

**DESIGN AND SOCIAL MALAISE;
A REEVALUATION**

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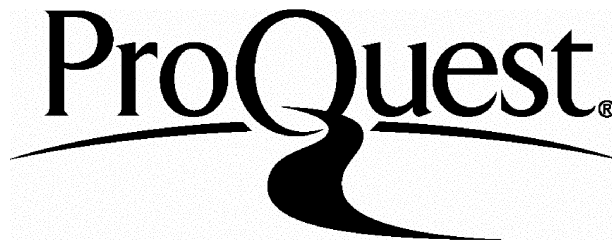
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ABSTRACT

Social malaise and crime are on the increase in Britain today and everyone is affected in one way or another.

There are a number of explanations that are put forward for the causes of social malaise and crime. Chief among these are social, biological and economic factors, the security of a property and the management and design of an area. All of these explanations have one thing in common; they are exclusive theories which do not recognise the importance of other factors. It is probable that the most effective approach would be a mixed one.

Most recently there has been much emphasis put upon the role that design can play in crime prevention. This factor is reflected in Government guidance.

This study has chosen to evaluate the work of Professor Alice Coleman, and the DICE team, who have modified a number of estates according to specific design criteria. The theory is that by enclosing space, and specifying ownership, social malaise and abuse, as well as crime, will decrease.

Two estates have been chosen for the evaluation, both in London; the Mozart Estate and the Rogers Estate. The evaluation here has been on five levels: ethnographic, anecdotal, statistical indicators, reapplication of Coleman's research and crime figures. Some doubt was cast upon the validity of Coleman's method.

Both Estates were felt to be unsuccessful in the terms of Coleman. Mozart Estate was found to be successful for other reasons. It was felt that this success could be attributed to management and policing changes. Design modification was seen to have an effect in combination with other changes. This factor lends weight to the argument that it is a multi-factoral approach that is needed.

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CHAPTER ONE

Introduction

Within this chapter it is proposed to look at the problem of crime and social malaise, to outline the research carried out within this study, to describe the emergence of problem local authority estates and to explain government policy.

Social malaise, including vandalism, drug and solvent abuse, family breakdown, delinquency, crime and fear of crime are impossible to avoid these days. Hardly a day goes by without there being some mention of a dramatic incident on the television and radio. It is practically impossible to be unaware of the realities that we have to face and everyone is affected. A recent MORI poll has shown that fear of crime has risen rapidly since 1987, 77% of people are afraid that their home will be burgled, as opposed to 60% in 1987 and 52% fear being mugged, as opposed to 38% in 1987. 56% feared having their homes and possessions vandalised, a seven point increase since 1987. 67% of women are afraid to go out after dark and 51% of both sexes feared any going out at night. 71% felt that unemployment was the main cause of crime. 87% felt that they would like to see more police on the beat, this is despite the fact that this is not felt to be the best way to fight crime. The poll was based on interviews with 2081 people aged 15 plus in 148 constituencies between January 20 and 24, 1994.¹

This rise in the fear of crime has happened despite the slowing down of increases in crime rates. In each of the main offence groups the rate of increase for the twelve months up to June 1993 was less than in the previous twelve months.² In addition there has been an overall decrease of 1.1% for all offences recorded between 1992 and 1993. However domestic burglary rape and robbery have continued

to rise.³

The 1992 British Crime survey provides an index of crime in England and Wales which can be set beside crime statistics compiled by the Police. It attempts to gain a clearer picture by surveying a sample of 10,000 people with reference to their experience of crime. In this way it is hoped to gain an idea of the extent of crime which goes unreported and of the true picture. The categories that are included are burglary, car theft and violent crimes. The BCS suggests a lower rise in crime than the recorded figures, 50% as opposed to 200%. Violent crime has risen more slowly than recorded figures suggest and vandalism appears to have changed little. Burglary has only risen by a third as much as recorded figures suggest but there has been a sharp increase since 1987. This discrepancy is explained by increased reporting and recording of crimes.⁴ Despite these encouraging figures social malaise and crime as well as fear of crime are real to a large proportion of the population and thus it is important to consider the causes of malaise and crime.

Social malaise and crime have often been associated, rightly or wrongly, with problem local authority housing estates. Most recently Professor Alice Coleman has masterminded a number of design improvement projects on local authority estates, many funded by the DOE. These projects have, as their starting point, the assumption that the removal of deleterious design elements will automatically lead to a reduction in social malaise and anti-social behaviour as well as crime. Coleman and the Land Use Research team carried out an extensive survey of 4099 blocks and have developed a quantitative system of identifying deleterious designs in housing blocks which is reported in 'Utopia on Trial; Vision and Reality in Planned Housing' (1986 & 1991)⁵. Redesign usually involves the vertical and/or horizontal partitioning of blocks and the division of grounds in order to create defensible space,

increase surveillance and promote territoriality. Where possible ground floor dwellings are converted to quasi-houses with their own front door and garden. These principles have been implemented by Coleman herself on the Mozart Estate, Queens Park and on seven DICE estates as part of a DOE funded experiment. Similar principles have been taken on board by many others, in these cases the theory has not been rigorously implemented. Although Coleman's work has been highly influential it has also been criticised on a number of fundamental grounds. It is for this reason, and the fact that widespread support has been afforded to Coleman, that it is proposed to evaluate the work of Coleman in this study.

An attempt has been made to reapply Coleman's methods rigorously and to test her claims about the reduction of crime rates, whilst adding observations. By doing this her improvements can be tested in her own terms. Account has also been taken of the opinions of residents, housing managers, police officers, planners, surveyors, architects and other individuals, as well as other statistical indicators. Two London housing estates have been looked at primarily; firstly the Mozart Estate situated in Queens Park within the City of Westminster and secondly the Roger's Estate in the Globe Town Neighbourhood of The London Borough of Tower Hamlets. Both are very different, but both have been 'Colemanised'. Mozart was the first estate to be subject to redesign by Coleman. Only a small part of Mozart has been redesigned and this was paid for by the council itself, although it did have ministerial approval. Mozart is in fact used as an example of good practice in 'Utopia on Trial' revised edition. There are more plans at the moment to redesign the rest of the estate which has been awarded Estate Action funding. The original redesign was in two phases and the second phase was completed in 1991. Rogers was finished in February of 1993 and is part of the DICE project, which is funded by the DOE and incorporated within Estate Action. The whole of Rogers has been 'improved'. The estates and their backgrounds will be described in more detail in chapter five.

The origins of problem local authority estates will be outlined here before looking at the government's response to these problems. Council building began in the 1880's and by 1914 there were 20,000 dwellings. By 1977 30% of dwellings were publicly owned. In the 1930's building was driven by slum clearance, after the second world war by bomb damage and in the 1960's and 70's by utopian social engineering projects. Housing projects became larger and larger as time went on due to new technology, economies of scale and confidence. There were financial rewards for building higher and larger. These projects brought with them new styles of management involving political reorganisation, mass building projects and a commitment to substantial administrative structures. The average numbers of properties controlled by individual authorities rose from 1400 in 1945 to 14000 in 1975. The larger authorities became owners of between 20000 and 30000 units. In 1963 authorities were urged to concentrate power and activity at the centre.⁶

The problems of local authority estates took time to emerge. There was a predominant feeling that they must be better than the slums, simply by virtue of the new environment. Initial problems were excused by saying that everything would be alright when the residents had settled in. An additional problem was that new schemes were not monitored and many of a similar type were implemented before realising that they were unsuitable. Most local authorities did not establish specialised housing departments and for 30 years or so most estates went without professional housing management. Some estates were a problem right from the start but most experienced a slow decline. There was still a reluctance to see that these innovations could be failures. Estates were often enclosed and cut off from the rest of society and the city. Isolation was therefore experienced and this was exacerbated by the centralisation of council services and the refusal of the police to visit certain estates.⁷

These problems prompted a number of initiatives attempting to ameliorate the problems. Newman promoted a new sensitivity to the part played by design in shaping behaviour. A number of incidents served to bring the problems to the attention of the popular press, the most famous being the collapse of Ronan Point. In 1974, 1976 and 1978 the DOE commissioned surveys of hard to let and troublesome estates. This was followed by a number of initiatives. In 1976 NACRO began its Cunningham Road Improvement Scheme. Priority Estates Project (PEP) was founded in 1979 and the GLC founded the Safe Neighbourhood Unit (SNU) in 1980. Alice Coleman and her Land Use Research Unit (later to become DICE) began a large survey of problem estates at this time. These initiatives were spurred on by the riots of the 1980's, particularly on Broadwater Farm Estate in Tottenham and the fact that 5% (300,000) of local authority stock was to be classified as difficult to let.⁸ There were many different views expounded as to where the solution lay. Some felt that the communities had not been consulted enough, others felt that the people themselves had genetic defects or that the answer lay with education, others felt that security and policing needed to be improved and poor management and design were also blamed. Most of these ideas have been tried out and have had differing success rates for a variety of reasons. This will be explained in more detail in the following chapter.

The problems of local authority estates have been compounded in recent years following the application by the Government of its privatisation policy. The government has promoted the rise of owner-occupation as the norm and has set about the privatisation of existing estates. Local authorities are now known as 'enablers' rather than 'providers' and under this regime newbuild council housing has ground to a halt. The only way a local authority can increase rented accommodation and affordable housing is by encouraging housing associations to build in their borough. Often they do this by offering council owned land for free,

or at a low price, and ensuring that the council will have access to a certain number of the resulting dwellings to house those on their waiting list. However a recent shift in Government policy appears to encourage Housing Associations to build for sale rather than rent.⁹ Many local authorities have sought to include policies concerning affordable housing provision within their Development Plans; either by identifying sites where affordable housing is the desired use and/or stating the intention to secure occupancy of a certain number of the units constructed at affordable rents or for those on the housing waiting list. The effectiveness of such a policy is yet to be evaluated.

'Right to Buy' is probably the most significant policy as far as council estates are concerned. Under this initiative council tenants have been encouraged to buy their homes at a vastly reduced rate, thus becoming owner-occupiers. The best homes, usually houses, are sold and this tends to lead to residualisation and marginalisation of properties on the worst estates and can contribute to further decline. This can in fact be taken further, in boroughs such as Westminster City Council estates have been divided into designated and non-designated estates. On designated estates the dwellings are earmarked for sale to outsiders, ie those not on the council waiting list. These people are usually 'yuppies' and the theory is that their presence will help to stabilise communities. Conversely the effect has been to marginalise non-designated estates. In addition difficult to let estates have often been further residualised by the offering of tenancies to the homeless, as they do not have the right to more than one offer.

