Compaction of Urban Areas and Shifting Perceptions of Degraded Ground

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Abstract

Compaction of urban areas depends on effective reuse of previously developed land. Britain (and especially England) shows that policies and practices in this field can be subject to dominant political imperatives. This is reflected in the terminology of "contaminated land" and "brownfield sites"and their changing meanings. Early policy on contaminated land in Britain reflected fear of the health impacts of contamination. In the 1990's concern switched to how perception of health threats affected the property market. Implementation of the relevant Section of the Environment Act 1990 was suspended and the Environmental Protection Act 1995 amended the earlier Act. During the mid 1990's the emphasis in policy debates on land on which there has been previous industrial use shifted. It was now defined as "brownfield", to reflect concern about house-building on "greenfield" sites. This debate in turn became focused on a "60%" target for the building of new homes on "brownfield" rather than greenfield locations. This paper outlines these changes in emphasis and suggests that they are closely dependent on economic conditions.

Introduction

Compaction of urban areas depends on effective reuse of previously developed land. As Britain (and especially England) shows, policies and practices in this field can be subject to a range of dominant political imperatives. This is most obvious in the terminology used in different periods, and in the way the meaning of specific words and phrases has changed, especially "contaminated land" and "brownfield sites".

Britain has the longest history of industrialisation in the world, and England has a high population density. A significant proportion of its land has therefore been previously used for industrial purposes, and much of this has been or may be reused for development. How previously used land has been viewed has evolved over at least four decades, and this paper concentrates on the last twenty years. This evolution can be seen through two different phrases that have successively dominated the debate: 'contaminated land' and 'brownfield sites'.

Contaminated Land

Concern about land contamination was inspired by two famous (or infamous) overseas examples. The Love Canal in the USA was a long standing waste dump for industrial chemicals on which the indiscriminate development of a residential suburb led to a range of health problems and to a national scandal in the 1970's (Petts et al. 1997, pp15-16). Similarly the village of Lekkerkerk in the Netherlands was extended over a mixed waste dump (Petts et al. 1997 p17).

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Within Britain the debate became focused on the need for reliable information on the contaminated status of sites in the market process (Smith, 1999). In essence how do people avoid buying a home that might be harmful to them. In an early attempt to address this problem the Royal Commission on Environmental Pollution (1985 p131) recommended that contamination on sites be registered on land charge registers.

The issue was examined in parallel by the Law Commission and the House of Commons Environment Committee. The Law Commission (1989, pp10-11) was concerned with the question of whether to reverse the caveat emptor principle: the principle that a buyer discovering a problem with a property after purchase should accept responsibility since they should have investigated adequately in advance. In general they rejected the idea of reversing caveat emptor but recommended public registers of contaminated land, and (or at least) entries on local land charges registers.

In January 1990, the House of Commons Environment Committee (1990) produced their first report on contaminated land. This recommended the establishment of registers of contaminated land which would facilitate the abolition of caveat emptor. Such registers would also guide policy making and expenditure on grants (Department of the Environment,1991a p.3). Under pressure from Members of Parliament the government inserted s.143 into the Environment Protection Bill (1990). This did not provide registers of contaminated land as such, but “Public registers of land that may be contaminated” (the section's marginal note). The section defined “land subject to contamination” as meaning “land which is being or has been put to a contaminative use”. At a cursory reading the section may have appeared to be establishing registers of contaminated land. The Government were quite clear, however, that it was only appropriate to identify land that might be contaminated, on grounds of cost and practicality. In a change from their earlier position, they accepted the Law Commission's view that the caveat emptor principle should remain (Department of the Environment, 1990).

A consultation paper on s.143 registers issued in May 1991 stated the Government's “that contamination is not synonymous with pollution” (Department of the Environment. May 1991b, p7). They derived this view from the RCEP (1985) 10th Report, which emphasised that “contamination” was merely the presence of certain substances in an environment, without regard to whether they were at concentrations high enough to be “pollution”, i.e. harmful. In other words contaminated land became a very inclusive definition.

