

# **The Political Geography of Damaged Communities - The Timescapes and Landscapes of the Armley Asbestos “Tragedy”**

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## **Introduction**

A discussion of the Armley Asbestos Tragedy seemed to fit well with the conference theme of damaged communities. In outline the “tragedy” (as defined by the local media) involved the contamination of an area of Leeds consisting of around 1000 houses in the Armley Lodge (1) area of the city, as a result of the activities of a local asbestos factory. The contamination occurred in the period between the end of the 19<sup>th</sup> Century and 1959 when the factory closed. This factory was part of the Turner and Newall {T&N} group although it is often referred to under the name of its founders, J.W. Roberts.

At least 36 people have died as a result (Arblaster, Hatton, Renvoize & Schweiger 1990) of this pollution, and the estimated costs of cleaning the area of dust when completed will have cost residents and Leeds City Council around £6.3 million (Yorkshire Evening Post {YEP} 23/7/92).

“Tragedy” may not be the correct term, however, since in 1995 T&N, were found guilty of breaching their duty of care to two local residents both of whom have now died of mesothelioma, the cancer most associated with exposure to asbestos. (Margereson v J.W.Roberts Limited)

The aim of this paper is try to develop an understanding of the issues involved in this tragedy, or perhaps better scandal, using approaches developed in the writings of Barbara Adam in particular her book Timescapes of Modernity (1998).

Time has become more significant in sociological studies of late modernity (Giddens, 1984, Lash & Urry, 1994) Adam’s contribution through a series of works (1990, 1995, 1998) has been to seek to bridge social and environmental concerns. Very briefly, at this stage Adam’s argument is that what is needed to understand and engage with environmental issues effectively is a new understanding of the complexity of time. Subordinantly, in the book she also points to the utility of the concept of landscape, which also points us towards a form of knowledge and understanding which is more attuned to natural process than conventional social science. The book not only contains arguments for a new epistemology but also several case studies indicating the way in which this can be applied to a range of contemporary environmental issues. One of the most significant of these is her appraisal of the Chernobyl disaster. This paper also draws on these.

The paper is in three sections. It begins with an outline of the world wide hazard of asbestos as a context the specifics of the local case study. Second, the relevance of Adam’s ideas are explored. Finally, the paper attempts a deconstruction of the Armley tragedy itself identifying a number of timescapes and landscapes. For ease of access to the development of the major issues involved, a chronology is appended, together with a map of the area. A list of key television broadcasts is also attached. This is designed again to give clarity to one section of the analysis that follows.

Methodologically this paper is derived from an examination of texts, principally contemporary newspaper articles. These are supplemented with analysis of a number of other key texts of the period. Significant items are noted in the chronology. No interviews have been carried out with any of the key actors and in no sense does this paper claim to be a conventional history of events.

The original brief for this paper invited examination of the [political housing geography of a damaged community. Hopefully, this is revealed in the way which the timescapes and landscapes landscape discussed allow an appreciation of the way in which the tragedy became structured in both time and space.

### **The Hazards of Asbestos**

The purpose of this section is to introduce the nature of asbestos, its production and the hazards to health that arise.

Asbestos is a naturally occurring mineral with unique properties. It is mined in a variety of locations across the world, notably Canada, South Africa and India and although extracted in the same way as many ores; it is fibrous. The fibres range in length from 1millionth of an inch to over a foot and can be spun. Once spun asbestos has been used in wide variety of products from building materials to brake linings.

There are three major types of asbestos, crocidolite (blue asbestos), chrysotile, (white asbestos) and amosite, (brown asbestos). All are hazardous, though in the past it was argued that the dangers of blue asbestos outweighed the rest. Blue asbestos ceased to be used as a result of a voluntary industry ban in the 1960's; all forms of asbestos are now subject to significant regulation.

The hazard of asbestos comes from the inhalation of dust produced at any stage of the chain from extraction to disposal. As Hilyard (1983) informs us "once lodged in the lungs, the fibres lacerate the delicate tissues of the bronchial tubes, causing hard and thick scars to develop. In time – and it takes a minimum of ten years for the symptoms to develop – the scarring can cause cancer or asbestosis" (p162).

There are three major types of health risk associated with asbestos These are asbestosis, a progressive and incurable lung disease, lung cancer and mesothelioma, a cancer of the outer lining of the lungs. Exposure to asbestos may have a part to play in the development of other cancers too, but as yet no further links can be definitively established. Mesothelioma is a relatively rare cancer, which was initially easy to distinguish from other lung cancers or perhaps even T.B. These difficulties of diagnosis and post mortem examination in the past may have led to an underestimation of attributable asbestos deaths. This issue makes the precise definition of the scale of the Armley tragedy in the last instance unknowable.

Death normally occurs within a year of diagnosis. The "incubation" period from exposure to diagnosis can be up to fifty years. Therefore, how many further deaths may occur amongst Armley residents exposed to emissions during the life of the plant or exposed to residual dust after it closed cannot be predicted at this stage.

Throughout the chain, from extraction, through production to end use consumption, asbestos carries risks to health. The hazards are therefore global affecting mining communities in developing countries through to end users in Europe and other developed countries. The link in the chain being provided by multi-national companies, a prime example being T&N whose subsidiary J.W. Roberts Limited was the owner of the Armley factory.

To indicate the scale of the hazards involved, but considering only mesothelioma, the British Asbestos Newsletter (Autumn 2000) provided a short literature review showing the issues in Europe. Amongst the key findings were:-

- In the U.K statistics show an overall increase in deaths of nearly 300% in 20 years from 393 in 1978 to 1527 in 1998.
- In Denmark, the number of deaths are expected to rise and the effects of environmental regulation of asbestos will not be seen for another 10 years
- In France researchers predict that the national mesothelioma death-toll will exceed 44,000 between 1997 and 2050.

The same article also examined Health and Safety Executive sources for the U.K and these revealed:-

- High risk occupational groups included metal plate workers (including ship yard workers), vehicle builders (including railway carriages). Other construction industry workers were also at risk. In these statistics workers in the asbestos manufacturing itself were not identified as a separate group.
- Male mesothelioma deaths were concentrated into regions around ports and dockyards, where asbestos products were widely used in ship building, e.g. in the lagging of boilers
- Strathclyde is second only to Greater London in the regional tables. In Scotland, Strathclyde contributes 70% of deaths, 626 between 1976 and 1992. 280 of these were in Glasgow. The Strathclyde region had a concentration of asbestos factories as well as ship yards. There is a campaigning and victims support group very active in this area of Scotland
- A growth in the numbers of deaths could be anticipated rising from 1400 in 2005 to 2100 in 2020.

In Leeds, where asbestos products were both made and widely used, a report commissioned by the City Council, "the Arblaster Report", (Arblaster, Hatton, Renvoize & Schweiger1990) showed that between 1971 and 1987 180 people with a Leeds address at death died of mesothelioma. A further thirty people born in Leeds died from the disease elsewhere. Of these deaths 120 were occupationally related, of these 33 were employees of T&N's Armley factory.