Although the Government has supported a whole range of initiatives over the years to improve estates, recently they have promoted the importance of design. The most important aspect, as far as planning is concerned, is the Government guidance in the form of PPG's, circulars and draft circulars which have been produced. Circular 1/84

Crime Prevention set the scene for Government policy on crime and design. In this it was stated that the community needs to be involved. In addition cooperation between local agencies and the police are important. It was pointed out that schemes should be formulated after considering the characteristics of the area and its associated problems. Whilst social factors are being addressed in the long term, in the short term problems need to be addressed through management, design and environmental changes. Improved management, increased security and design to allow surveillance are cited as appropriate measures to take to decrease crime. Such considerations should be taken into account in discussions with developers. Prevention should be given priority and must become the responsibility of the community as a whole.¹⁰ However at this time crime was not considered to be a material consideration when determining planning applications. The status of crime prevention has been increased by PPG1 (1992). Paragraph 51 states that:

Crime Prevention is one of the social considerations to which, in accordance with the Town and Country (Development Plan) Regulations 1991, regard must be given in development plans. Local Plans may establish standards for the design and layout of new development which can make crime more difficult to commit and/or increase the risk of detection for potential offenders. Local authorities may also wish to consult Police Architectural Liaison officers on planning applications for those developments where there is potential to eliminate or reduce criminal activity through the adoption of appropriate measures at the design stage... More detailed advice on crime prevention will be contained in a future circular.¹¹

Since a development should normally be granted permission if it is in accordance with the development plan then the design standards which are set down regarding crime prevention in development plans are obviously of paramount importance.

This future circular was published in draft form entitled Planning and Crime Prevention in October 1993 and was replaced by Circular 5/94 Planning out Crime. The draft

circular (OCT. 1993) said that "local planning authorities are required to have regard to social considerations in preparing development plans. Crime prevention is one such consideration and may therefore be material when determining planning applications". The circular goes on to say that

local plans and part 2 of UDP's should establish principles for the design, layout and landscaping of new residential or commercial development; these should aim to make crime more difficult to commit, increase the risk of detection and help to reassure the public. These principles may include the obvious deterrent effects of good design, layout and lighting. They also embrace broader concepts such as the need to avoid over-large single use developments which are sparsely populated at particular times of the day.

This is essentially a healthy prospect, but it depends on the type of design which is promoted and whether this type is beneficial. The circular goes on to say that research has shown that a broad approach to crime prevention through looking at estate management, social issues and design and layout is the most appropriate. The importance of layout is stressed: "Layouts which help the residents to see visitors and tradespeople, and to control access to their premises, can help reduce the risk that potential offenders will go unnoticed." The importance of consulting Police Architectural Liaison Officers is constantly stressed. This may have important implications if the principles which are promoted by the police are seen to be detrimental.

The circular also mentions that

The general design principles of defensible territory, variety and the need to keep areas open to view also apply to the layout of minor roads and footpaths....Residential areas obviously need access to local services, but footpaths should not be designed so as to encourage unrestricted movement between communities. Properties, groups of properties and community units, should have defined perimeters with real or symbolic barriers to indicate an element of control and surveillance by residents'.¹²

This draft circular is thus similar to 1/84 but is more

specific.

Circular 5/94 is essentially very similar to the draft version. However it differs in one major respect. The importance of design seems to have been toned down and the importance of other matters of equal importance has been stressed.

Paragraph 4 states that :

The causes of crime and vandalism are complex but it is widely accepted that environmental factors can play a part. Desolate, sterile and featureless surroundings can engender feelings of hostility, anonymity and alienation. Used sensitively the planning system can be instrumental in producing attractive and well managed environments that help to discourage anti-social behaviour. It can also be used to make it harder for criminals to find targets. It can do this by encouraging developers to adopt designs for new developments that take the security of people and property fully into account, and by influencing the siting of new residential, commercial and leisure developments. A wide and varied range of land uses can help to create environments that are lively and well-used.

The importance of the Police Architectural liaison manual of guidance and the use of the 'secured by design' scheme is stressed.

With regard to housing estates the dependence of successful crime prevention on a variety of factors is recognised. These factors would include changes to estate management as well as the layout of the whole estate and of individual blocks. The provision of sporting leisure and recreational activities has also been seen to have had an effect on reducing crime. The guidance concerning roads and footpaths has remained the same.¹³ The circular has emerged as much more multi-agency and a mixed approach than was first envisaged. However the circular still recommends referral to the Police force literature which has a strong design base.

The police have set up the 'secured by design' initiative

which promotes design principles to help prevent crime. Crime Prevention Design advisers are experienced crime prevention officers who specialise in the relationship between crime and the environment. They are available to advise planners on newbuild and refurbishment projects. The idea is that housebuilders adopt their principles and gain an entitlement to use a logo stating that their new homes are police approved. It was created by members of the South-East Region Senior Crime Prevention Conference. It actively promotes standards relating to physical security, security lighting and smoke/burglar alarms as well as estate design. Turning to look specifically at the section entitled Estate in the 'Secured by Design' information pack, as it is relevant to this study.

The objective of estate design should be 'to create a community where people recognise the area in which they live as their neighbourhood. They know each other, respect each other's person and property and exercise a measure of responsibility for their own and their neighbour's children. Because they can readily identify those who belong to the estate and their community they have little difficulty in recognising the presence of strangers.¹⁴

In this context security covers three interrelated subjects: defensible space, landscaping and natural surveillance.

"Estate design should encourage a feeling of territoriality among the residents by providing an environment where they feel they have an influence on the area outside their home". It is envisaged that this will be created by using real or symbolic barriers to define spaces. It is felt that the cul-de-sac is the best situation as there is no other means of access or exit and thus the offender is deterred. Natural surveillance is also increased in this situation. Landscaping should be such that it does not provide a hiding place. Back gardens should back onto other back gardens and not onto alleyways.¹⁵ The Crime Prevention Design Advice service is readily promoting enclosure and rejecting integration.

The information pack refers back to the Police Architectural Liaison Manual of Guidance. The manual acknowledges that the built environment can effect criminal behaviour for good or ill and therefore can influence the citizen's ability to exercise control over his surroundings. Defensible space is concerned with enhancing those design features which support community interaction and good surveillance whilst denying the criminal anonymity and unhindered access towards targets and easy escape routes. Defensible space principles are seen to be advantageous as they apply to existing housing and to new developments. They believe that where defensible space is not adhered to there are problems. They believe that defensible space is an essential characteristic of a successful neighbourhood.¹⁶

As Charlotte Cook (1993)¹⁷ pointed out there are a number of local authorities that have incorporated defensible space principles within their development plans. Southwark's deposit UDP contains a policy relating to Safety and security in the environment in its environment section:

POLICY E.1.1: New developments and refurbishments must be designed to enhance safety and security in the environment and the council will seek improvements to existing areas in the following ways:

- (i) increase the overlooking of public areas
- (ii) prevent the creation of dark or secluded areas
- (iii) provide and maintain adequate lighting
- (iv) **make a clear distinction between public and private space and provide 'defensible space'**(my highlighting)
- (v) prevent the creation of secure enclaves which do not contribute to the security of the area as a whole
- (vi) make houses and flats secure
- (vii) increase the use of public areas by encouraging mixed land uses

Reason: The design of buildings, streets, housing estates and parks can all affect the sense of safety and security which people have when using them. The

incidence and fear of crime is a major drawback to inner city living for many people especially women, particularly black women, and the elderly. An awareness of these problems at an early stage in the design process can help to overcome many of the problems facing minority groups.¹⁸

Tower Hamlets Deposit UDP includes as one of its General Development requirements to "Incorporate 'security and safety in design' principles". This has been included in response to residents concerns.¹⁹

Westminster Deposit UDP contains a crime prevention policy within the Conservation and Design section:

9.14 The City Council is concerned to ensure high standards of security and crime prevention measures and will consult Police Crime Prevention Design Advisors and bear their comments in mind. Architects are also advised to consult Crime Prevention police officers at the early design stage. Careful design and good maintenance can discourage graffiti and litter, increasing feelings of safety and discouraging petty crime.²⁰

It is interesting that Westminster recognise that good maintenance and careful design may also have an effect on crime prevention.

Much of the design guidance that has been included in UDP'S and within the police guidance as well as in the Circulars refers to 'defensible space'. This term was first used by Oscar Newman and has recently been resurrected by Alice Coleman. Coleman's work has been criticised, principally by Hillier (1986)²¹ who feels that integration is more beneficial than enclosure and that her research is not scientific. There have been a number of other criticisms mainly on the grounds that the research is methodologically unsound and that it ignores social and economic factors.

In view of the criticisms that have been voiced it is surprising that Coleman has received so much support from the government, the police and local authorities in the

absence of an evaluation of her work. If Coleman's work was found to be successful then this would have enormous implications for planning. Her work is attractive, as it gives a much wanted answer to a desperate problem, and is relatively cheap and easy to implement. There is a danger, though, that her ideas will be accepted without proper testing and this could lead to an expensive repeat of the disasters of the 1960's. To build without proper testing was bad enough, to repeat the mistake with refurbishment would be even worse. If design can be seen to effect social malaise then this is obviously a very important consideration for planners. If it does not then it is important that this is realised and that public policy does not misrepresent the truth.

Chapter two will look at the different explanations for social malaise and offending as well as the different types of schemes that have been implemented in an attempt to rehabilitate problem estates. Chapter three will look at the work of DICE specifically and the literature that they have produced. Chapter four will look in detail at the methodology that has been used within this study. Chapter five will provide a detailed description of each of the estates in visual, descriptive, anecdotal and statistical terms. Chapter six will describe the results of the reapplication of Coleman's methods. Chapter seven will draw conclusions from the study.

Summary

crime is a real fear of many.

although the increase in crime rates is slowing fear of crime is on the increase.

This study attempts to carry out an evaluation of the work of Coleman on a number of levels.

Government policy promotes the importance of design

amongst other factors.

Coleman's views have been taken on board without proper evaluation.

An evaluation of the work of Coleman is therefore important.

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CHAPTER TWO

Social Malaise Investigated.....

Within this study social malaise is taken to mean the breakdown of society by rising delinquency and crime levels. Its manifestations are in vandalism and graffiti, fear of crime and rising crime rates as well as other forms of anti-social behaviour.

Throughout the literature there are a number of theories which are put forward as to the causes of social malaise. These theories include the motivations of the offender, the social, economic, educational and biological background of the offender, the security of the target, the management of the area and the design of the area. Each of these theories suggests a prevailing reason as to what causes people to offend. Usually one author has a particular theory which they strongly advocate and defend, there is little multi-factoral treatment of the problem. It is proposed to deal with each of these types of theory in turn.