Although there was a substantial response to the consultation process from environmentalists, environmental consultancies and business in general, public awareness of it was not high. At the start of 1992 it was assumed that compilation of the registers would start on time in April, although the necessary regulations were not due to be published until the end of March. In a survey conducted by the Robens Institute (Smith, 1992) it was found that many local authorities had already started preparatory work early in 1992. But, following a spate of rumours, it was confirmed in March 1992 that implementation of registers was to be delayed indefinitely. Government was quite explicit that this was due to pressure from the property business. It seems that after the consultation period ended, awareness of the registers increased, and with the property bubble threatening to burst the property business started to panic. In the run up to the 1992 General Election the Government were not minded to ignore them.

There was sustained interest in the issue from the media throughout 1992, even if some writers were unaware of the difference between “contaminated land” and “land subject to contaminative uses”. Most M.P.s who questioned Ministers in 1992 seemed similarly

unaware. Presumably in an attempt to reduce the levels of aggravation, the Department of the Environment (DoE) came up with a revised set of regulations at the end of July 1992. In essence the DoE reduced the "contaminative uses" that would initially be registered to those they considered most likely to be severe. They expected that the number of sites included would be reduced to 10 or 15% of the area previously envisaged. (Department of the Environment, 31 July 1992). However, in March 1993 the DoE announced the abandonment of s.143 registers and a complete review of contaminated land policy. Again they were quite explicit that this was due to business criticisms. This review took a "market centred" approach to contaminated land policy. In November 1994 it was confirmed that s.143 would be repealed, and that there would be new registers - simply registers of legal actions taken in extreme cases by local authorities regarding contaminated land. The Environment Act 1995 implemented these proposals. The meaning of "contaminated land" had therefore been greatly changed. In the new interpretation land is contaminated only if it is causing significant harm (to people, eco-systems or buildings) or is polluting controlled waters (in effect streams, rivers and groundwater).

In 1991 contamination had not been synonymous with pollution: low contaminant levels were enough to call a site contaminated. By 1995 the definition had been moved to the other end of the spectrum and land was only deemed contaminated if it was severely polluted. The RCEP in its 19th Report (on soil) neatly and expressly side-stepped this problem by referring to "contaminated sites". Eventually, in July 1998, it was announced that implementation of Part IIA of the Environmental Protection Act 1990 (inserted by the Environment Act 1995) would go ahead in July 1999, and local authorities would start to implement the new contaminate land regime.

Brownfield Sites

As the issue of contaminated land as such was moved gently into relative obscurity, the related concept of brownfield land was coming to the fore (Smith, 2000). This term has evolved with two meanings, with a spread of variations in between. At one end of the range it is synonymous with contaminated land (however defined), at the other end it may simply refer to land that has had previous development. The origins of the "brownfield" phrase appear to lie in North American practice and to date from the early 1990's or earlier. Brownfield land became a topic for academic journal discussion in 1995. The earliest reference in Geobase is for that year and concerns US practice(Simons and Salling, 1995). 1996 saw only two entries, one each from USA and UK. Though it is evident from a UK paper (Mawson, 1996) that the term brownfield was in spoken use by 1994. Given the time lag in publishing academic papers this suggests origins in 1993-4. Even 1997 shows only three entries, but there were seven in 1998 and thirteen in 1999. Brownfield land appears to have been first used in the British press in 1996, and was well established by 1998. For example checking four national newspapers (including their Sunday counterparts) i.e. The Daily Telegraph and The Sunday Telegraph, The Guardian and The Observer, The Independent and The Independent on Sunday, and Daily Mail and Mail on Sunday) shows this increasing use of the phrase "brownfield". The total number of items containing the term, starting in 1996, were:

1996: 9 1997: 31 1998: 151 1999: 158.

At the outset academic use of the phrase referred to sites that were “environmentally contaminated” (Simons and Salling, 1995). Schwab (1997) states that “Brownfields are generally defined as used industrial land with real or potential problems of environmental contamination”. Mawson (1996) on the other hand was already using the term simply to describe sites that were previously developed for industrial purposes, to distinguish them from factories newly built on “greenfield” sites. In 1997 Petts et al. sought to typify the differences between brownfield and greenfield land in terms of the degree of physical disturbance of the underlying strata. Murray and Rogers (1999) use “brownfield redevelopment” to mean “industrial site recycling in urban areas”. While Syms and Simons (1999) thought it necessary to explain that brownfield was a US word for contaminated sites. Alker et al. (2000) aimed to develop a coherent definition of “brownfield” which incorporated the contamination aspect, but not as an exclusive characteristic.