Those cancers developing as a result of direct occupational exposure to asbestos, however, are not the concern of this paper, rather it is those which were contracted in the community surrounding this specific plant. The Arblaster study (Arblaster, Hatton, Renvoize & Schweiger1990) investigated 36 cases of this kind to which its attention had been drawn by the media or Her Majesty's Coroner. The classification of categories of the deceased is complex both conceptually and in the Arblaster report itself, for example the deaths of persons who had relatives working at the Armley factory were included both in this "environmental" group and additionally within the main study group of Leeds deaths.

Too finer analysis of these issues is however inappropriate within the context of this paper, since the overriding issue of liability for deaths due to contamination has been secured. Briefly, however, it may be worth noting the wide range of ways in which this occurred. Local residents were workers at the plant, their relatives and partners have been identified as victims through contact with their dusty clothes. Visitors to these homes were also affected.

Children played in the asbestos delivery yards of the factory. There has been contamination by blown dust to houses over significant area. At least one school playground was dust covered for probably years on end. Victims have been located amongst the workers at nearby factories and amongst workers whose daily walk to employment caused them to pass the plant.

### **Timescapes and Landscapes**

Adam, in a series of writings (1990,1995,1998), has addressed issues of time, and to a lesser degree space, environmental issues and nature. The most recent of these Timescapes of Modernity (1998) seemed to provide a novel and insightful way of examining the issues involved in the Armley tragedy. This short section attempts to show the outline structure and the issues raised by the book as a preliminary to the discussion that follows.

The central purpose of Timescapes of Modernity is to invite its readers to reconsider the ways in which traditionally the social sciences have sought to understand time and nature, principally, she argues as separate entities. The structure of the book is broadly in two parts: a conceptualisation of the issues of time, modernity and nature and a series of case studies illustrating the application and development of these ideas in a number of recent and contemporary contexts. Three of these case studies have a particular pertinence for the paper. These are those relating to liberal democracy and environmental politics, the relationship of the media to environmental issues and time, invisibility and latency, and her consideration of the Chernobyl disaster. This latter example raises many relevant questions for the Armley tragedy, significantly the latency of the hazards involved and the overlapping timescapes involved in each.

In her advocacy of the need for social scientists to re-centre their views of time and nature in order to provide a better appreciation of the origins and impacts of environmental issues Adam argues that modernity has brought with it a specific and unitary view of time which not only fails to encompass the complexity of time in nature but moreover effectively weakens our ability to engage with the politics of the environmental issues which ensue.

This unitary approach to what is essentially clock time is characterised its linearity, its calculability and rationality. This character is particularly appropriate for the processes of industrialisation, through its commodification and as the basis for forms of scientific measurement. This specific view of time is therefore facilitative to the development of environmental hazard. Moreover, this view of time is particularly inappropriate to understanding these issues since she argues that natural processes and environmental issues are suffused with much more complex temporalities and rhythmicities than the unitary approach can concede.

In a brief section of the book, Adam discusses the academic discourse of “landscape”. (p53). She argues that landscapes mark the spatial features of the interaction of past and present activities and that landscapes are frequently viewed in academic writings both of cities and the countryside from the viewpoint of the imaginary, particularly in nostalgia. In this paper, however, the concept will be used more concretely to examine the human shaping of the material, topographical and political.

### **Timescapes**

#### **(a) Timescapes of Science, Medicine and Environmental Health**

A Liberal view of the relationship between scientific knowledge and environmental regulation would suggest that the accrual of facts should lead speedily legislative action. A political analysis of the developing knowledge of asbestos hazards, the emergence of regulations and

their subsequent enforcement would suggest that this timescape is far more complex and contested than this liberal interpretation would suggest.

The first association of asbestos with health risk was discovered in 1906 when the death of an asbestos spinner was reported to the British government inquiry in to compensation for industrial diseases. (Singer 1987)

In 1927 an Armley G.P. Dr Ian Grieve completed his doctoral thesis on health issues amongst workers at the T&N factory. (Maregeson v J.W. Roberts Limited, 1996:170)

In 1928, the Medical Officer of Health of Barnet, where there was a large Cape Asbestos factory noted asbestos related deaths. Further investigations by the Factory Inspectorate (Merewether and Price, 1930) confirmed these findings, and new regulations and a statutory compensation scheme were introduced in 1930 and 1931, enforceable in 1933 (The Asbestos Industry Regulations 1931). These stated that asbestos workers should work in a dust free environment. Lung cancer deaths amongst asbestos workers were reported in factory inspectors reports in 1934.

In Germany a study in Hamburg identified in the Yorkshire Evening Post (YEP 4/7/83) concluded that residents adjacent to asbestos factories there suffered higher death rates from cancers.

Statutory provisions for environmental protection were introduced in the 1936 Public Health Act. This made it a duty for local authorities to carry out inspections in their districts to locate and remove statutory nuisances. Amongst the nuisances identified in the act were dust and factory effluents likely to cause damage to local communities. For the emissions from the Roberts factory in Armley, there is no evidence of any inspection ever having been carried out.

The association of mesothelioma with asbestos was established in 1960 in the work of Dr. J.C. Wagner and others. Initially working with miners in South Africa in the 1950's and later in London it was shown that the disease required only brief exposure to the substance and not only in an industrial setting. (Wagner, Sleggs & Marchand, 1960)

Singer (1987) reports that two Government reports into the health risks of asbestos exposure were produced in the 1960's. the Ministry of Labour report "Problems Arising From The Use of Asbestos" (1967) and the Department of Health Standing Committee on Cancer "The Cancer Hazard due to Asbestos to the General Population". Amongst several recommendations the latter report argued that local authorities should measure the amount of asbestos in the air near asbestos factories. Despite changes, (in fact a lessening) in clean air requirements in factories in 1969, no level was set for exposure outside the workplace.

Singer (1987) further reports that following the report by the Ombudsman in 1976 into the Factory Inspectorate's regulation of conditions in Cape Asbestos's Acre Mills factory in Hebden Bridge, West Yorkshire, the government set up a further inquiry, the Government Advisory Committee on Asbestos. Its report took regulation only marginally forward as only 4 of its 41 recommendations were adopted; none of which were concerned with emissions from plants.

Moreover, in 1985 when the government produced a further Effects on Health of Exposure to Asbestos, (Doll & Peto, 1985) The authors excluded consideration of non-occupational exposure on the grounds that this was "either too insubstantial to justify review, or, if it is clear is unquantifiable...."(Singer 1987: 207)

In this context the civil negligence case brought by Armley residents in 1996 was the first to establish a duty of care by producers towards adjoining communities.

(a) **Housing Time**

Conventionally we talk about housing “life” implying planning, construction, use, repair, rehabilitation, demolition: a model of a lifecycle over time. Such a perspective can be elaborated by reference to Leather’s examination of renovation amongst owner occupiers. The way in which owners interact with the needs of their properties during their residence can be used to support the idea of a rhythm of renewal replicated through time. Using this timescape what can be said about the Armley Lodge area.