The first set of studies are those which feel that the reasons for offending depend on the criminal and they therefore look at the motivations of burglars. Maguire and Bennett (1982) provide a useful account of the motivations of burglars. They discovered that there is a close relationship between burglary and urbanisation. They found that the highest concentration of burglaries are normally in or close to socially disadvantaged areas. Social class, tenure type, nature of the area, relative wealth, frequency the property is unoccupied, the level of crime prevention, siting of the house in relation to the streets, footpaths, neighbouring houses and fences and hedges are all seen to be important. It seems that the propensity to offend is affected by both social and environmental factors. Two categories are seen to be at the highest risk: large high rateable value house units in their own grounds which are not easily visible from public areas and are frequently

unoccupied and the high rateable value house on a busy through road in town with a fairly large private garden. Areas with high offence rates often have high offender rates too, but this does not necessarily mean that local residents are offending in their locality. Older offenders tend to travel further than younger ones. They carried out interviews with persistent burglars that had been imprisoned and the majority said that they planned a burglary rather than it being opportunistic. They usually look for a rear entry as there is less chance of being noticed. Working class areas provide good opportunities as cash is often kept in the house and local authority housing is easiest as there is normally a standard layout. Most do not worry about ease of access as it is possible to break in anyway. The overriding factor seemed to be whether the house was occupied or not. They conclude that local crime patterns need to be studied and the attractions for the burglars assessed.¹

Heal and Laycock take a similar approach and look at the perceptions and decision making of convicted burglars from 1979-1982 through the medium of a semi-structured interview. The burglars were presented with a video of 36 dwellings filmed by a van travelling along a road to give the effect of a burglar walking. These were then followed up by photos in order to ascertain whether they would offend or not. The burglars were asked what had motivated them to offend in their last period of burglary. Six main categories were identified in order of importance; instrumental needs, influence of others, influence of presented opportunities, no precipitating factors, influence of expressive needs and the influence of alcohol. There are possibly two stages to the decision to offend, the first will be determined by social, cultural or economic factors but the second stage will be determined by physical factors. They felt that whether they would be seen or not was an important factor but if the first option was not a suitable target they would look again. The key assumption of this approach is that offenders are free to

choose to commit crimes and that the decision to offend is in response to immediate circumstances and the situation in which the offence is contemplated. Motivation therefore depends on a calculation of the costs and the rewards.²

Conter 1984 has identified 7 motivations for vandals:

1 Avenging society as there are no opportunities for youths

2 Anger at not getting their own way

3 Life is boring and vandalism brings excitement

4 For money

5 To break a part of the physical and social system which society is based on to see how the system works and to test its limits

6 'creative destruction': a desire for aesthetic stimulation

7 A desire for free expression

It is important that the diversity of reasons for vandalism are appreciated when seeking to provide solutions.³

This set of studies tends to cover a wide range of reasons for offending, but always within the framework that it is what motivates the offender that is important.

Another set of studies take a geographical perspective and attempt to identify the areas that are likely to be most at risk of burglary. The 1992 British Crime Survey has identified that the areas that are most at risk tend to be one of three types: mixed inner metropolitan or multi-racial areas with a mix of poor private rental housing and owner-occupation; high status non family areas with a mix of affluent and private rented accommodation in multiple occupation or the poorest local authority estates in inner cities or the outer rings of conurbations. This reflects where the offender is more likely to be active and may reflect differences in target vulnerability. Other factors that were identified as being influential were the number of adults in the household, accommodation type, occupancy

patterns, socio-economic status of the household head; the lowest and the highest income groups tend to be at the most risk.⁴

Another group of theories feel that the desire to offend is affected by the type of person that is involved, as well as their upbringing and experiences within life. Some people feel that the desire to offend is a genetic defect and others feel that it is a product of a low IQ. Criminal behaviour can be seen as avoidance learning and stimulus seeking behaviour. Family and social backgrounds are also thought to have an effect; parental criminality, poor supervision, cruel, passive or neglecting attitudes, erratic or harsh discipline, marital conflict and large family size may all be influential in some cases. Schooling may also be influential; styles and skills of classroom management, giving responsibility to the pupils and academic pressures and expectations can all be included. There is also some debate as to the effect of class and race.⁵

A number of theories have been developed concerning the propensity to offend. The theory of anomie or strain has been developed from Merton using Durkheim's ideas. The theory is that delinquency is a result of strain caused by the lack of means for people to achieve cultural goals. Cohen (1956) developed the theory of the delinquent sub-culture. Non-achievement at school leads to rejection of middle-class standards and delinquency subsequently becomes acceptable. This theory has not been supported by later research. Sutherland's theory of differential association suggests that delinquency is learnt by association with others, this theory has also been supported by Feldman 1977. Shaw and McKay 1942 identified disadvantaged areas, bad influences, norms taught by institutions and contact with peer groups as being influential. High economic status areas tend to experience less problems as they have conventional and unconflicting norms.⁶

Social Malaise and anti-social behaviour may also be

affected by the standards that are set down by the community. Conversely the absence of a strong community may mean that the restraining system of standards breaks down.

Another set of initiatives that have been promoted are those that improve security; these have their base in the fact that vulnerability to burglary depends upon the security of the premises. One way to increase security is 'Target Hardening'; such improvements include increasing the security of individual dwellings in order to prevent burglary and offending by making it harder to offend. There is some evidence that this approach is unsuccessful as burglars can break in anyway and it leads to displacement of the crime elsewhere. Entryphones are another common means to improve the security of flatted blocks. However these are subject to problems of misuse, vandalism and lack of repair. This method also assumes that it is those living outside the block who are a threat; this may not always be the case. Target removal is another option, but it may not always be practicable, in any case it is likely that another target will be selected. Other initiatives involve the use of CCTV, improved lighting and a concierge/receptionist.⁷ Increased policing has also been used to increase security.

There has been a move towards community policing whereby a set of officers are allocated to an area rather than merely working a shift. Thus an attempt to get to know the locals and to work with them is made. This can involve formal consultative committees or be an informal arrangement whereby the local policeman gets to know the locals. There have also been campaigns to encourage self-policing by increasing awareness and surveillance by setting up neighbourhood watch schemes.

Another theory is that it is poor management which creates vulnerability. There have been two prongs to this approach. The first has seen improved management alone as the answer. This has been implemented primarily in the form of Priority

Estates Project (PEP). There is the view that design may be a contributing factor but that with better management the effects could be ameliorated. PEP was set up in 1979 as a joint DOE and local authority experiment in improving unpopular estates. PEP was primarily concerned with setting up estate-based management. The PEP model has ten key elements which were considered to be essential to the success of an estate based management project: a local office, local repairs, localised lettings, local rent arrears control, an estate budget, residential caretaking, tenant participation, coordination and liaison with other services and monitoring of performance and training. It must be noted, however that the reduction of crime and vandalism is not the main focus of PEP projects, although it is an important goal.⁸

One estate that has been improved as part of PEP is Broadwater Farm Estate in Haringey. It is a large system built estate with 1063 properties and a population of around 3500. Most of the estate is built on concrete stilts and linked at first floor level by long overhead walkways and internal corridors. It was completed in 1973 and was at first popular with tenants but within three years became difficult to let. In the late '70's and early '80's the problems became serious and there was a rapid turnover of tenants and many tensions. The standard of maintenance and management was poor. This resulted in pressure for action. A programme of improvements were initiated in 1983 with the opening of an estate office that had responsibility for repairs, caretaking and cleaning. The housing manager worked closely with tenants and councillors and had a remit to coordinate all council services to the estate. The result was that people began to be prepared to move onto the estate and the environment was improved. In addition block interiors were refurbished and new lighting was put in, roads and footpaths improved, entry phones introduced, communal glass was made vandal-proof and residents front doors were strengthened. The community have also set up a number of services. The result has been a drop in recorded

crime rate of over 60% 1983-1985 and despite the 1985 riots the police believe that it is probably the safest estate in Tottenham. The estate accounted for 1% of the area's crime in 1987 despite having 3.5% of its population.⁹

The Safe Neighbourhoods Unit (SNU) was established by NACRO and the GLC in 1980 with a remit to carry out extensive tenant consultation and contribute to comprehensive improvement projects on disadvantaged housing estates. Between 1980 and 1986 they undertook 21 estate improvement projects on GLC and ex-GLC estates. They are less specifically concerned with the establishment of estate-based housing management offices but many of their schemes have resulted in their formation. They have consistently stressed the link between poor management of an estate and crime and fear of crime. SNU particularly stresses the importance of inter-agency cooperation in the resolution of crime problems.¹⁰

Management improvements have in some cases involved the use of improved security, including entryphones, and the use of a concierge/receptionist arrangement. These have been most successful in high rise blocks.¹¹ Such an arrangement has been implemented in Trellick Tower after advice from SNU in the Royal borough of Kensington and Chelsea and has led to improvements in the environment and a desire by tenants that the building should be listed.

In other cases complete blocks have been sold off to a developer and dwellings are sold on the open market after refurbishment to the highest bidder. This is most common amongst high rise blocks. The disadvantage of this approach, and others like it, is that it tends to lead to residualisation and marginalisation of other council estates and properties.

The other management theory that has been put forward is that the environment can only be improved in the long term by extensive tenant involvement.

When dwellers control the major decisions and are free to make their own contribution to the design, construction or management of their housing, both the process and the environment produced stimulate individual and social well-being. When people have no control over nor responsibility for key decisions in the housing process, on the other hand, dwelling environments may instead become a barrier to personal fulfilment and a burden on the economy.¹²

There have been a number of manifestations of community involvement including:

selfbuild housing

community architecture (where architects are available to help community groups)

Planning Aid (planning expertise is provided to enable people to object to schemes or to plan their own)

Community Technical Aid (providing quantity surveyors, architects, planners, fundraisers and feasibility studies)

community development (taking on the development of a project on behalf of the neighbourhood)¹³

The concept behind all these initiatives and the guiding statement of community technical aid, which draws all the others together, is that 'local experience is combined with professional skills, ensuring that people get the building and environmental improvements they want, rather than having to accept designs that the 'experts' think they ought to have'¹⁴

Wates and Knevitt believe that there are three fundamental characteristics of successful architecture:

- 1 People willingly take responsibility for their environment and participate both individually and collectively in its creation and management
- 2 A creative working partnership is established with specialists from 1 or more disciplines
- 3 All aspects of people's environmental needs are considered simultaneously and on a continuing

evolutionary basis.

When the three are applied together human settlements are more successful. There are two reasons why people should be allowed to participate; an environment will be created that fulfils the needs of the user. It is the local people which understand how the area works and how the proposal will relate to the end users. Without the input of residents it is likely that the end result will be insensitive and may not be an improvement. The second reason why participation is vital is that it creates a strong community and helps satisfy the human need to be in control of one's own environment. Environments that have resulted from participation generally are cared for and looked after. The community often develops and the changes are often further reaching than environmental changes.¹⁵

However the participation needs to be full; only when people are given real responsibility will they respond most effectively. If people do not feel that their input will be taken seriously they will not take the trouble to understand the issues and examine the options available thoroughly. Participation can only become a positive creative force when it is used to its full extent. Arnstein developed a ladder which illustrates the different levels of participation.

Citizen control
Delegated power
Partnership
Placation
Consultation
Informing
Therapy
Manipulation

The higher up the ladder the more power is given to the user and the more fruitful the outcome is likely to be. Wates and Knevitt believe that there is a threshold of

involvement below which the exercise is likely to be counterproductive. Where the threshold lies depends on the nature of the project. Evidence suggests that only the top two to three rungs where some form of commitment or contractual relationship exists are effective.¹⁶

Examples of the use of community involvement include the Coin Street Community Builders scheme; where local residents were able to defend their area against major commercial development and implement a housing and retail scheme of their own. In Liverpool the Eldonian Community Association came into existence to save a community from breakup by council redevelopment. 160 homes have been built using Housing corporation finance, a community trust has been set up to cater for local social, recreational and welfare needs and a development trust has been set up to build managed workspace to help create jobs.¹⁷ In the Black road area of Macclesfield the residents of condemned 'slum' housing were able, with the help of Rod Hackney and the community architecture scheme, to save their terraced houses. The area was declared a 'General Improvement Area' and the houses were renovated.¹⁸ Given the right circumstances the community can have a very powerful impact on their surroundings.

