Beck,⁵ pp 106–7).

Beck’s references to food illustrate some general problems highlighted by his critics. He remarks that “food scares” demonstrate the loss of distinction between nature and culture, and the need to acknowledge that “we are building, acting and living in a constructed artificial world of civilisation whose characteristics are beyond these distinctions” (Beck,⁵ p 145). This seems historically naive, as food fears, conditioned by and expressed through culture are centuries-old phenomena¹³ (Mythen,⁷ pp 38–9). However, changes have certainly taken place in the precise forms of expression, management and consequences of food fears, and therefore, since Beck regards the final decades of the 20th century as the period of transition to risk society, it may be fruitful to compare the 1980s–90s food safety episodes with one that took place during the 1960s: the 1964 Aberdeen typhoid outbreak (ATO), which was associated with contaminated canned corned beef. An outline of the outbreak follows, before we return to the risk society theme.

ABERDEEN 1964

On 27 May 1964, Aberdeen’s *Press and Journal* carried an announcement from the Medical Officer of Health, Ian MacQueen, under the headline “Typhoid in Bully Tin”. MacQueen revealed that he no longer thought a local carrier was responsible for the typhoid outbreak in the city, which had begun a week earlier. He believed that the outbreak was caused by a large can of corned beef contaminated during manufacture abroad, and that the bacteria had spread at a shop via a slicing

Figure 2 Back cover of a booklet produced during the Aberdeen Typhoid Outbreak.

machine.¹⁴ This began a dramatic food safety episode, covered in the local, national and foreign press, with reporting facilitated by MacQueen's frequent press conferences. Criticised for not giving enough information, MacQueen responded by using the media for educating the public on hygiene, announcing controls upon public gatherings and advising on travel. He also collaborated in the production of a health education booklet featuring a character from a local newspaper cartoon (figs 1 and 2). As the number of people hospitalised increased (reaching >500), all this made for sensational coverage, the press conferences providing material used by the electronic media, as well as newspapers.¹⁵

Soon after MacQueen announced the corned beef connection, he made the (incorrect) allegation that the implicated meat might have originated from the food stockpile the government maintained in case of nuclear war.¹⁶ The corned beef stores, and the system of disposing of the food on the domestic market after about 13 years, had recently come to the attention of the public through a story about poor-quality corned beef that had been on sale, that the newspapers picked up from *Grocer's Gazette*.^{17 18}

During June several batches of corned beef were recalled. These had been manufactured using non-chlorinated cooling water, which was thought to be the cause of the ATO (Smith *et al.*,¹⁰ pp 132–41, 152–5). Consequently, an increasing proportion of the government's stockpile became unfit for release to the market. The history of the meat linked to the ATO was revealed in the press, leading to heated exchanges in parliament. During 1963, three small, much less-publicised, corned beef-associated outbreaks had occurred in England, and, as a result, the Ministry of Health arranged for the manufacturer concerned to withdraw the suspect batch of cans quietly, and an inspector was despatched to South America, to check the meat plants' hygiene standards. During early 1964, the inspector identified a plant using unchlorinated water. Some consignments from this source were prevented from entering Britain, but others were left in circulation, the latter becoming responsible for the ATO.^{19–21}

This information was confirmed in December, when a committee of enquiry report appeared (Milne report), which also discussed a 1955 outbreak in Yorkshire, which had been traced to canned tongue contaminated during manufacture in Argentina. This outbreak, and the canned meat connection, were also relatively unpublicised, but did result in the adoption of chlorination at most Argentine canning plants. However, some factories did not adopt the practice or allowed it to lapse following equipment failure, company experts assuming that bacterial contamination would lead to obviously spoiled cans or meat, which would be eliminated during quality control or rejected by consumers.²¹

The Milne report was critical of MacQueen's media strategy and officials hoped that this would distract attention from their own failings, but the press predominantly defended MacQueen and criticised the government departments (Smith *et al.*,¹⁰ pp 136–8). But this reincarnation of the affair was short lived and soon officials settled down to consider the report's numerous recommendations, with relatively little interest from the press or parliament. Recent research has investigated the process via which officials (primarily from the Ministry of Agriculture, Fisheries and Food, Ministry of Health, and Foreign Office) made decisions during and following the 1963–4 outbreaks, showing that decision making usually proceeded slowly, involved much interdepartmental conflict and consistently took into account potential economic and political implications. Although the meat plants universally adopted chlorination following the ATO, closer scrutiny of the industry revealed numerous other problems of hygiene. But

moves to stop unhygienic plants exporting to Britain were frequently compromised by fears about the possible loss of Argentine meat supplies, impacts of rising beef prices and potential British–Argentine trade and political consequences. The officials, and meat companies, consistently assumed that the less publicity surrounding decision making and action regarding food safety the better. In these conditions, corned beef consumption, which declined markedly in 1964, recovered slowly.¹⁰