The area is a typical Leeds inner city older housing area. The houses were built in late 19<sup>th</sup> early 20<sup>th</sup> century, consisting of back to back and through terraces. How long they were viewed as likely to last might well not have been of primary importance to the speculative builders who put them up or their initial owners. Speculatively, looking back it might be possible to make a judgement about what their expected life might have been based on the building materials and standards of construction employed. This lifecycle approach has however two major weaknesses. Firstly, it can be pointed out that such an exercise would be of limited value since expectations of users have fortunately risen leading to the likelihood of a more rapid extinction than any notion of their “natural” life would suggest. Secondly, “life” is essentially a relative concept since investment can maintain property possibly indefinitely.

Generalisations and speculations using the idea of a timescape in such a naturalistic way are however inappropriate since although the majority of properties in the area are of a similar age there is subtle and fine grained variation in the prospect, size, and form of construction of the properties across the area, which might modify any overall judgment on how long they could survive. These issues will be explored in more detail later.

More significant in the problematisation of any notion of a “natural” timescape is clearly the action of housing policies of different kinds within the area and their interactions with the development of contamination within the houses. Two aspects stand out here, improvement and slum clearance that in Leeds were linked from the mid-1960’s. Very briefly, in devising its urban renewal strategies in the early 1960’s for a period almost forty years ahead, the City Council anticipated very large numbers of properties would require demolition. To relieve the issue of scheduling the renewal process and to reduce the issues of blighting, the council developed an area based improvement grant scheme to modernise properties later in the plans. The anticipation was that when these grants were given the life of the properties, effectively zero in terms of their existing standards of fitness, would be extended for a further fifteen years or longer, in other words until they were planned to be demolished.

These urban re-development proposals affected property throughout the area, both in terms of the zoning of improvement grants and in the scheduling of demolition plans. The urban renewal plans devised as a strategy in the mid 1960’s were approved by the city council and released to the public in stages. The last major approval and notification occurred in 1972 and would have entailed almost total demolition throughout Armley Lodge. This was proposed in three phases up to the late 1990’s. Manifestly these proposals would, had they been put into action, signaled the end of this housing’s life. These later phases of the programme were abandoned by the City Council in 1974.

In terms of “community” clearly Armley Lodge, in the main survived and the wishes of those residents who campaigned against the proposals did prevail over those who might have wished to move. In detail however, one small but significant area, the Hopes, was demolished in the mid-1970’s having been included in an earlier phase of the programme. The issues surrounding these streets will be looked at again later.

Despite the fact that the programme was withdrawn there would nevertheless have been notable impacts, for example on property and rental values. This may well have had impacts on rates of movement in and out of the area and introducing cultural and demographic change as a result. Late arrivals in the area, particularly new owners, were differentially affected as the campaign unfolded particularly in terms of compensation arrangements for the costs of decontamination. Interestingly, new owners were prominent in the Campaign committee. (YEP 23/7/92)

A number of general and specific issues flow from this analysis. The general issue would be to recognise the contested nature of the temporally contextualised normative judgments of Environmental Health Officers, the main professional agents of the renewal programme, and the specifics of the housing standards legislation of the time. From the view point of many of the residents these unwelcome interventions interrupted a “natural” cycle of renewal which would have retained the community into the future.

Several specific issues related to the impact of the dust contamination also need to be considered. First it seems clear that location of the properties vis a vis the factory was not an issue in either the selection of the area for demolition or its sequencing in the programme. Had this been the case, clearly a higher priority in the sequencing might have occurred and possibly demolition actually have taken place.

Second, had the demolition proposals gone ahead we would have seen very different environmental issues arising. Demolition would have clearly released the contamination that already existed in the buildings. This would have raised its own problems for both contractors and the remaining residents. No one can be sure how these would have been tackled or what resistance would have surfaced. The Hopes are an interesting case of where demolition did happen. It seems highly unlikely based on what we now know of the Council’s approach to the contamination issue that any special precautionary measures were taken to protect workers against possible asbestos release during this process or the movement of residents from the area in any way altered.

In actuality, the resistance offered to these proposals, the area’s early removal from the clearance programme made a qualitative difference to the issues that subsequently emerged. Not only was the area obviously “saved” for new generations of owners and tenants to move into, unwittingly perhaps exposing themselves to risks to their health. The subsequent issues of information to local authority tenants moving into council “miscellaneous” properties in the area and issue of the council’s manipulation of Land Registry records of contamination (Commission for Local Administration in England 1996) which were to emerge later in the campaign.

This “reprieve” of course had its own effects not only enabling the survival of the community but also impacting on its life many of these will be noted later. Most significantly, however, in terms of the campaign for individual compensation against T&N and for the remediation of properties by the City Council, many of the individual victims and resident leaders would have been dispersed, perhaps widely, throughout the city. Consequently, it would have been very much more difficult for an effective campaign to develop.

### **(c) Community Time**

The danger of thinking of community in terms of a timescape or for that matter landscape) is clearly that it leads to notions of organicism, romanticism and nostalgia, which if they cannot be avoided should be at least acknowledged in the section that follows.

In the past one might envision a relatively stable population living within the streets affected, perhaps generations of families living within close proximity within a geographically

confined space, with local educational and employment opportunities available or not. Early in its life the community was provided with a Co-operative store (a shop worker here was amongst the victims (YEP 4/7/83) and church.

Although not by any means the sole employer, from 1896-1959, The Roberts factory had a significant economic role within the area. Many but not all the employees lived locally. The health impacts of working at the plant were serious will be discussed in more detail below, but as has been noted, 33 of the 180 deaths from mesothelioma in Leeds between 1971 and 1987 identified in the Arblaster report (Arblaster, Hatton, Renvoize & Schweiger 1990) were employees of Roberts. Likewise the health impacts on local residents, Of 36 “environmental” i.e. non-occupationally related, deaths from, which could be attributed to exposure from the Roberts factory, 18 were relatives of workers. Of the cases that could be followed up, the average number of years living in the Armley Lodge area was 29 years. The longest residence was 51 years and the shortest six.

When the case against T&N came to court a number of aspects of community life in the area were reported.. For example, the major plaintiff, the late Arthur Margerson lived throughout his life (1925-91), apart from a period of military service in the Second World War neighbouring the factory and June Hancock the other major plaintiff in the case lived from 1925-51 in the Armley Lodge area. One witness in the Margerson case argued that one of the reasons for the lack of local complaints about the pollution, despite the health fears arising, was fear of loss of employment by a family relative. Judge Holland in his judgment commented on the economic links between factory and community and to some extent drew the duty of care he found from the obligations which he saw following from this. (Margerson v J.W. Roberts Limited 1996)

Notwithstanding the impacts of recession and war, the image of the area is one of stability and slow moving evolutionary change.

From the closure of the factory clearly ended the immediate issue of air born dust but equally did not end the issue of the deposited dust which alongside claims for individual compensation became the major issue of the campaign to make the area safe. Between the closure of the factory and the development of the campaign it is necessary to assess in more detail the effects on the community of the “reprieve” from the urban renewal programme and assess the impacts these had on the way in which the campaign developed.