The housing action trust scheme has also attempted to combine the management improvements along with community participation. Under the scheme a number of estates have been taken out of council ownership and placed in to the hands of trusts. First of all a company is formed to take over the estates and to undertake redevelopments that are necessary and then the properties are leased back to the council at market rents. In March 1988 the Secretary of State announced that such leaseback would not be allowed. One alternative to this is to set up a tenant controlled housing association. Part of the costs are thus met by rent and some properties are sold. The estates also attract a 'dowry' from the council which would meet most of the costs of redevelopment. By classing this 'dowry' as debt the

council can pay it out of capital receipts. Waltham Forest HAT have demolished four large panel construction estates and have replaced them with low rise houses and flats with gardens. An integral part of these schemes has been community development. The theory is that it is possible to sustain physical regeneration by supplementing it with community regeneration. The idea is to encourage tenants to make and demand choices, to increase employment and to improve the social and community infrastructure. Thus removing many impetuses to spoil an environment.¹⁹

This approach was also implemented by NACRO in the late 1970's and early 1980's. NACRO was principally concerned with involving residents in affairs of their communities and reinforcing informal social control over delinquent and anti-social behaviour. Thus cohesion and neighbourliness are encouraged along with better management techniques. Such an approach was used on the Cunningham Road Improvement Scheme in Widnes. There was an 11% decline in burglary and a decrease in vandalism.²⁰

Thus it can be seen that design is but one element to be considered when looking at the subject of social malaise. If design was seen to be the most important causal factor this would hold enormous implications for planning.

There are two main strands to the design causes social malaise argument. Newman and Coleman believe that enclosing space is the way forward and recently they have been supported by Poyner. Hillier believes that integrating spaces is the only answer. Elements of the thinking of Jane Jacobs can be seen within both approaches.

Coleman believes that criminal disposition is not an innate drive but something which is learned. It is the design which causes delinquency to be easily learned. This is picked up at an early age in the same type of crime-prone environment that, she believes, will lead to later offending by rational choice. The average age of the

British criminal is 14.7 years and thus it follows that criminality must be genetic or learned. Coleman argues that it cannot be genetic as crime rates are not stable from one generation to the next, as would be expected if this were the case. There may be several reasons why children are less law abiding now than in the past; violence on the television, lead petrol, junk food, the lack of discipline and the decline of religion. Coleman however believes that the overriding factor is the demolition of traditional housing and its replacement by non-traditional flatted developments where grounds and space are shared. This means that normal child-rearing practices cannot be carried out. Children are not able to learn to respect other people's properties as territories are not defined and children are not reprimanded by others as there is little supervision at play. She believes that by creating defensible space with front gardens the propensity for children becoming criminals will be reduced.²¹

Coleman has used Jacobs observations in the 'Death and Life of Great American Cities'²² as the basis for her research. Jacobs outlines the virtues of the older city neighbourhoods and the problems of the newer ones. She espouses the importance of surveillance and traditional family values and a number of principles to follow to create success. Coleman uses these to provide the bases for her redesign recommendations, however she has not really assimilated these properly and does not always see the real significance of them. Newman can also be said to have these problems too.

Jacobs wrote a remarkably astute work for its time, in 1961. Its significance was not realised at the time, but a measure of its importance can be seen in the fact that it is still quoted widely today. She believes that the streets and sidewalks are of paramount importance in city safety. Safety is promoted by a network of voluntary controls enforced by the residents themselves. The well used city street is safe whereas the deserted one invariably is not.

Jacobs identifies three factors which make a street safe; a clear demarcation between private and public space, 'eyes on the street' and it must be used continuously. A web of reputation, gossip, approval and disapproval are also useful. Newman and Coleman have tended to concentrate on the first two and ignored the third. This has led to an overconcentration on 'defensible space' and ignoring the importance of integration and the well used street. Jacobs has been misinterpreted and all three factors should be given equal weighting. Jacobs recognises that high-rise and modern housing projects have a number of problems as their space is not open to the public and therefore is under-used and shut-off. Jacobs feels that such shutting off is detrimental. Jacobs does not support the enclosure viewpoint. Jacobs stresses the need for informal social contact, such that there people know who the strangers are and they are prepared to challenge them and to reprimand children where necessary, in such a way order is maintained. The best way to ensure this is to promote mixed use developments. Jacobs believes that the best place for children to play is in the street rather than in the playground, as playgrounds are not challenging enough for children over 6. In playgrounds the play is often unsupervised and vandalism is rife as playgrounds are often sited in the middle of blocks or in a corner. Coleman has used this belief as a basis for removing playgrounds and parks from projects. However these projects are often situated in areas where the streets are little used and there is not mixed use and it is difficult to see that removal is an adequate answer. Jacobs' theories seem to be more in tune with the Hillier theory of integration than the Coleman/ Newman theory of enclosure and 'Defensible Space'.

Defensible space became an issue in the 1970's with the work of Newman, the implication being that if crime occurs in places of a particular character then the removal of a feature will prevent the crime. Newman studied all the public housing projects in New York, totalling 169 estates accommodating approximately half a million people. Newman

identified from his research the designs that seemed to encourage crime and advanced 3 unifying principles that explained how crime was made easy to commit and difficult to prevent. These unifying principles were anonymity, lack of surveillance and the presence of alternative escape routes. Coleman has built on these principles in her study of British public housing. Newman introduced the idea of a specific test measure, that of crime and vandalism, to serve as an indicator as to the nature of the block. He aimed to discover which design features attracted the most crime and vandalism and to show this he used correlations. Thus he built on the largely descriptive work of Jane Jacobs.

Taking his principles in turn: Anonymity can be described as the impersonal character of an area which has a poorly developed community structure and where people do not know each other. Thus the criminal feels safe as he will not be noticed and the community has no natural mechanism to prevent crime. Jane Jacobs felt that this was caused by low-density layouts, Newman has identified four other causes. Firstly the size of the block or estate. If it is too large people cannot get to know each other. Secondly the number of people using the same entrance has an effect. The block may be large but if it is partitioned off then the effect would be ameliorated. Thirdly the number of storeys in the block can be seen to have an effect; the larger the number of storeys the less likely people are to get to know each other. Fourthly the degree to which the grounds and the shared parts of the block are defended by different households is seen to be important. There is a sequence from private through semi-private and semi-public to public space with increases in anonymity as the degree of sharing increases. The idea is that as more people share a space their sense of responsibility and control (territoriality) over that space is greatly reduced.

Surveillance is said to play an important part in whether or not criminals feel 'safe' committing a crime. The theory is that if a household can see the approaches to its

dwelling then they will be able to control who enters and that the risk of being seen will be enough to deter the criminal from offending.

In addition the presence of alternative escape routes would encourage the criminal to offend even if he would be seen as he would be likely to lose the police in the network of escape routes. Newman concluded that crime levels would be highest where all three of these principles existed. He went on to try and prove whether these principles were causal and whether crime would reduce with their removal. He concludes that they were causal and that removal of them did lead to reductions in crime and vandalism levels. Newman's theories are almost universally known as 'defensible space' theories and it is by this name that they are referred to in much of the literature.²³

Newman has been criticised on a number of grounds and Coleman has recognised this fact. The major criticisms have been that Newman ignores the importance of socioeconomic factors and that the problem is largely an American phenomenon.

Walmsley (1988) criticised Newman for paying little attention to the behaviour of the offender and to the fact that upgrading may lead to displacement of crime. Often the role of the youth subculture in directing hostility towards symbols of adult or institutional authority are stressed but the reasons why environments are vandalised differentially is not discussed.²⁴

The findings of Newman were the subject of a Home office study of 52 London Housing Estates. Coleman states that the first report in 1976 found that only one socioeconomic factor was more important than design; the density of children. The final report in 1980 concluded that whilst design features were significantly correlated with vandalism, in practice they were discounted because child density was correlated more highly.

D Herbert in 'The Geography of Urban Crime'²⁵ provides a more detailed criticism. He recognises that Newman only uses small sample sizes in his main study and he did not seek to control social variables. He used a paired comparison which has limited use in methodological terms and his theories have been insufficiently tested to give them a firm base for generalisation. Sample size was often too small to test for statistical significances. The focus upon physical design has led to criticisms of architectural determinism as well as ignorance of social factors.

Hillier has also criticised Newman for being methodologically unsound but most importantly he challenges the territorial base of Newman's theories. He explains that humans are not territorial and that this theory is not supported by history or anthropological research.²⁶

Newman's research has triggered others to carry out similar studies. Newman's principles have been vindicated in relation to school vandalism by Pablant and Baxter (1975) and in relation to vandalism by Leather and Matthews (1975). Ley and Cybriwsky (1974) mapped the distribution of stripped cars in Inner Philadelphia and found that there were clusters of them in areas where there was little social control and sense of belonging. They also realised that graffiti was used by teenage groups to mark out their territories. Brantingham and Brantingham (1975) found, in a study of residential burglary in Tallahassee, that in peripheral areas offenders find greater anonymity arising from a less well defined sense of belonging and identity than would be found in the central core of a neighbourhood.²⁷

Others have been less supportive; Waller and Okhiro (1978) found no clear evidence supporting the relevance of defensible space in a study of residential burglary. Repetto (1974) carried out a study in Boston which looked at both defensible space and social factors. He found that

ethnic composition and residential crime rate in the adjacent districts were significant. He could find no clear patterns relating to visibility, design of access and surveillance. Although the probability of a dwelling being burgled did increase with the number of entry options available, the quality of the front door and whether it was on a corner or not, Repetto's findings were more supportive of the influence of social factors than of design principles. Mawby (1977) carried out a number of empirical studies and was strongly critical of Newman. He used data from four public sector housing projects. He found that low rise council housing has the highest offence rates and this in itself is a contradiction of Newman. He criticised some of Newman's concepts as being ambiguous. Gardens may provide an opportunity for crime as well as providing a barrier which marks out property. Having back windows can increase vulnerability as well as provide surveillance. He recognised the importance of the way space is used. Wilson (1978) conducted an explicit test of some defensible space ideas by studying all public sector estates with more than 100 dwelling units in 2 inner London boroughs. Data was gathered for 38 estates totalling 288 separate blocks. Defensible space criteria which were measured included height and size of buildings, entrance features, levels of privacy, play facilities and numbers of children. Individual blocks were scored for vandalism on a 4 point scale. The location of recorded damage was as follows: dwellings 24%, lifts 26%, access areas 23%, communal facilities 12%, entrances 6%, elsewhere 9%. Excluding lift damage 60% of damage was concentrated on the ground floor and decreased steadily with height. Regression analysis showed child density to be the single most important factor in explaining the amounts of vandalism. All of these writers recognised that the high socioeconomic status apartment block suffered from little vandalism or crime. There must be some reason for this and possibilities range from the nature of the residents themselves to their ability to organise security. Here it must be seen that design does not really have an effect. Winchester (1978)

suggests that less integrated space is more vulnerable.²⁸ Although there have been a lot of studies into defensible space none have proved the theory conclusively and thus it seems strange that Coleman should devise her methodology along the lines of Newman. This seems to make the basis of her research even more tenuous.