RISK SOCIETY AND ABERDEEN

We are now in a position to discuss the ATO in terms of Beck's thesis, and compare it with the later food safety episodes. Firstly, the sequence of events leading to the outbreak, including the action/inaction on the earlier outbreaks, and the inspector's visit to South America, suggest processes involved in risk production and definition not dissimilar to those alluded to by Beck in connection with the BSE saga. Likewise, just as BSE highlighted the possible temporal disjuncture between the consumption of contaminated food and disease, the revelations about the government's corned beef stockpile showed that infection might be caused by food contaminated during manufacture not only thousands of miles away, but also, perhaps, 13 years earlier. However, while the risk of typhoid in Aberdeen was presented as serious and widespread, it could be defeated by soap and water (figs 1 and 2). Later, in contrast, avoiding the risk from BSE-contaminated products, would be much more problematic. But as with the BSE affair, the international repercussions of the ATO were considerable and complex. So by citing the international dimensions of BSE, as if such dimensions of food safety are new and therefore reinforce the risk society thesis, Beck seems uninformed about the history of international food production. The regulations governing the hygiene standards of meat imports, which proved so problematic following the ATO, were introduced in the first decade of the 20th century, and there are many earlier examples of food safety issues that have crossed international boundaries.^{13 22}

Beck's references to the media in connection with BSE and GMF illustrate what some critics regard as the superficiality of his use of examples—here his failure to deploy a body of empirical analyses of risk reporting. Mythen⁷ (p 177) points out that Beck fails to consider the impacts of media ownership, control and economic power upon output, and the filtering effects of internal news production processes. The media can play a role in promoting trust in government food safety machinery. And some studies have shown that, rather than encouraging reflection and dissent, some media food controversies encourage complacency and resignation.^{7 23} In the ATO, as in the 1990s episodes, the media played a range of roles: alerting the public to hazards, encouraging critical attitudes towards government and industry, and conveying official reassurances. During the 1960s, however, the ATO was unique: there were no other comparable food safety stories. By contrast, during the 1980–90s, the series of food safety episodes encouraged the emergence of more widespread and specialised critical food journalism, increasing demands for information and openness. The growth in the membership of the Guild of Food Writers (<http://www.gfw.co.uk/>) provides evidence of this process of specialisation. Established in 1984, with the stated aims including campaigning for improvements in food quality, it now counts over 350 authors, columnists, freelance journalists and broadcasters among its members. While the media may not play such a simple role in generating food subpolitics as Beck seems to suggest, during the 1990s the media did play a role in reviving and maintaining the momentum of food safety issues, producing an impression of systemic problems which was not characteristic of the 1960s.

FOOD SUBPOLITICS: 1960–90s

Differences between the ATO and 1980–90s food safety episodes come more into focus if we consider the contrasting concrete outcomes of the respective episodes, which may be ascribable to the emergence of food subpolitics (and/or reflexive modernisation) during the intervening period. Although corned beef consumption statistics show that government reassurances did not entirely assuage public anxieties, there is no evidence that the ATO stimulated significant pressure-group activity. Even among the immediate victims only a few took up compensation cases, settling for modest sums out of court. (Records of 31 claims brought against the supermarket are at the National Archives of Scotland, files SC1/11/1967/69–99.) The canned meat manufacturers' strategy was to try to minimise publicity and reminders of the episode, relying on fading public awareness to restore sales, rather than proactive advertisement of efficient remedial action or new improved food standards. Following the Milne report, minor adjustments were made to the food safety machinery, but there was no significant change in the culture of policy making and regulation (Smith *et al.*,¹⁰ pp 192–8). Officials continued to seek, as far as possible, to make policies in private, and to act secretly. Interdepartmental tensions continued to be prominent, and economic and political considerations continued to be factored into decision making. This policy culture is recognisable right up to the 1980–90s.²⁵ In terms of campaigning for changes in the food safety regime, the main impact of the ATO was a slight stimulus to existing activities of public health inspectors. These local officials had been seeking roles independent of medical officers of health. They acquired such independence (and became environmental health officers), after medical officers of health were abolished in 1974 (Smith *et al.*,¹⁰ p 299).

In contrast with the 1960s, during the 1980–90s, pressure mounted for a complete revision of food safety policy arrangements. In anticipation of the new principle of openness, the proceedings of the BSE enquiry, unlike those of the Milne Committee, were held in public. Mythen⁷ (pp 156, 178, 193) observed that recently “public discontent about the unresponsiveness of social institutions” has led to the launch of “quasi-autonomous government bodies” to “plug the gap between citizens and the state”, citing the Food Standards Agency (FSA), which began work in April 2000, as an example. But later she commented that “national governments have attempted to suck non-governmental organisations in to the political system via consultation and round-table discussion”, a trend “particularly prevalent in risk-related areas such as food safety”.