Such changes are measurable from the small area statistics of the census. Unpublished analysis of the 1972 census by the author indicated that increasingly rapid outward migration was occurring in some parts of the area; the population in some streets becoming younger and obviously of less long standing in the area than their predecessors had been. From the mid-seventies onwards movement increased. Some of the key campaigners moved into the area at this time. Conversely one could imagine that the declining numbers of long standing residents and perhaps more especially tenants added to the difficulties of building up and retaining support for the campaign.

These measures also give an indication of other factors in local employment, in housing policy, in land and property market values that were impacting on the area, or specific street clusters within it. Time for the community was beginning to move faster.

#### **(d) Factory Time**

Adam (1998) makes the point that in modernity time is regulated, measured and evaluated economically. At both the micro and macro levels it can be argued that the timescape of the factory had an impact on the political geography of the tragedy that followed.



At the macro-level, the business and product cycle, the management skills of the owners, issues of profitability, consolidation and rationalisation all would have played a part in the time-sequenced opening, take-over, and closure of the works.

Conventionally businesses refer to the “life” of a factory, process or product. In terms of the factory although the site was small and the available land for development small there is no indication prior to the creation of T&N that this was an issue. But again, how far this issue entered the considerations of the initiators of the Roberts factory remains unknown. They may well have believed that they were there for the long term. Subsequently for Turners, this did begin to enter their rationality and prompts the suggestion that coupled with issues of product, the life of the factory would be comparatively short. The decision that the production would eventually have to move was taken in 1951 and the closure finally occurred in 1959.

The Margereson case (*Margereson v J.W. Roberts Limited* 1996) evidence was considerably damning for the defendants in terms of the strategy by which they managed the hazards of the factory. Although there is some evidence of welfare work being carried out by the management in the 1920's in terms of meals and gifts in kind in lieu of sickness benefits, overall the strategy was highly instrumental. Low levels of health and safety provisions in the work place and beyond the factory gates were counter-balanced by higher than average wages and contributions to compensation schemes. The word short-termism would seem appropriate to describe the timescape.

Apart from the issue of the size of the site the other major factory that shortened the factory life was the products produced. One of the major products of the factory was asbestos mattresses which were used in manufacture of steam railway locomotives and other boilers for heat insulation. Although apparently the record breaking Mallard engine carried a Roberts mattress when steam technology was replaced by diesel then clearly this product had only a limited life. Latterly, the factory produced sprayed asbestos sheeting for the building trade but this diversification was not enough to produce profitability.

At the micro-level the pattern of shifts, holidays, the consistency or seasonal fluctuations in the volumes of production and their relationship to prevailing weather conditions, would have affected the duration, density and spread of contamination. Reports of victims suggests that in the summer both factory and house doors were opened to improve ventilation. In winter children stood near the exit vents, some of which were at street level, for warmth. In Margereson case (*Margereson v J.W. Roberts Limited* 1996) the point of judgment revolved around access to loading bays and children playing on asbestos sacks. Here, clearly, the issue was the timing of the deliveries and the length of time bags were left accessible.

#### **(e) Time and Bureaucracy**

Rational analysis of policy making suggests a linearity from policy-formation to the selection of a strategy, through to implementation and possibly its evaluation. This also a chronology which extends over weeks, months or years depending on the issues concerned and its perceived saliency to the dominant political agenda. The process with regard to Asbestos regulation is noted above. The significance of Armley is that for the first time established a third party duty of care it on producers for injuries received in local communities. (Castle 1996)

Examination of the literature on environmental policy making in Britain suggests the form of policy making has had direct bearing on issues of temporality in both the areas of policy formation and implementation. Some of these issues have been noted above.

Moreover, critics of pollution control policy in the past highlighted its fragmentary nature. (Weale, 1992, Garner, 1996). The graphic accounts of the effects of dust pollution in local

streets and in the playgrounds of local schools poses the obvious questions of as to why more wasn't done earlier to address the issue. At least three explanations can be given for this.

- The gaps between factory health and safety legislation, control of pollution and waste management legislation and more general public health legislation.
- These gaps resulted in what might be termed implementation deficits whereby enforcement responsibilities were diffused between local Environmental health Officers, factory Inspectors and possibly the Alkali Inspectorate.
- The inability or reluctance of local authority Environmental Health Officers to recognise and act upon an evident nuisance while the factory was in operation. Moreover subsequent to closure to disguise the dangers to local residents, as the subsequent Ombudsman's report (Commission for Local Administration in England 1996) was to show. To day, there remains an issue of monitoring the buried asbestos on the site.

The issue of the time at which the attribution of the knowledge of risks to the community lead to the establishment of a duty of care was the crucial issue tried in the Margereson case. Judge Holland in the original High Court judgment (*Margereson v J.W. Roberts Limited* 1996) found that this coincided with the time at which the fatal exposures could be assumed to have occurred. In essence the growing factory regulation of asbestos dust and subsequent medical evidence of hazard of small quantities in inhaled dust should have alerted Turners of the need to have acted to protect residents.

The gap of almost sixty years between Asbestos Injury Regulations of 1931 and the Control of Asbestos in the Air Regulations of 1990 must surely imply more than the time needed to establish scientifically reliable measures of risk. Clearly, these specifics are shaped within the wider question of the saliency of environmental issues, and specifically which issues within the wider political agenda.

Ignoring the issues of fragmentation of the delivery of pollution control that have clear implications for implementation. In particular, the overall aim of the culture of the inspection regime was one that attempted to build a consensus for change between the polluter and the inspector; the outcome sought was the "best practicable option". However, after 1931 Judge Holland notes "The Asbestos Industry Regulations ... imposed a series of absolute obligations" on manufacturers. Despite these obligations he found that in Armley conditions such both within and beyond the factory that could "never be justified on the grounds that nothing more could be done within the limits of contemporary reasonable practicality". Overall he summarised conditions were "worse than that prevailing at other factories operated by unit companies." (*Margereson v J.W. Roberts Limited* 1996:166)

From research conducted so far it appears that no records exist of Factory Inspectors visits. In terms of a timescape, the frequency of any inspections would be of interest the way in which discussions took place and when or if any follow ups took place over the lifetime of the plant.

#### **(f) Media Time**

Adam's (1998) case study of the media coverage of BSE highlights the issues affecting the content of news media are inherently bound up with issues of time, since immediacy is closely associated with content which is viewed as "newsworthy." She is critical of this from an environmentalist point of view in having the result of restricting coverage predominantly to the spectacular effects of eco-disasters and consequently denying space to the reality of environmental issues which may be intrinsically long term and whose complexity goes

considerably beyond the human interest aspects of the spectacular. There are similar debates surrounding the coverage of issues in social policy (Franklin, 1999)

Immediacy as a new value also implies that reactivity, inconsistency, and probably superficiality in coverage. The result of which is to provide information rather than understanding. Issues are raised but not followed up in any holistic sense. A narrow range of explanation is afforded.