Professor Alice Coleman originally wrote 'Utopia on Trial' in 1985 and a revised edition was published in 1991.²⁹ She based her research principally on the work of Newman and sought to build on the base established by Jacobs. Coleman also cites two other major influences on her work; firstly the Glasgow study of Jephcott and Robinson published as Homes in High Flats (1971).³⁰ This study was based on nearly 1000 interviews in 168 multistory blocks rising at least six storeys and served by lifts. In a survey of tenants' feelings about living in such blocks the 'likes' slightly outweighed the 'dislikes'. Predominantly the likes referred to the dwelling itself but the dislikes referred to the block. First and foremost the lifts, followed by loneliness and isolation, the entrances, vandalism, inadequate laundry provision, noise, poor maintenance and refuse disposal problems were cited. Graffiti was not mentioned but was thought to be important enough to merit a special study. 90% were on the whole pleased with living on the estate but likes did not relate to the estate itself but to accidents of location, such as being near to the shops or relatives. The study was not fully scientific as there is the problem of comparison between slum housing and 'nice, new flats'. Secondly a study by Carl Sagan (1977) entitled The Dragons of Eden³¹ which talks about four levels of development of the human brain. From this Coleman concludes that humans have an inbuilt desire to seek shelter with an adjoining piece of territory and to mark it with their own identity. Thus the real problem of the tenement is seen to be the lack of chance to express individuality and choice.

Coleman sought to correlate the presence of adverse design features with social malaise. To do this she looked at six forms of malaise; litter, excrement (urine and faeces), vandalism and children in care. Her basic study covered 4,099 blocks of flats and 4,172 houses and converted houses. Subsequently this data was supplemented from a variety of British and overseas examples raising the totals to 7,000 and 14,000 respectively. She attempted to correlate the presence of social malaise indicators with adverse design features. The presence of design features thought to be problematic were calculated. Such features included the number of storeys per block, the number of dwellings in a block, the number of dwellings served by the same entrance, the number of overhead walkways, the type of corridor and the number of interconnecting exits and vertical routes. Each block was then given a score to represent its design disadvantage for each feature. Then the blocks were divided up according to their score on a design feature and the percentage at each level was calculated having or not having malaise indicators.

She proposed a method to calculate the design disadvantage threshold and the score. The first step is to find an objective cut-off point for each design variable so that what is wrong with a particular block can be identified. This is begun by setting out a table to show what percentage of blocks with each design value also have the various classes of each test measure. The threshold for each design feature is calculated. Thus the score can be calculated where the design breaches the threshold level.

She concluded that the higher the percentage of blocks with the indicator the more it must have been caused by a design feature. The evidence is presented using trend lines, there is almost always an upward trend which is said to indicate that indicators worsen due to design. Number of dwellings per entrance and per block, number of storeys, overhead walkways and spatial organisation were recognised as the most important. Tables of statistical significances are used to prove this. On the basis of this evidence Coleman

proposes an approach for rehabilitation. The aim is to improve the scores by removing offending design features. A number of changes are normally suggested; removal of overhead walkways, fencing around blocks to make a single block site, lop top storeys off to make two storey, divide blocks into separate self-contained sections either vertically or horizontally and improving entrances and streetscapes. This should be done in consultation with the residents and with their support.

Hillier has identified a number of flaws in Coleman's methodology, this is reported in 'City of Alice's Dreams' Architectural Journal 9th July 1986. Surprisingly there have been little other in-depth criticisms and the approach has been highly thought of and frequently implemented without much evaluation. Perhaps this is because it provides a practical answer to the worrying current problems.

Hillier points out that Coleman does not quantify how much litter/graffiti there is. She uses an on/off switch to say whether it is present or not. She uses the percentage of blocks at each level having or not having malaise indicators as quantitative indexes. That is the higher the percentage of the blocks with that indicator the more it must be caused by a design feature. However as the number of people in each block increases then the malaise will increase simply as more people create more litter and so on. Additionally the adverse design features are more likely to occur in the larger blocks, small blocks obviously do not have upper level walkways. Hillier also recognises that Coleman's trend lines are all remarkably similar. Coleman inaccurately calculates the factor of children in care as she uses the on/off switch again and only counts those blocks without children in care. These findings are extrapolated to prove that the largest blocks are the worst. When these calculations are worked out correctly the largest are found to be the best due to allocation policy. Hillier therefore claims that Coleman's research is not scientific because the numbers of people

living in the blocks and their socioeconomic circumstances are not accounted for. Her correlation coefficients are weak and thus she presents them as statistical significances in order to make them look more effective. Social malaise indicators are never really discussed. All of the design features are aggregated into a single measure of design disadvantage and the joint effects of social variables are not discussed.

Hillier recognises that Coleman fuses the ideas of Jacobs and Newman so that her recommendations are that dwellings are made house-like and estate space is made street-like. Hillier feels that it is not enough to create 'defensible space' as the precise problem of modern housing is that it has grouped people into 'group territories' and therefore has caused segregation from each other and the outside world. He believes that interaction must be encouraged; spaces on estates are empty as people do not use them unless they have to. Hillier identifies the way forward as being to re-integrate estates into the public realm. He believes that is important to use descriptors of space rather than of built form.

These ideas are developed further in a chapter entitled 'Against Enclosure' in Rehumanising Housing.³² Here Hillier identifies enclosure as the real problem. Enclosures create fragmentary, unintelligible and under used spaces. Enclosure claims precedence from the past but in its present form it does not replicate the past. Old towns had deformed grids which means that you are aware of the local space and global space whilst walking. This is because of lines of sight and access. If a pattern of integration and movement is worked out an encounter rate can be assigned to each space. That is the number of people one is likely to encounter in a given time whilst passing through the space. Axial maps of housing estates reveal that estates are much smaller in scale than a normal street pattern. Estates lack internal spatial structure and have peripheral integration cores. This means that they integrate from the outside,

creating the phenomenon that one meets more people on the outside and fewer on the inside. These encounter rates can be explained by the fact that people take the shortest route in and out of the estate and make only essential trips. In terms of encounters it is like night at all times; you meet very few people. Normally adults and children exhibit similar forms of encounter space but in estates they occupy separate realms. This contributes to feelings of fear and isolation and may actually affect crime rates.

There is some evidence to suggest that segregated spaces have higher burglary rates than integrated spaces. On the Marquess Road Estate in Islington it has been found that levels with walkways had half the mean rate of burglaries for the whole estate. In addition ground levels with steps and ramps have double the mean rate. Thus burglary rates double with segregation. It has also been found that most burglaries occur in places where burglars do not have to pass a lot of entrances, ie. the estate periphery. Thus it is not surveillance of space on which you open that it is important but potential surveillance of routes to your space that is important. In a study looking at 2,816 dwellings the 211 that had been burgled had an integration of 0.780 and the unburgled had a an integration of 0.759. This goes some way to confirming the importance of integration and begins to cast some doubts upon Newman's concept of Defensible Space. Newman in fact espouses just what Hillier feels is dangerous: that the elimination of natural movement and encounter increases safety. Hillier suggests that integration with the surrounding area with a more central rather than a peripheral integrating core is the only beneficial way of effecting improvements.

In order to achieve this he suggests several principles to follow:

- Make sure that all spaces have building entrances opening onto them whilst avoiding clustering many entrances onto small spaces

Relate spaces leading into an area directly to building entrances

Link spaces to the structure of a scheme

Orientate buildings and entrances to clarify structure thus ensuring that further movement possibilities can be seen and aiding intelligibility and memorability

Avoid over enclosing, repetition and over-hierarchisation of space; the aim should be to create a range of busy and large zones.

This concept is an interesting one which has not, unfortunately received as much attention and uptake as Professor Coleman's. This may be as this approach would require more rebuilding and is a more difficult concept to grasp. This approach, also, does not seem to take account of the socioeconomic factors involved. Whilst there have been few other detailed criticisms of Coleman there have been a number of brief ones; Some of which are outlined below.

SJ Smith in a book review of 'Utopia on Trial' criticised Coleman for not looking at litter in communal areas of groups of houses and more importantly for her ignorance of the social problems of flat dwellers.³³ P Dickens believes that Coleman's research has a number of problems; most importantly that it is not very scientific and that it assumes that society is balanced and is working properly. He recognises that the concept has received a lot of coverage as it seems to be a panacea for most of Britain's social problems, ranging from drug taking and mental illness to inner city riots, and that people will believe whatever they want to if it solves a problem.³⁴ Rustin recognises Coleman's influence over the importance of design and its effects upon social behaviour. He believes that disorganised communities are much more liable than badly managed or poorly designed buildings to generate

vandalism, loneliness and disrepair.³⁵ Day, whilst recognising the significance of Coleman's research, points out that there is a need to separate out the effects of social and economic factors from design factors. Kirby comes to similar conclusions in a book review.³⁶ Bottoms and Wiles have also criticised Coleman, they believe that if the research could be substantiated then it would be very interesting. However they identify a number of problems especially with her data. Firstly there are methodological flaws, secondly there is little crime data which is surprising as crime is integral to her theories and thirdly and most importantly there is no satisfactory research of social variables.³⁷

Poyner has developed the ideas of Coleman further and has applied them to the newbuild situation. Poyner has recognised that the lack of success of measures aimed to stop the criminal from wanting to offend has led to a concentration of environmental measures which aim to reduce the opportunity to offend. This has led to an interest in the measures that Coleman presents.³⁸ His ideas have been developed in a later publication which relates specifically to the construction of new-build housing. Here Poyner advocates Coleman like modifications such as facing windows to provide security, space at the front of the house, parking on the driveway or a garage to the side of the house, limited road access, no through pedestrian paths and surveillance of access roads and the green spaces outside the housing area. In addition he advocates access for servicing and deliveries, high fences at the side and rear and moderate locking security. Poyner follows this up with design recommendations for low rise housing as he feels that this is the housing form that is likely to be built in the future.³⁹ His recommendations go against the guidelines of Hillier.

All of these theories exhibit a narrow viewpoint. Within the literature there has been little treatment of the

subject on a multi-factoral level. In reality it is likely that it would be such treatment that would provide an effective answer to the problem of social malaise.

Estate Action, a recent initiative promoted by government to revitalise rundown estates, goes some way towards a multi-factoral approach by encouraging many types of regeneration on housing estates. It promotes a system whereby the housing office identifies the problems and needs of estates in conjunction with tenants and puts a package together which is then submitted to the DOE for funding approval. The project encourages a wide range of initiatives to help housing authorities to improve the quality of life on run down estates. These initiatives have ranged from PEP type management, tenant based cooperatives, sale to housing associations and complete privatisation. The design element has also been included; DICE (Design Improvement Controlled Experiment) which is implementing Coleman's principles has been incorporated as part of Estate Action. The Handbooks of Estate Improvement set out the process by which improvement programmes can be formulated and implemented. The aim is to promote the approach which is best suited to the estate and which uses money wisely. Tenant consultation and the opportunities for crime reduction are stressed.⁴⁰ The tendency has been, however, for there to be an emphasis on the management approach within Estate Action and approaches are often implemented individually rather than in unison. DICE itself will be discussed in more detail in chapter four.

Summary

There are a number of theories put forward as to the possible causes of social malaise.

These include:

discussion of the motivations of offenders

the social, economic, educational and biological
background of the potential offender

the security of the target

The management of the area

The design of the area

All of these theories put forward individual reasons for offending and tend to be exclusive. None of the theories recognises the importance of any of the other theories and there is no multi-factoral treatment of the problem.