The formation of the FSA might be understood as a new kind of institution characteristic of risk society, as a strategy for reducing dissent by coopting concerned parties, or, perhaps, as an attempt to divert blame for problems from government. But when the performance of the FSA, in striving to make its procedures as open as possible, making minutes of meetings and many other documents freely available to the public, acting swiftly, monitoring its performance and learning from experience, is compared with the food safety regime, before, during and after the ATO, it is clear that much of importance has changed. Numerous documents available on the FSA website testify to the new style of policy making that the agency represents (<http://www.foodstandards.gov.uk/>).

FOOD SUBPOLITICS AND THE TRANSFORMATION OF FOOD POLICY CULTURE

Could the formation and operation of the FSA be understood in terms of reflexive modernisation and subpolitics? What would an account of the emergence of the FSA in terms of food

subpolitics look like? A useful starting point is an account of the 1980–90s “new food movement” by Tim Lang, who, as director of the London Food Commission (LFC), was one of its activists. Lang presents the prehistory of this movement as linked to the “radical science movement”, represented by the British Society for Social Responsibility in Science, founded in 1969. During the 1970s, this organisation began a still-active movement campaigning around work hazards, and also critical analyses of food industries. The high-profile and high-impact 1980s food campaigns Lang ascribes to a new professional and artful approach, especially in terms of media relations, made possible by funding provided by the Greater London Council. At the time Beck was preparing his original thesis, campaigns against food preservation by irradiation were breaking the mould of conventional politics by creating unusual coalitions involving trade unions, consumer organisations, medical organisations, local authorities, environmental health officers and large retail chains.^{25–26} The anti-irradiation campaign may be considered as a good example of both NGO and corporate subpolitics.

A detailed analysis of the FSA cannot be covered within the confines of this article. And it could not, of course, be considered exclusively as a product of subpolitics as it is, after all, a product of parliament, an idea floated in parliamentary debates in 1990, which featured in the 1997 Labour manifesto (Smith *et al.*,¹⁰ pp 307–8). But the establishment (and operations) of the FSA might be productively conceptualised in terms of interactions between subpolitics (including corporate subpolitics) and parliamentary politics.

FOOD POLITICS IN CLASSICAL INDUSTRIAL SOCIETY

Does the comparison of the outcomes of the ATO and the 1980s–90s food safety episodes really reinforce the risk society thesis and date the process of emergence of risk society to the intervening period? To answer this question, comparison with an earlier period will help. Do unusual coalitions apparent in British 1930s malnutrition campaigns negate the notion that food subpolitics emerged roughly during the 1980s, as outlined above? *Food Health and Income* (1936), a report by John Boyd Orr, a Conservative Party supporter, and a film, *Enough to Eat?*, made with funding by the gas industry, were key campaigning tools of a broad movement with a predominantly left-wing leadership.^{27–28} But in as much as the malnutrition campaign was concerned with equitable food distribution, an issue that Beck² (p 20) regards as paradigmatic of classical industrial society, it could be said that a shift occurred in the predominant food campaigning issues between the 1930s and 1980–90s, which reinforces Beck's thesis. But there were also other broad-based campaigns during the 1930s around food quality and food safety, notably on milk and bovine tuberculosis. Again, however, the difference between these episodes and the 1980–90s can be understood in terms of outcome: during the 1930s, action to tackle bovine tuberculosis was consistently impeded by policy and decision making involving government committees meeting in private, allowing economic and industrial considerations to be continuously factored in.²⁹ Looked at this way, if the FSA is taken as representing a new departure, then the perspective of Beck, that new social arrangements for managing risk may be expected to arise during the large-scale late-20th century process of transition to risk society, does offer a promising conceptual framework.

CONCLUSIONS

Despite its deficiencies, in terms, for example, of its schematic view of history, and weaknesses arising from the superficial use of empirical evidence, it is concluded from the above discussion that comparing the handling and outcome of the ATO, and recent changes in the culture of food policy making in Britain,

What this paper adds

A comparative historical discussion of food safety episodes in terms of Ulrich Beck's risk society thesis.

Policy implications

For specialists in the fields of epidemiology and community health currently operating in the field of food safety, this paper suggests theoretical concepts that will help them understand recent and on-going changes in the policy culture in which they operate.

demonstrates the potential value of some elements of Beck's risk society thesis. More specifically, the emergence, nature, roles and impacts of food subpolitics are worthy of consideration, in connection with the institutionalisation of the new approaches to food safety policy making and regulation represented by the FSA. Analyses of the recent developments and the current situation in these terms may help orientate those active in the field of food safety, by providing useful insights into the social milieu in which they operate.

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