In the case being examined here it seems possible to view the role of at least the printed media in a more positive light bearing in mind that the concentration of the research has been upon the local press of its various kinds.

There are a number of key pointers. The first is to argue that the Yorkshire Evening Post's (YEP 4/7/83) coverage began the process of the rediscovery of an issue; enabling what must have been private tragedies into a public issue. A degree of investigation was carried out to establish previously disguised facts and to break down the boundaries of secrecy or inaccessibility surrounding records which were already theoretically in the public domain. There are clear links between early reporting in the media and the structure of the investigations in the Arblaster report.

Looking back over several years of coverage the impression is one of sustained interest. Taking a liberal view it might be argued here is evidence that behind the front page headlines reflecting the campaign issues and human interest at any one time there was at work a "civic conscience" committed to the revelation and exposure of something very significant to the city as a whole. Note can be made of the fact that coverage began significantly before the emergence of any residents organisation. Between 1983 and 1992 the development of the issues of the tragedy seem almost an elite affair between local journalists and the local M.P.

Of course, the various newspapers and journals responded and editorialised differently to the issues as they emerged. It is worth noting that Leeds was at the time the beneficiary for having a "radical" paper the Northern Star which although not an early commentator on the issue did subsequently provide individual items (Northern Star {NS} 14/3/92, 30/7/92, 11/3/93) which served to extend and develop the campaign issues. This is particularly true in respect of their exposure of the maladministration by Leeds City Council (NS 15/7/93), and their distinctive reporting on the geography of the contamination. (NS 2/9/93)

An appendix is attached which gives an indication of some of the activities of broadcasters for which there is some direct evidence. One television programme in particular stands out in the coverage of the asbestos issue in general "Alice – a fight for life". Although most of this programme was devoted to the plight of asbestos workers at a Cape Asbestos factory in Hebden Bridge, West Yorkshire, part of the programme cited the manipulation of records of mesothelioma deaths amongst workers at T&N. The impact of this programme was significant as Singer (1986) reports; following the broadcast parliamentary debates led by M.P. Jack Ashley the government failed to respond demands for a parliamentary inquiry but did nevertheless did speedily bring into force four of the Simpson Inquiry's recommendations. The impact on T&N evidenced in the press cutting files in Rochdale Libraries, where the company promoted in local news a resilient re-affirmation of the safety of asbestos products and manufacturing processes. The creation of a significantly enhanced public relations fund at this time is noted by Singer (1986). She quotes £500,000 being spent in six weeks (p 199)

#### **(g) Political Time**

Timescapes of Modernity (1998) also provides an analysis of the interface of the timescapes of liberal democracy and those of the environmental issues with which they engage. Her

argument is that of a lack of fit. Rather as we have seen with issues of the media the periods and process of electoral politics do not accord with the rhythms and cycles of the natural world. Environmental issues transcend the compass of the electoral cycle.

Examining the Armley campaign, it is perhaps possible to identify three sequences in the political timescape of the campaign. The first is the immediate and short term. The significance of which may be minor in the overall flow of events but is of short term significance e.g. the replacement of Geoffrey Keys as head of the internal inquiry into Leeds City Council. Maladministration (YEP17/1/94) or the discovery of the investment by the L.C.C pension fund in shares in T&N (Yorkshire Post {YP}26/1/94). Did these issues make any differences to the overall outcomes of the campaign in any significant way?

The second sequence can be seen in terms of the electoral cycle. Here a point of consideration might be the electoral impact of the campaign to the fortunes of individual politicians, the M.P. and Councillors. Here, we can see a leading role played by the M.P. in a number of spheres, raising the matter at Westminster, supporting the campaigners in the legal process and following and promoting relevant side issues. From the media reporting it appears the local councillors in the news reporting appear at best marginal or even invisible. When many of the issues have been resolved, they came more into the picture as manager of the political interface between the residents and the administration of the "clean up".

The electoral significance of these activities were probably of minor significance at ward, constituency or city level. By the mid-eighties Labour dominance in the ward, constituency and city had become re-established after both at both ward and constituency electors had supported the then Liberal party. By the time of the campaign the city had become strongly Labour having in the seventies been at one stage hung (Labour/Liberal) and in the late sixties Conservative.

Perhaps of more interest is the longer term, particularly at the city level but also in the context of the national politics of environmentalism. In the city commentators have noted a distinctive characteristic of the local political culture is its continuity. Leeds politics is significantly middle of the road and has in the past varied little across the party divide. The style is centralised with a succession of "powerful leaders" largely but not exclusively of local origin John Trickett, George Mudie, (an exception to local recruitment) Peter Sparling, Earnest Bellow, Frank Marshall. These figures worked with an officer cadre who were again generally locally recruited and internally promoted. It was arguably this combination which lead to conservatism (with a small "c"), continuity and significant officer influence in policy making. (Hartley, 1980). It may be appropriate to argue that such a regime might at some stage deteriorate into "maladministration".

This can be coupled to the timescape of environmental politics at national level, slowly evolving, fragmented, pragmatic, consensual and not electorally significant for long periods.

#### **(h) Legal Time**

Legal time has its own imperatives relating to both the procedures of the courts and the hierarchical process of appeals. In addition, there are time limitations that affect whether cases can be brought to trial at all. Trials have to be sequenced so there are delays in starting procedures and obtaining appeals. The legal process is constrained by notions of procedure and due process. As will be noted a variety of tactics are at the disposal of lawyers which can serve to further impede a speedy disposal of cases.

Many of these can be illustrated in the unfolding of the legal process surrounding the search for compensation in this affair, led by Margerson and Hancock. The outline of the timescape

involved her includes; the request for the release of relevant documents (YEP 12/9/92), the High Court case for individual compensation (YP20/6/95), the Court of Appeal hearing (YEP 4/12/95) and the possibility of further appeal to the House of Lords, which was eventually rejected by the defendants (YEP 3/5/96).

In addition to the case against the polluters T&N, the tragedy, in addition, raised the issue of the redress of injustice and local administrative malpractice by the Leeds City Council in what was eventually to be decided to be a cover up of early knowledge of the environmental damage caused by the factory. The process of internal and external inquiries into this affair were embedded within a further timescape, beginning with an internal inquiry undertaken, followed by “independent” inquiry with an external chair and finally, the appeal to and decision by the local government ombudsman. (YEP17/5/93, YEP 8/7/93, YP 9/11/93, YP 17/1/94, YEP 27/4/94, YEP 24/10/96, Commission for Local Administration in England 1996)

Finally there are the issues of the legal tactics, in this case to delay proceedings. In the Magereson V J.W. Roberts case Justice Holland criticises the defendants on three grounds; the way in which they sought to slow down process of discovery of documents; the way in which they declined to accept that within the interlocking structure of companies T&N could be construed as liable for its subsidiary’s actions. Finally the defendants sought to impose limitations against one of the plaintiffs who was terminally ill. Commenting on the tactics of the defendants Mr Justice Holland stated

*“ I presently explain the discovery history as being of a piece with other features of the conduct of the defence, that is, as, reflecting a wish to contest these claims by any means possible, legitimate or otherwise, so as to wear these down by attrition, This it is has not been with respect of discovery that the defendants have remorselessly persisted in taking bad points, apparently simply to obstruct the plaintiff’s road ... ”*  
(Magereson v. J.W. Roberts Limited 1996 p157) .