To a certain extent Estate Action has involved a multi-factoral approach but not necessarily within the same scheme and there has tended to be an emphasis upon the management approach.

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CHAPTER THREE

DICE

The aim of this chapter is to explain what DICE is, what the work is that they have carried out and to outline the literature they have produced.

DICE stands for Design Improvement Controlled experiment. It was formed as a consultancy from what was called the Land Use Research Unit. It is headed by Professor Alice Coleman. Professor Coleman has a number of employees, some part-time and some full-time as well as geography students on placement which help her with her research. There are two parts to the DICE work, firstly their work involves a controlled experiment, as their title suggests, carried out for the DOE and secondly they are a consultancy which can be asked for advice or to create schemes. DICE is active at present in both these fields.

In 1988 Professor Coleman was appointed by the DOE as a consultant to test her ideas that design improvements on run-down estates can themselves reduce the disadvantages suffered by residents and affect behaviour. This decision followed discussions between Coleman and DOE officials and ultimately the then Prime Minister, Margaret Thatcher. On 3rd November 1988 Nicholas Ridley, the then Secretary of State for the Environment, according to the Prime Minister's instructions, announced that there would be a full-scale trial of Coleman's methods. It was envisaged that each trial would take 2-3 years and would be evaluated over a five year period. At first it was thought that the trial would involve three estates and would be London based. The DOE were to pay for the works where money was not available from the local authorities.¹ Following a number of site visits and considering that there had not been enough interest in London, the search for suitable estates was widened to the whole country.

Ultimately DICE has involved the redesign of seven selected estates. Three of the estates were announced in 1990-91: Rogers (Tower Hamlets), Avenham (Preston) and Bennett Street (Manchester). The other four were announced in 1991-92: Ranwell (Tower Hamlets), Kingsthorpe (Nottingham), Durham (Sandwell) and Nazareth (Birmingham). A design disadvantage and abuse survey was carried out for each estate and resulting from these surveys a scheme was drawn up to remedy the deleterious designs in consultation with tenants and council officers.² The first estate to be announced was Rogers Estate on 19th October 1990. Announcing the allocation of £4.5 Million to the estate Mr Spicer said

I am delighted to approve today the first of Professor Coleman's experimental schemes-on the Rogers Estate in London. Professor's Coleman's theories on design improvement are important and need to be tested out in practice....The conclusions will have wide implications for housing policy and I am sure that the other authorities involved will be eager to press ahead with their schemes³

As a special case DICE was included as part of Estate Action following the Prime Minister's instructions. The experiment is being evaluated by Price Waterhouse for the DOE.

Price Waterhouse have been collecting data since 1991 so as to provide a comprehensive before and after study. The study is intended to be five years in length. The housing authorities are sent a form every quarter upon which to record their statistics. The statistics that have been requested relate to a number of subject areas; firstly lettings which includes the number of voids, the length of time it takes to relet, the number of offers that are made before they are relet, whether offers were to people who had no choice but to accept, why tenants leave and rent loss through voids. Secondly management performance including the numbers on housing benefit, the expenditure

on repairs, whether the turnover is speeding up or slowing down and the relationship between emergency and cyclical repairs. Thirdly tenancy including who is moving in and who is moving out, how many want to transfer and the number of mutual transfers and outstanding requests for transfer. Other categories include environmental quality, perception of tenants of management and efficiency and changes in management methods. In addition the fire service, the police service and the DSS are consulted in each case. A MORI poll was also carried out before and after the changes. This poll included questions on the households, health, education and crime (both actual and fear of). For each DICE estate there are three control estates in each area. Price Waterhouse are establishing indicators to ascertain whether or not the estates have fulfilled their aims. Within this study it is proposed to use similar indicators, on a smaller scale to evaluate the success of the projects on Mozart and Rogers.

In addition to this work for the DOE DICE has begun to market itself and has produced a number of fact sheets relating to different aspects of their work. These are aimed at residents and tenants associations. Leaflet number one introduces the methodology of design disadvantage. It states that 'The design of your home can be bad for you'. Sharing space leads to anonymity which makes intruders feel safe, different entrances provide escape routes, without defensible space criminals feel they can come and go unseen and most importantly bad design makes it difficult to bring up children properly and some become anti-social and delinquent. They suggest that those who are concerned calculate the disadvantage score and if it is high and they want it changed they should contact the chair of their Tenants' association, local councillor, MP and housing manager. At the invitation of one of these DICE will come to have a look and a professional survey report may be requested which is relatively cheap. They suggest that their ideas are proven.

Leaflets Two and Three outline good and bad design layouts

for houses and blocks. Leaflet Four looks at methods of estate improvement. They identify that design improvement is the only approach that attacks the root cause of the problem, is a natural approach, stabilises environmental problems, eradicates social problems, decreases crime and leads to future savings. It is astonishing that such claims have been made before a comprehensive evaluation has been completed. There seems to be some recognition that other approaches may be useful if carried out in conjunction with design improvement. Leaflet Five looks at the financial benefits of Design improvement. There is said to be no ongoing costs, there are savings in housing administration as turnover decreases, there are less communal grounds to be cared for and there is less vandalism and graffiti. In addition there are also said to be related savings in education, fire, police, national health and social services. Leaflet Seven deals with the problem of open space and leaflet eight looks at the importance of individual gardens. Gardens provide an activity, promote care for living things, encourage decision making and initiative, encourage self expression, help form communities by increasing contact, create defensible space and teach children to respect others property.⁴ It is in the capacity of a consultant that Coleman and DICE have been employed on the Mozart Estate at present. They have drawn up a scheme for further phases of redevelopment which has received Estate Action funding. DICE is due to publish its own evaluation of the projects.

An evaluation of the DICE project and principles is of paramount importance as the principles are being used untested.

Summary

DICE stands for Design Improvement Controlled Experiment.

DICE is both a consultancy and a controlled experiment funded by the DOE.

The DICE project has involved the refurbishment of seven estates to Coleman principles and is being evaluated by Price Waterhouse.

DICE Consultancy has produced a number of leaflets to be used as a marketing tool in promoting their services to the public and to local authorities.

An evaluation is of paramount importance.

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 - Leaflet 1 Design Disadvantagement Fact Sheet
 - Leaflet 2 Good and Bad External Design and Layout (Houses)
 - Leaflet 3 Good and Bad Design and Layout (Blocks)
 - Leaflet 4 Methods of Estate Improvement
 - Leaflet 5 Financial Aspects of design Improvement
 - Leaflet 6 Not yet finished
 - Leaflet 7 Open Space
 - Leaflet 8 The Value of Individual Gardens

CHAPTER FOUR

Methodology

This chapter proposes to explain in detail the methods and techniques used here in evaluating the work of Coleman. It begins by introducing the estates used briefly and continues by describing the methods used in the evaluation.

In order to evaluate the work of Professor Coleman and DICE two estates have been chosen which have been modified according to DICE principles and which are in London. These estates will be described in detail in the following chapter; they are the Mozart Estate in Queens Park and the Rogers Estate in Bethnal Green. These examples have been chosen as they illustrate well the processes involved and represent the different stages of development of DICE theory. Mozart was the first estate to be modified along the lines of Coleman and is a large estate. The process of Colemanisation is continuing. The first stages of the modification process were funded by the local authority itself and the process has interesting political implications. Rogers was the first estate to be completed under the DOE funded DICE project and it is useful to make comparisons between the two estates.

An evaluation of the work of Coleman has been carried out on five levels. Firstly an ethnographic account of the estates is presented. Secondly the views of Planners, tenants, housing officers, surveyors, architects and police as well as others with relevant knowledge of the situation have been taken account of. The process by which these developments were accepted and implemented has also been considered. Thirdly a number of indicators have been chosen to assess the redesigns such as the number of people wanting a transfer. Fourthly Coleman's research has been reapplied as rigorously as is possible in order to evaluate her work in her own terms. The two estates have been looked at in terms of calculating design disadvantage scores

and abuse scores. Fifthly crime rates have been looked at. Coleman believed that her modifications would lead to substantial reductions in abuse scores and crime levels. Each of these will be described in turn.

An ethnographic account of the two estates was attempted in order to provide an assessment of the situation from the point of view of an outsider. This involved walking around the estates and along each floor of the blocks and gaining a feel of the different areas as well as noticing local differences.

The next part of the study attempted to evaluate the successes of Coleman type redesign by taking account of the views of professionals and tenants who have relevant experience in these case studies. There have been little problems in evaluating the experiences of professionals. Each group was asked what they felt about the redesign, what their involvement had been and whether they would have rather seen things done differently. Dealing with the views of tenants has been more difficult. On Rogers the views of the tenants have been taken account of primarily through sitting in on the post DICE improvements interviews. The drawback of these interviews was that they relied on the residents coming to the interview venue and not vice-versa. This could result in a situation whereby those who were not satisfied with the changes were more more likely to attend. Other views of tenants have been taken account of as people came to chat with the researcher as the surveys were being carried out. On the Mozart the views of the tenants have been taken account of by contacting the tenants association. This means that the views of the tenants that are presented here may not be strictly representative. It was not intended to be strictly representative but was purely intended to give some idea of the situation.

In assessing the processes by which these schemes were accepted and implemented it is often difficult to work out exactly what happened. Obviously one can only find out what people want to tell you the rest is left to supposition.

A number of indicators were identified which were thought to give some measure of the success of the project in terms of satisfaction of the residents, reduction in deprivation and reduced costs. A comparison before and after design modification has been attempted. Indicators which have been identified as useful are the number of properties that have been sold under Right to Buy, the number of voids, the average period to relet dwellings, the number of live applications to transfer off the estate, the population breakdown, the numbers that are unemployed, the number of tenants that are in rent arrears, the amounts spent on management and maintenance and the numbers of children from the estate in care or on the at risk register. These indicators were chosen as they were similar to the indicators used by Price Waterhouse and for the Rogers Estate it was easy to obtain these figures for the period prior to refurbishment. In practice it has been difficult to obtain statistics from the local authorities. As far as has been possible these statistics have been obtained from the local authorities and gaps have been filled in by referring to other reports, unfortunately gaps do remain.

Turning to look at the methodology that has been applied to calculate design and abuse scores. The DICE design disadvantage survey manual of July 1992 was used as a basis for the research carried out to evaluate Coleman in her own terms. This manual was used by the researchers who carried out the research to choose the estates for the DICE project and will be used at a later date to evaluate the project themselves. The process is based around two forms which are used to record data which are included in Appendix One. These two forms are the Block Survey Form and the House Survey Form. The survey forms require the researcher to record certain attributes of a block and its surrounding area, in order to carry this out it is necessary to walk around all sides of the block and to examine all levels on the interior. Guides to the appropriate codes to insert are provided on the reverse of the form and the thresholds stated. The significance of the

thresholds will become clear later. The survey forms will be taken in turn and described section by section.