Use in political polemic sprang from the need for more new homes. The threat of building in the Green Belt become a controversial issue with environmental and amenity groups in 1996. With 50% of new houses being constructed in rural (or greenfield) areas there was pressure for releasing some of the more protected Green Belt land for development. For many people, however, the terms Green Belt and greenfield were not distinct. As a way off heading of this criticism the then government introduced what was (at least subsequently) described as an “aspirational” target of 60% of houses being built on “brown” land, meaning “already developed” (Clover, 1998; Millar, 1996). A variety of phrases were used to describe this non-greenfield land. The popularity of “greenfield”, however, encouraged the use of its “brownfield” counterpart.

After the election of 1997, the new Labour government was criticised for what were seen as moves away from the 60% target to the existing standard of 50%, and a willingness to relax controls on some areas of Green Belt. There were calls for the proportion of brownfield building to be higher, The UK Round Table on Sustainability for example called for 75%. By the end of 1997 the government was concerned to be seen as defenders of the countryside, although some argued that their actions did not always meet their rhetoric. They talked of over half of new building being in towns, and consideration was given to taxes on greenfield developments to pay for “cleaning up derelict inner city sites” (Shrimsley, 1998). There was also a suggestion of an audit of empty “brownfield” sites to ensure that they are used for new housing” (Macintyre, 1998). The 60% target was formally included in the Planning Policy Guidance Note on Housing’ (PPG 3) in March, 2000 with a target “that by 2008, 60% of additional housing should be provided on previously-developed land and through conversions of existing buildings.” (DTLR, 2000) The target was reached six years early (DTLR 2002, Smith 2002). In adopting the 60% target for England John Prescott, the relevant Secretary of State, had felt that “As for the 75 per cent. target, I believe that 60 per cent. is difficult enough to achieve.” (Hansard, 1998, Col. 27). He did however, aim to shift the terms of the brownfield/greenfield debate, which had focused on countryside protection: “One of the most effective ways of relieving the pressure on the countryside is to revitalise our cities and improve the quality of urban life.” (Hansard, 1998, Col. 22). From a ‘quick-fix’ - as the initial commitment may have been - to quell the rumblings in the shires, the focus was moved towards the wider debate on urban renaissance.

There was a degree of haziness in the use of the phrase. Both for the general public and many professionals the phrase brownfield referred to land that had already been fouled up (at least) once. When it was used in the housing debate there was an assumption that we would do well to reuse such land before carving into any more countryside. The assumption was not just that the land had been previously developed, but also that it would benefit from a new use. Brownfield development in this situation carries a sense of regeneration.

Conclusion

The evolution of government policy and public debate on the reuse of previously developed land has passed through two phases - concentrating firstly on contaminated land and secondly on brownfield sites, but it can also be seen as resulting from three successive threats:

- The first of these threats was to health, through the dangers of living on "contaminated land".
- The second threat was to prosperity, at least for the property industry, who saw the fears about land contamination as the problem.
- Finally, this was followed by public fears of the threat to the countryside from building on greenfield sites.

In essence these represent changes in the economic climate. In the boom years of the mid 80's, with high levels of building, much of this was on actually or potentially contaminated land. With the economic downturn of the early 90's the fears of recession in the building industry dominated the policy. As the economy picked up during the mid 90's so did house building, and the threats to the countryside from increased construction became apparent. By then, although the question of registers was being sidelined, there was a wider acceptance of the need to check sites for contamination at the time of development, and to make efforts to clean them up. The brownfield/greenfield controversy seems to have been defused with the attainment of the 60% target.

The debates on house building and on urban regeneration have, to some extent moved on, with greater emphasis on increasing housing densities as such (which was another of the aims of PPG 3 in 2000) and also on the number of dwellings actually needed. While these debates may have the appearance of being rational and professional ones, it is nevertheless wise to remember the political processes within which they take place, and especially the prevailing economic dynamics and their potential for controlling the debate.

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