## **Victim(s) Time**

In her earlier work Timewatch (1995), Adam describes the way in which the patient’s view of time is affected by their illness. Depending on the seriousness of the illness, perceptions of the future may change, present activities and feelings of continuity become suspended and a sense develops that time is slowing down or even running out altogether.

In the book, she interviews (1995: 55) a family, one of whose members has cancer, in order to understand these processes better. The person dying with cancer reflects on the impact this coming event has on the way in which they now perceive a new quality of time, in particular its relationship to their spirituality and the content and purpose of day and night. Whilst treatment is occurring the timescapes of health care processes form a dominant regime; this contrasts sharply with other later periods in which time passes slowly through inward reflection.

The illness impacts too on the time perceptions of other family members. For the partner the length of the illness (six years) and other deaths has squeezed time to the immediate. “Normal” perceptions of the speed of time passing and the processes by which life has been organised have ended. There is a need only to concentrate on the present, which paradoxically makes it more real, immediate and meaningful.

In the press coverage of the tragedy there is no material that addresses these issues from the victims point of view, although there may be some in the television coverage which has not been seen. One woman whose image and action remains part of the enduring legacy of the time was June Hancock who was the second plaintiffs in the Margereson case. She was terminally ill during the trial and died shortly after the final appeal was rejected.

## **Landscapes**

### **(a) Armley Lodge Landscapes**

The housing landscape of the area consists mainly of through terraced and back to back housing. Back to back housing is a characteristic form of older working class property in Leeds that consists of either six or eight houses built as a single block, back to back because there is no rear access to dwellings. They are literally back to back. The blocks are separated by what were formerly toilet yards but which now housing refuse bins. Originally, these were built without internal bathrooms but the majority was converted from the early 1960's onwards to include internal bathrooms and dormer attic bedrooms under improvement area schemes which the city promoted. These improvements did not affect the city council's judgment that these properties were fundamentally incapable of meeting basic housing standards even when structurally sound because they lacked through ventilation and had steep and sometimes winding staircases.

Back to backs in the area come in a number of types depending on size and whether they were built with a small front garden or yard. The smallest consisting originally of two rooms would now have the first floor bedroom divided and a new attic bedroom. More commonly back to backs had two ground floor rooms consisting of a small kitchen on one side of the entrance door and again originally one first floor bedroom. Larger back to backs had two larger ground floor rooms and two first floor bedrooms in their original design. When enlarged these properties could accommodate two second floor bedrooms. Because of the sloping nature of the terrain some larger back to backs were also built with cellars, sometimes fitted for use as kitchens or living space which open directly onto a front yard.

In addition to back to backs there was some through terraced property in the area of types familiar in any working class industrial area. All were originally built with outside toilets and no internal bathrooms. A gain all were modernised in the 1960's.

All housing in the area, with the exception of some small numbers of post-war infill, was built at the turn of the century.

The street pattern of the area grew up from two causes. The first as is common, derives from pre-existing field pattern which was sold off to speculative builders. Obviously, by examining the deeds of properties the specific dates at which this occurred can be ascertained. The second fact was the slopes that meant that surrounding the factory were parallel streets running along the slope. Behind these, streets run at angles having an alignment towards Gott's Park. At far side of the area, there are streets aligned in parallel to the park.

The combination of the housing types and street positioning may have had some impact on the complex social geography of the area. In Leeds it is conventional to use street names as sub-divisions and in this area, the Aviaries, Arlies, Cecils, Rombalds, Nunningtons, and Salisburies convey particular references, including the numbers of rented properties, the type of housing as well as its more or less favoured location, for example fronting onto or located near Gott's Park.

From this complex landscape some points relevant to the evolution of the tragedy can be drawn. The housing type might have affected the spread of contamination through roof voids. Back to backs and through terraces would be different in this respect. The orientation and alignment of properties might have made them more or less susceptible to blown dust. Some of these issues are dealt with in more detail below. However at this stage one issue, here, can be clearly referenced and that is, briefly, the "clean up" processes which were to be used. Here the residents objected to the trial sites used to test out the decontamination methods, in

this case a block of back to backs as insufficiently representative of the problems confronting the area as a whole.

**(a) Polluted landscapes**

The topography of the area is steeply sloping away from the River Aire, the Leeds-Liverpool canal and the rail routes to Ilkley, Skipton and Harrogate. The setting of the factory is in a gully running down to river and canal. It is located physically below the Clock School and surrounding streets. Obviously, this siting coupled with the micro-climatological effect, particularly of wind would have affected the spread of dust. Some of these issues are commented on in the Margeteson case. (*Margeteson v. J.W. Roberts Limited* 1996 p159).

The landscape of pollution was initially established by the location of victims. Most of whom obviously came from the Armley Lodge area itself, although not exclusively so. Two early victims came from the other side of the main Leeds- Bradford Road but the source and mode of their contamination is not entirely clear, not least because in one of these cases their property was demolished in the housing renewal programme.

Once the scale of the tragedy became clear further investigations were carried out in the area by environmental health officers and other specialists, including both housing and public buildings. Initially the Leeds City Council wishing to clear itself of any public liability (NS 11/3/93).

There have been several investigations can be used to adjudge in one way or another the geography of risk arising from the asbestos dust emissions from the plant. These are noted in the chronology provided. The first of these was the study of Leeds Mesothelioma deaths 1971-1987 conducted by Dr. Arblaster and others, which was completed in 1990 (Arblaster, Hatton, Renvoize & Schweiger 1990). The report investigated 210 cases of death from mesothelioma recorded in Leeds or where Leeds was the birthplace of the deceased, of these 50 had direct or indirect occupational links with the Roberts factory. Of the 36 "Environmentla cases, the report concluded that in eight of these cases death could have due to asbestos exposure but they noted "the evidence was far from complete". The report also investigated pupils attending the Clock School between 1927 and 1947 and found that of 1077 children admitted 5 developed mesothelioma in later life. They concluded that given the other risk factors "attendance at the school alone did not constitute a high risk."(p33) In the legal process that followed liability was found in cases of mesothelioma at the school and compensation paid albeit at a lower level than other local victims (British Asbestos Newsletter 1997). The other major conclusion drawn from the study was that the Leeds 12 postal district in which Armley is located had the highest overall death rate in the population over 50. (195.2/100,000) compared to Bramley, also in West Leeds (145.7/100,000).(Arblaster, Hatton, Renvoize & Schweiger 1990 p17)

The second investigation into contamination was carried out by the Leeds Design Consultancy (L.D.C. is the City Council's Direct Services Agency which provides architectural and related services) in April 1992 this concluded that at least 25% of houses throughout the Armley Lodge area were contaminated. This report effectively set the standard for the zone of treatment and which has formed the basis of council action that continues today (Yorkshire Evening Post 23/7/92).