Block Survey Form

The first section of the form is not relevant for our purposes as it relates to the referencing system which was specific to the DICE system of recording data. The second section relates to external data. Before looking at the specific questions it is necessary to define a block as the variables are recorded block by block. The definition of a block according to DICE is that it must be continuously built up at ground level, without a coincidence of internal partitions and separate external walling that would divide it into separate attached blocks. Linked buildings are counted as separate blocks if they are joined only by overhead walkways and/or roofed but not walled paths at ground level. Thus a block may be more than one building and one building may be more than one block if it is internally and externally partitioned. If only the building is partitioned and not the grounds then the parts are termed sub-blocks. To access these sub-blocks one has to go out of the buildings but not out of the grounds. Turning to the variables:

Stilts/Garages/Facilities (threshold: none)

Ground floor dwellings give the best opportunities for surveillance and control of the grounds by the residents. The use of the ground floor for impersonal or public purposes detracts from security. These uses are recorded as stilts (code S), if the block is raised up on columns, garages (code G) for garages or enclosed parking facilities and facilities (code F) for facilities.

Number of storeys (threshold: 3)

The number of storeys is recorded as a maximum figure, counting any lower floor, whether occupied by dwellings, stilts, garages or facilities and any visible basement levels. Extra storeys on the downslope side of the block are included in the total as are upper storeys that only

occupy part of the block's length.

Flats or Maisonettes (threshold: flats)

Coleman has the view that flats are the only desirable form of highrise living. Flats (code F) and maisonettes (code M) can be distinguished from the fenestration, although both sides of the block should be checked. Flats produce a window and balcony pattern that is regular, maisonettes produce an alternating pattern. Some blocks contain both maisonettes and flats (code B) and these produce an irregular fenestration pattern. In the case of complex fenestration the inside of the block should be checked and questions asked and plans consulted if necessary.

Walkways (threshold: 0)

There are three types of walkway:

WW Overhead walkways

WP Podium walkway routes to nearby blocks without passing other blocks

WU Underground walkways linking entrances to different blocks under the podium

Play areas (threshold: -)

An area with equipment such as swings, chutes, climbing frames and sand-pits is intended for children and not teenagers and should be recorded as C. Hard-surfaced games courts are marked H. If there are both this should be recorded as B. If there is no play area a - should be recorded. Play areas may be so badly vandalised that they are functionally ineffective. Nevertheless they are still likely to be focal points for groups of youths and should be marked. In addition there is always the possibility that they may be restored. For the play area to be recorded as relevant to a block the play area must be visible from some of the block's windows and close enough to it that a line from the play area to the block does not pass any other nearer block. Coleman feels that the presence of a play area directly affects the likelihood that a block will be vandalised.

Spatial Organisation (threshold: A, B, O)

This is the most complex variable to be surveyed but it has, so Coleman says, the most powerful effect upon the volume of crime. It is recorded as a string of three letters which refer respectively to the front, the back and the surroundings. The first two letters may be A, B or C and the last digit may be C or O. Spatial organisation refers to the buffer zone between private space, which is inside the dwelling and public space, such as streets and parks where any member of the public has a right to be.

The best type of spatial organisation is semi-private space (Code A) controlled by a single household although visible to others. Its essential features are dwelling windows giving surveillance over the territory, a dwelling door affording direct access onto it, and perimeter walls that signal the line where the household's property is separated from the neighbours and from public or other shared space. Thus the family knows that its territorial control is assured and exclusive which leads them to look after their space and respect other people's. No-one enters the front gate without having business with the inhabitants and failure to go straight up to the front door is immediately seen to be suspicious. Children are brought up not to trespass on other people's property. These conditions combine to produce a cared-for environment and a low probability of anti-social behaviour.

Individual gardens cannot rank as semi-private if they are traversed by a through path for the postman or milkman. Such gardens are confused space. Gardens cannot rank as semi-private if two or more share the same front gate. These form semi-public space.

Semi public space (Code B) is an intermediate form of spatial organisation. No household can exercise individual control, as the grounds are controlled by the residents of more than one dwelling and often the whole block. The perimeter must be securely walled, with a gate on one side only so that strangers cannot take short cuts through the grounds. The filtering out of unrelated strangers makes it easier for residents to get to know each other and to come to a working relationship in order to establish joint

responsibility for the grounds.

Confused Space (Code C) is the worst type of space shared by too many people to create a natural self-tending, self-policing social structure. The absolute numbers need not be great if the layout admits outsiders from other blocks . contributory features are:

Perimeter fencing does not wholly separate the block from other blocks, other land uses or roads.

Fencing that divides the block from its grounds as much as from the other blocks, land uses or roads.

Gates or gaps in different sides of the perimeter allow the grounds to be used as public routes.

No buffer zone between public and private space.

Surrounding areas are either satisfactory (Code O) or confused (Code C). If there is no adjoining semi-private or semi-public space the surroundings are automatically classed as confused. Otherwise the surroundings encircle the outer rim of semi-private or semi-public areas, and fills breaks between them. Only if none of the surrounding area is confused can the rating be satisfactory. Features causing confusion are paths (as distinct from pavements along roads), cul-de-sacs (as opposed to through roads), alleys, greens, car parks, garage courts, and unfenced or ungated paths or forecourts in front of communal entrances.

The third section of the form relates to Entrance Data:

Entrance position (threshold: F, S, B)

F entrance flush with street

S set back a few metres

B Both F and S

I inside the estate

M mixed: I and F and/or S

Doorless communal entrances (threshold: 0)

The presence of doorless entrance is logged, the feeling is that entrances without doors invite strangers to enter.

Entrance Type (threshold: CO, CG, IG)

CO communal entrances only

CG both communal and individual entrances

IG individual entrances only, with separate front garden, usually where upper flats in a two storey building have doors at ground level

OO No communal entrance in the block. Upper flats are reached by overhead walkways from another block.

CI both communal and individual entrances without gardens, or with shared garden space

IO individual only. Upper flat doors at ground level, without individual gardens

Fourthly internal circulation and exits, these are intended to provide some measure as to the likelihood that criminals would have the opportunity to use alternative escape routes.

Interconnecting Exits Block

This variable is not used directly to calculate the disadvantage score but is used as a composite part of the calculated values section which follows later.

Interconnecting Stairs and Lifts Block

Stairs and lifts that service the same vertical route are logged as one. The total number interaccessible is logged. Again this variable is not used directly but is incorporated within the calculated values section.

Fifthly Dwelling numbers, the number of households sharing the same building has an important bearing upon anonymity and alienation of residents and also whether criminals feel they are safe from recognition. This factor is recorded in a number of different ways.

Dwellings per Block (threshold: 12)

The total number of dwellings in the block is recorded

Dwellings per entrance in the block (threshold: 6)

Independently entered ground floor dwellings are excluded from dwellings per entrance. In the case of upper flats with individual ground floor doors (IO or IG) the value is

1.

Corridor Type (threshold: D, L, B)

D stands for duplex which refers to dwellings with individual front entrances

L and B are landings and balconies respectively which have four or fewer dwellings.

I and E stand for longer internal and external corridors

Dwellings per corridor (threshold: 4)

A corridor is any interaccessible part of the same floor in a block, regardless of whether it occurs in a straight passage or is broken into separate wings that may not even be intervisible with each other. For blocks that have been partitioned it is the corridor within each sub-block which counts. Where corridor length varies among sub-blocks it is the largest number of dwellings which is logged.

Sixthly calculated values, these variables are not observed directly but are worked out later. They apply for the block itself and for blocks that the block is attached to.

Dwellings per entrance total (Threshold: 6)

This is calculated by adding together the numbers of dwellings per entrance in adjacent blocks or strings of blocks linked by overhead walkways. With sub-blocks the additions should stop at partition lines. Any locks or entryphones are disregarded as these may easily be rendered non-functional by vandals.

Interconnecting Exits Total (threshold: 1)

The number of interconnecting exits for attached blocks

Interconnecting Vertical Routes (threshold: 1)

The number of lifts and staircases that linked blocks contain.

Blocks per Site (Threshold: 1)

A site is defined as an area bound by through roads or by other enclosed land uses. It may contain dwellings,

facilities, paths, alleys, cul-de-sacs, greens, gardens, paved areas, car parks, garages and so on. The sites within the estate should be defined and then the number of blocks per site should be calculated and recorded for the relevant blocks.

Access Points per site

The access points into the site from through roads should be calculated

Podium Access points inside the estate

Access points to the podium should be calculated which are additional to those along the site perimeter

Access Sides per Site (Threshold: 1)

The number of sides of the site that have access points should be calculated. Two or more access points on the same side are not harmful as they do not allow outsiders to take shortcuts across the residential space. The number of sides should be entered for all the blocks within the site.

The design disadvantage score is then calculated from the above variables. The variables that are listed above and have a threshold after the title are those that are used to calculate the score. The others simply provide additional information. Those that are not directly used to calculate the score are numbered 2a, 6a, 7a, 8a, 13a, 14a, and 16a on the form. Each value for the relevant variables that breaches its threshold is marked with an asterisk and the asterisks are counted up and this is the design disadvantage score.

After redesign there may be the possibility of the use of secondary thresholds. When redesign improves a variable as far as its threshold value the asterisk denoting a defect is omitted. In certain cases an improved design may not quite satisfy its threshold but comes sufficiently near it to meet a secondary threshold and so merit a score deduction of half a point. The conditions for the use of **secondary thresholds** are set out as follows:

- (1) There are no secondary thresholds for overhead walkways, any of the four entrance variables or any of the four characteristics of the grounds
- (2) The disadvantage score must have been reduced to below the general average of 8 before any secondary thresholds are considered
- (3) Four variables have numerical secondary thresholds:

Dwellings per block	20
Dwellings per entrance	10
Number of storeys	4
Dwellings per corridor	6
- (4) Maisonettes qualify for a secondary threshold when only one layer remains above quasi-houses (ie. ground-floor dwellings given independent front and back doors and gardens)
- (5) Two inter-connected entrances are permissible when the second one, like the back door of a house, leads into an enclosed rear garden
- (6) Two interconnected vertical routes are permissible when only one lift and one staircase rise from the same location and are both visible from the entrance door

Variables left with half point disadvantage are marked with the hash symbol#

The maximum disadvantage score for blocks is 16.

The final section of the Block Survey Form relates to the calculation of the **abuse score**.

Sixteen measures of abuse are observed in blocks of flats or maisonettes. The first six ie litter, graffiti, urine, faeces, fences and sheds are observed by inspecting the inside of every communal entrance, and a radius of three metres outside it. There are two grades of litter, two grades of graffiti and two types of excrement. If there is more than one exit per block, the code chosen is the worst one that is observed in the same block or adjacent service towers but not in other connected blocks.

The codes are as follows:

Litter	-	Absent
	1	Clean and casual
	2	Dirty and decayed
Graffiti	-	Absent
	1	Either inside or outside the entrance
	2	Both inside and outside
Urine	-	Absent
	1	Urine puddles, stains or smells
Faeces	-	Absent
	1	Present

Criteria are set out for distinguishing between clean and casual and dirty and decayed litter. Dirty and decayed litter tends to be crumpled, stained, damp and trodden-in. It often consists of larger pieces than clean and casual litter, but if there are ten or more cigarette butts, small polythene fragments etc. these also qualify as dirty and decayed. Inside the entrance, dirty and decayed litter tends to be accompanied by dust and other signs of an inefficient cleaning service.