This report was challenged from two other sources, the more debated being the Willy report (Willy, 1994). Here Prof. Roger Willy of Paisley University was jointly commissioned by the residents and the City Council to review previous findings in 1993. This reported that throughout the area the risk to the health of residents from airbourne asbestos fibres was "negligible under normal living conditions" However, in one area there was a slight risk to

tradesmen and others carrying out structural alternations. Although this are was not revealed in the report for legal reasons it became apparent media coverage that this was the area closest to the factory. The controversy surrounding these finding lead to a split in the residents' group committee between those who felt that having commissioned the report it should be accepted and those who felt its conclusions, on various grounds, should be rejected.

The next attempt to influence discussions of the affected area can be found in an article in the Northern Star (NS 2/9/93) that claimed to have located three additional local sources of possible asbestos pollution. Two are of interest here One was a building used for the storage of asbestos adjacent to Armley Canal Road Station which appeared to have been used for asbestos storage between 1939 and 1949. The second is evidence that Roberts used a second factory in the area Winker Green Mill for spinning between 1913 –20. This building is directly opposite Armley Middle School, the streets known as the Hopes referred to previously and other residential areas. There is no evidence that the implications for these pupils or residents have ever been followed up. The activities on this site were not discussed in the Margerson case.

Clearly the geographical extent of these investigations are crucial to both the degree to which residents might be feel secure that their houses were clean but also the degree to which they might feel stigmatised by living in a blighted area.

However, the extension of the investigation zone would have met some resistance from particularly home owners fearful that their properties would then become devalued or impossible to sell. (YEP 30/10/97). This seems to have in fact occurred, as it is evident that lenders remain reluctant to offer mortgages in the area (The Aviaries Newsletter 2000). As result, houses in Armley generally and the Armley Lodge area are frequently auctioned rather than sold on the direct market.

Margerson v J.W. Roberts (1996) itself set a geography of compensation linked specifically to issues surrounding access to the factory loading bay and only the most proximate housing. The case and the subsequent appeal were deliberately not tied as test cases for a wider group of victims in the surrounding area. (p1 86) However, subsequent agreements in 1996 with T&N. did secure compensation for seven out of eight "category A" cases victims who as children played in the yards and loading bays and children and a further "category B" case a former pupil at the Clock School who had no nearer contact with the factory. (British Asbestos Newsletter 1997)

### **(c) Interactions in the Landscape.**

Besides the physical and material aspects of landscapes they are also built upon the interactions of people. In this instance the interactions are very dense both in space and time.

Children were born, brought up, moved into and out of the area at various times in their lives. Children played in the area and were educated at local schools, they might well have gone on to work at the factory or at other neighbouring factories. Key witnesses in the Margerson case reflect this.

People from nearby areas walked past the factory daily for perhaps lengthy periods on their way to work. Children went to stay with relatives who were factory workers living in the area.

In all these ways they became or potentially became victims of the tragedy.

### **(d) Landscapes of victims**



In considering the issue of the landscape of victims here one must first identify who the victims are and in what ways they have been victimised. The most obvious victims are those who died of mesothelioma. Although despite the extensive research amongst medical records and death certificates we may never know accurately know the full extent of the tragedy because of misdiagnosis or misreporting in the past. The part asbestos plays in the development of a range of cancers other than mesothelioma is not clear. Likewise is it possible at this stage to accurately predict how many will become fatalities in the future or where they will be found. A dam refers to this process in relation to the victims of Chernobyl as the numbers “dying by degrees”.

We do not know exactly the spread of contamination because some areas, which might have been affected have now been demolished. It may be difficult to show an association of a mesothelioma victim with the area. They may have been resident for a short period or have simply passed through the area. They may have worked for a short time at a neighbouring works. Victims can be found in all these categories. With movements of this kind it is difficult to say that medically this is exclusively local occurrence.

Although the legal process of establishing liability lies with individual or cases of individuals, there are a number of issues of victimisation that are more collective at a number of levels.

Firstly, we could distinguish all residents whose houses have been affected by dust. Until this has been removed then they live with a continuing health risk. By September 2000 out of 796 housing in the decontamination zone 496 had been tested for asbestos and all except one was positive. In the previous six months sixty one homes had been tested; these figures imply that the testing programme has a further almost three years to run. For some of these, in addition to the health concerns, there will be economic concerns of the property’s valuation. Leeds City Council is currently examining the issue of the guaranteeing of decontamination work completed. This specific issue is currently impeding lending in the area. 236 houses had been decontaminated by September 2000 of these 109 (out of 150) were council properties, 26 (out of 28) were housing association owner and 101 (out of 619) were privately owned. (Aviaries Newsletter 2000)

There may be residual issues about the factory site itself and the extent and thoroughness of the clean up which occurred, particularly with regard to the sealing of buried blue asbestos. (NS 2/9/93)

More generally it can be argued that there is now an issue of the stigmatisation of wider Armley area, leading amongst a wide range of other factors to further neighbourhood decline, reflected, for example in property prices. Alternatively, it could be argued that the clean up operation and the extensive consultation that the City Council has undertaken the publicity material that has been produced and the meetings which have been held have lead, in these unfortunate circumstances, to a social as well as physical renewal..

Lastly, since at various stages the cause of the residents was taken up in Westminster and beyond there might well be a case that the tragedy was an issue for the whole of the City of Leeds. This aspect was implicit and sometimes explicit in the editorialising by the local newspapers. In the national coverage there could be an implication of “hell up north”, particularly since this issue had implications for other northern towns, Hebden Bridge, Rochdale and Bolton.

#### **(e) Landscapes of Control**

There are at least five aspects to what might be called the landscapes of control, which might have impacted on the tragedy. These are geography of pollution control, planning controls and factory location, city council housing re-development, school catchment areas and other local education policies.

The questions relating to the geography of pollution control are self evident, who if anyone was responsible for the regulation of emissions from the plant and at what level geographically and in terms of agency was this to be enforced? The Factory Inspectorate's responsibilities under national legislation stopped at the factory gates. Similarly, the Alkali Inspectorate's responsibilities were confined to smoke and fumes, rather than dust or other airborne particles. The local authority Environmental Health Department had a duty with regard to statutory nuisance within its local jurisdiction but this was at no time enforced.

Clearly if one were to follow this issue up to the present one would identify the fact that there has been more recently introduced a national system of integrated environmental pollution control and special regulation for asbestos. This regulations would hopefully have prevented the emission problem had the factory been built today.

Added to this would be the role of the European Union, to whom the City Council turned for help (unsuccessfully) to assist with the cost of clean up (YEP 24/7/92).

The structure of planning controls that arose after the Second World War was not in existence when the factory began operation. The local geography of industrial location shows that the factory although probably the closest located to housing was not unique. There were many other sources of dust and other pollutants. The corridor from Westgate, at the edge of the city centre, through the Kirkstall valley and along the lower part of the Leeds Bradford Road has many factories and industrial sites, from what was the Wortley gas works and the Armley Forge, through to Yorkshire Chemicals and Armley Mills. The Roberts asbestos factory, although the most noxious polluter, was far from unique in the area. The nature and scale of atmospheric in the area surfaced as an issue at the trial as an issue potentially confusing the specific nature and source of contamination from which the residents suffered (Margereson v J.W. Roberts Limited, 1996 p167)

The City Council's redevelopment plans have been referred to previously but there is a further issue of the way in which scheduling decisions had impacts down to the level of a small group of streets. The Hopes, Pastures and Parliaments, adjacent to the Leeds Bradford Road, were cleared but because the tragedy had yet to develop there was no reason to prioritise the Armley Lodge area, nor to proceed with redevelopment on the basis of exceptional environmental hazard.

The City Council's educational policies also had impacts in terms of school attendance. There were three schools within close proximity to the factory site. The Armley "Clock" School was the closest located and featured in Arblaster report. It was originally an elementary school, later a primary school, and now has closed. Armley Park Middle School is believed to have originally been an elementary school, became a 913 year old middle school under the former Leeds system and has again now closed. Armley Lodge School is a special needs school although it is uncertain without more research whether it was served as primary school before this.

In terms of initial schooling the decision or requirement for children to attend Armley Clock School may, with hindsight, be seen to have had tragic consequences as it did for at least one teacher who worked at the school. (YEP 4/7/83). There were other schools in the (sometimes close) locality which children might have attended given the choice or requirement, for example St Bartholomew's primary school in Wesley Road. More research would have to be carried out to investigate how any school catchment area policies operated at this time, for

example June Hancock attended St Bartholomew's Primary School, perhaps a little loosely described by Mr. Justice Holland as "not in the area" (Margereson v J.W. Roberts Limited, 1996 p 160)

School transfer policies might also be relevant to a degree since shortly after the factory closed Leeds introduced a Middle School system which changed the function and pupil age profile in the schools in the area. This changed the Clock school to a primary school and Armley Park School to a middle school. Had this system been introduced sooner it might have reduced the playground exposure of some children. Most of the focus of attention in the investigation and reporting of the impact of pollution on schools in the area focused on the blown dust in the Clock School playground. No attention appears to have been addressed to the Armley Park School. Here the Northern Star article (15/7/93) indicates that this school too may have been affected by the temporary use of Winker Green Mill for asbestos production. The article identifies that the effects of any such contamination might be further accentuated by the innovative ventilation system provided in the building. There are no articles in any of sources examined of investigations or issues affecting Armley Lodge School.

Lastly, there is the issue of council owned property to let in the area. This varies, particularly in terms of size. All of it would probably have been regarded as of the "miscellaneous" type. Property of this type, unless specifically requested would have been most likely allocated to families in difficulty, for example with a poor rent payment record. Several issues have arisen over the years in relation to these properties and their tenants, including lack of information, (NS 11/3/93) and their prioritization within the decontamination programme.

#### **(f) Landscapes of Opportunity**

Not everyone lives within a locality, either through choice or constraint, throughout their lives. The decision to move or the non-decision to stay may be affected by many factors obviously safety would be an important one. However, a decision to move away would be constrained by the economic issue of the affordability of alternative accommodation and other associated social and economic costs such as travel to work.

Without tracing at this stage the movements of victims about which there is some information available from the Margereson case, it is possible to see some of the structural issues in the landscapes of opportunity which might have influenced choices or commitments.

Perhaps the most significant would be those affecting work and the location of residence. Not only did asbestos factory workers live in the Armley Lodge area but the area also provided workers for a number of other factories that were within walking distance of Armley Lodge. Some of these can be noted above. The Armley area was also the place of residence of other major employers in south and west Leeds notably the railways and printing factories based in the nearby Holbeck district. Who in these circumstances would have wanted or would have been able to afford to move?

Alternatively, of course, some did, for example looking at the lives of some of the women who died we can see that their exposure must have occurred in childhood since on marriage they moved away. Likewise some women's and some men's employment took them away either through choice or through necessity.

The housing landscape also provided some opportunities, particularly through cost. Local house prices made homes in the area affordable to young couples. Some of those who became prominent in some of the campaigning had fairly recently moved into the area and whose future housing and financial security were now under threat, particularly with the prospect of having initially to have meet substantial personal costs for decontamination.

### **(g) Landscapes of Resistance : -**

Asbestos is a global industry that almost from the beginning was considerably vertically integrated and increasingly monopolistic. (British Asbestos Newsletter 1999/2000, Tweedale 2001 forthcoming) The history of the evolution of this tragedy reflects this: from the family owned business which served a local market, through rationalisation of ownership and eventual closure to litigation for compensation against a multi-national corporation.

The safe processing of asbestos is crucial at every stage of extraction, manufacturing and consumption. At each stage the activities of companies come under scrutiny for any failures in health and safety.

As we have seen in the description of the timescape of science, the risks of the business have been discovered at all stages and in all relevant locations. The third party community environmental effects were perhaps the last to be established.

As each layer of danger is uncovered from mines to factories and beyond, opportunities for resistance present themselves. Some of the evidence presented in the timescape of science suggests how this occurs through medical investigation, union activity, pressure groups and community action.

The issue here is the connectedness of the landscape. To what degree and in what ways did Armley campaigners interact with their predecessors, or contemporaries struggling against T&N elsewhere in Britain or overseas. Did they gain any specific support from any other group? Did their efforts raise issues elsewhere? Did they attempt to generalise their campaign in any way ?

Evidence from the sources consulted suggests that in the early stages of the campaign this was limited to contacts within the West Yorkshire area. One example is noted in the Yorkshire Evening Post when Tom Barratt, from the South Kirby and Wakefield Asbestos Group to sue Leeds City Council after blue asbestos was found on the factory site (YEP 27/7/89).

Again in the stages leading up to the Margerison case, journalists and the local M.P. were significant in researching the issues involved and building the formal political networks. Clearly within the trial process itself the plaintiffs were instructing solicitors and other representatives and using expert witnesses with wide national experience.

Ironically perhaps, the Campaign's greatest single ally at a distance can be argued to have been the Chase Manhattan Bank in New York who were engaged in a law suit against an American subsidiary of T.&N. over the installation of asbestos in their head quarters building. American laws on disclosure brought into the public domain a very large amount of documentation that was made available to the campaigners through the agency of the local M.P. (YEP 12/10/93).

There are many other local asbestos campaigning groups notably in Liverpool and Glasgow and these have built links with a continuing lobby group of M.P.s. It is not known whether Armley campaigners had or have any continuing links with these groups

### **Conclusion**

This paper has attempted to explore the issues of the Armley campaign by describing the various timescapes and landscapes involved. In comparison with a more conventional historical or political account of events a complexity of temporalities and geographies has been revealed, which hopefully has some value. What might have been lost, however, is the clarity of any single narrative of events which some might wish to apply, perhaps rightly to

the courage and persistence of the individuals and groups of local residents involved in their search for justice.