The other ten observations are types of vandal damage target anywhere inside or outside the block or in adjoining service towers. The target is marked with a - if not damaged, 1 if damaged and X if the target is not present to be vandalised. The surveyor must discriminate between vandal damage and ordinary wear and tear or fabric decay. The following tips are given:

Fences, walls and railings are vulnerable to accidental damage by vehicles and disfigured rather than displaced. Storage sheds on the inside or outside of the building are not very susceptible to wear and tear. Signs of forced entry or fire count as vandalism

Windows rarely break as a result of normal wear and tear.

Cracked panes due to building movement would be confirmed by other settlement cracks. Boarded-up windows may indicate void dwellings rather than vandalism

Doors particularly in communal entrances tend to get a lot of wear and tear. Look for actual damage to the door itself, hinges panels and panes. Check from the frame whether an aperture was originally designed with a door which is now missing.

Stairs suffer wear and tear of treads and vandalism tends to be targeted at the balustrades, bannister rails and the undersides.

Lifts mechanical and electrical failure should not automatically be taken as signs of vandalism; it is important to observe whether the user-electrics, door mechanisms, lights or internal fabric appear to have been tampered with.

Electrics Wiring looms and light fittings will come away from the walls if they are bad or decayed fittings, but the fittings themselves are unlikely to show wear. Actual damage to a duct or casing can be regarded as vandalism

Refuse bins are prone to a great deal of wear and tear. It is necessary to look for excessive damage, such as displacement of mechanisms or fire.

Garages are subject to accidental damage by vehicles at vehicle level but doors may be vandal damaged and displaced, refuse may be dumped and arson attempted. The building fabric may also be damaged

Building fabric means walls, floors, ceilings and non-electrical services such as heating and ventilation systems. Examples of natural fabric decay are spalling brickwork and concrete, leaching, rotting timber and slipped roof tiles. In order to do wilful damage to the fabric of a building it is likely that some form of tool or

piece of equipment would be used and this will leave its mark.

The number of types of target is totalled separately and then added to the values for litter, graffiti, urine and faeces to give an overall abuse score.

The maximum abuse score for blocks is 16.

House Survey Form

Houses have twelve design variables and twelve abuse measures to record and all the observations are made from the outside. Each house is logged individually, the house is the unit rather than the block.

Again the first section of the survey form relates to DICE specific referencing. The first section of variables are the Facade features.

The facade of the house is seen as important for surveillance by the occupants and is surveyed as follows:

Windows (Threshold: F, O, B)

There should be windows in a front downstairs room which give the occupants a clear view of the approaches to the dwelling in the course of their normal activities, whether seated standing or moving about. Features which breach the threshold are clouded glass (beaded, frosted, patterned, darkened or grilled), a location that is too high above eye level or set in a recessed part of the facade or positioned in the entrance hall or stairwell and not in a room, or a window that is too small to give an easy outlook. If the window has none of these threshold breaching features, it is logged according to its form as either flush, oriel or walk-in bay or bow.

Doors (threshold: F, S)

The front door is thought to complement the visibility from the windows by affording easy access from the dwelling to the approach area, and helping to signal that the household has some external control. The door should face the front

and either be set flush in the facade or slightly recessed. It should not be so deeply recessed that it gives cover to housebreakers, nor project so far forward that it obstructs the line of sight from the window. It should not face sideways, either in the porch or on the flank of the building. The only porch that is acceptable is one that is fully glazed above waist level so that it allows the watcher at the window to observe straight through it.

Projecting features (Threshold: -)

There are other projecting features which can obstruct the sightlines from windows. The threshold is breached if any of the following are present: garages, sheds and stores, high walls or fences, high screens or vegetation, refuse facilities and the offset wall of an adjacent house.

The second section of variables are entitled Frontage Features. Four frontage features define a front garden territory that is clearly signalled and acknowledged by others as belonging to the individual household. These four features are the depth of the front garden, the presence of side fences between neighbours and the existence of a front wall and front gate of an appropriate height.

Front Garden Depth (threshold: 3-5m)

The depth of the garden from the facade to the back of the pavement is estimated in three size grades. Shallow means < 3m deep. Medium means 3-5m and deep means >5m. These depth categories were chosen on the basis of general observation and the medium depth proved to be the best. It is not absolutely known whether 5m is the best boundary, it causes problems as 5m does not allow a car to be parked and the gate to be shut.

Side fences (threshold: 2)

Good fences make good neighbours and it is desirable to have property line fences on both sides of the front garden. No fence or a fence on one side only breaches the threshold.

The front boundary of the garden is the essential division

between public and semi-private space, making it quite clear to the general public where the household's right of control begins. Hedges, fences and railings are not ruled out but walls are preferred as they do not let litter drift in and are better able to resist vandalism. Here it is being suggested that a form be used which does not allow the problem of social malaise to manifest itself. The value which is recorded is the height of the front boundary. Waist height is best, as it allows residential surveillance outwards and and public surveillance inwards. High fences above eye level preclude surveillance and impede control as they screen intruders from the passing public. Low fences do not deter children, dogs or litter. Therefore any departure from waist height (ie 1m) is a breach of threshold.

Front gate (Threshold: G)

An individual front gate is also a necessary symbol of the household's control. Features that breach the threshold are gateless apertures and gates or apertures shared by more than one dwelling.

Thirdly the Spatial setting of the house has an influence. The house both influences and is influenced by its spatial setting. Two of the variables in this group concern the front setting, two are related to the back setting and one the end of the row.

Road Frontage (R2, R1)

Public surveillance is increased if the house faces a through road with pavements on both sides. More people walk past the house giving more opportunities for community formation as householders work in their front gardens. The bigger public presence makes for greater social safety which is increased still further by passing motorists. The presence of vehicles also teaches toddlers kerb drill. Situations which breach the threshold: R0 ie a road with no pavements or with one pavement on the side away from the houses. C cul-de-sacs, A alley, P path, T track (unsurfaced), G green, Y courtyard, V vehicle park. Those

that are acceptable are R2 ie fronting onto a road with pavement on both sides and R1 ie fronting onto a road with a pavement on one side, the side the house is on.

Intervisibility (Threshold: I)

If house facades face each other or are perpendicular to and within sight of each other, neighbour surveillance is added to resident surveillance and public surveillance. Any other situation breaches the threshold.

Back Gate (Threshold: F)

Houses are less secure when they are accessible from the back as well as the front. Back gates or gateless apertures breach the threshold for this variable. Only access from the front is within the threshold whether it is through a terraced house or through a garage or via a side path of a detached or semi-detached building.

Rear Land Use (Threshold: B, O)

Even without back gates exposed back walls are vulnerable to intrusion by agile burglars who can scramble over and then are screened from public view by the height of the wall. Accessible rear land uses that breach the threshold are roads, cul-de-sacs, alleys, paths, unsurfaced tracks, greens, vehicle parks and courtyards. The only acceptable direct rear abutments are other back gardens (B) and other enclosed land uses (O).

Corner or End Houses (Threshold: all except E)

Corner houses have windows overlooking L-shaped front gardens that wrap round to insulate the dwellings from both intersecting roads. End houses have a blank gable wall, with no window, at ground floor level. These walls are a magnet for graffiti, and the exposed side wall of the back wall provides a temptation for intruders to scramble over and then be screened from view. End houses are doubly burglary prone if the rear wall is exposed as well as the side wall. These houses breach the threshold. Houses without an end or corner position are within the threshold

and are logged as detached, semi-detached or terraced.

The design disadvantage score is then calculated. Going back over the variables on the form all those that breach the threshold should be marked with an asterisk and the number of asterisks represents the disadvantage score.

The maximum disadvantage score for houses is 12.

Abuse score for houses

As far as possible the test measures for houses are the same as for blocks but circumscribed by the fact that house interiors cannot be inspected. Instead **litter, graffiti and excrement** are observed within a strip extending 3m forward from the facade of the house or as far as any front garden wall, whichever is the lesser distance. Graffiti is marked simply as present or absent as it cannot be recorded inside the building. Litter has the same classification as in the blocks ie clean and casual, recorded as 1 and dirty and decayed, recorded as 2. Urine and Faeces are marked as present or absent. Vandal targets may occur anywhere round the observable part of the house or garden and as with blocks are marked - if undamaged, 1 if damaged and X if the target is not present. Stairs and lifts, sheds and refuse facilities are not relevant to houses but the other target types are included: **Fences, walls, railings, windows, doors, electrical fittings, garages and building fabric together with gates**. Gate hinges are vulnerable to everyday wear and tear and vandal damage should be looked for on the gate itself. Back gates are more likely to be liable to forced entry.

The maximum abuse score for houses is 12.

The surveys were carried out once in line with the way that DICE have carried out previous surveys. They said that they had aimed to survey once every six months but in most cases they had only been able to carry out the survey once. There was also no control for scoring before the blocks were

cleaned or repaired. For this reason there was no attempt to control for these factors in this study.

Although the criticisms of Coleman's approaches are accepted and supported it was felt that it was important to evaluate the DICE project in its own terms. If the project is not successful in its own terms it is difficult to see how it can be regarded as successful at all. Coleman believed that following DICE related design changes and the reduction of design disadvantage scores that abuse scores and crime rates would reduce accordingly. This study has attempted to establish whether this has been the case in the two examples used here.

There have been some problems in obtaining crime data as they are covered by the data protection act. It was the intention in the first place to obtain locational crime data. This data was however unavailable for legal reasons. The data that has been obtained is broken down into Beat crimes eg. common assault, low value theft or criminal damage, Major crimes eg. robbery, bodily harm, Vehicle crimes eg taking and driving away, break-ins and thefts from vehicles and Burglary crimes.

There have been additional problems with the way data is held on Metropolitan Police computers as the systems do not hold data by estates and the incidents are recorded by road. The incident may therefore be recorded in a road neighbouring the estate and it is impossible to tell whether this incident has been committed on the estate. In addition the reporting of the exact location of a crime is not always accurate. The crime data used in this report is also subject to the shortcomings of all crime data. The data that is obtained from the Police is thought to be underrepresentative. Less than half of offences result in a prosecution, a large number of crimes go unreported and other crimes go unrecorded and the police are aware of a number of other crimes which do not enter the official records. For this reason the representativeness of official

crime statistics have been questioned. In addition official statistics are thought to be misrepresentative. Societal rules set the definition and thus crime statistics are a product of the agencies of social control. For these reasons crime surveys have been developed as an alternative data source to official statistics. For the purposes of this study official crime statistics will be looked at as crime survey figures are not available at such a detailed level.

Comparisons between the two estates are useful but can be problematic. The Rogers estate has been completed for a little over a year and the whole estate has been improved. The Mozart Estate has been finished since 1991 and only part of the estate has been improved. Rogers Estate has been improved under the DICE project whereas the Mozart improvements were financed by the council itself. Both local authorities, have different agendas and operate in different ways. It is interesting to see how these two estates differ in their implementation of the projects and in their management systems and these factors may make a contribution to the difference between the successes of the projects.

Summary

The design modifications on Mozart and Rogers Estate have been evaluated in five different ways:

ethnographic description

views of housing officers, planners, police and tenants

other statistical indicators

Design Disadvantage and Abuse Scores

Crime data

REFERENCES

- 1 The DICE design disadvantage survey manual of July 1992.

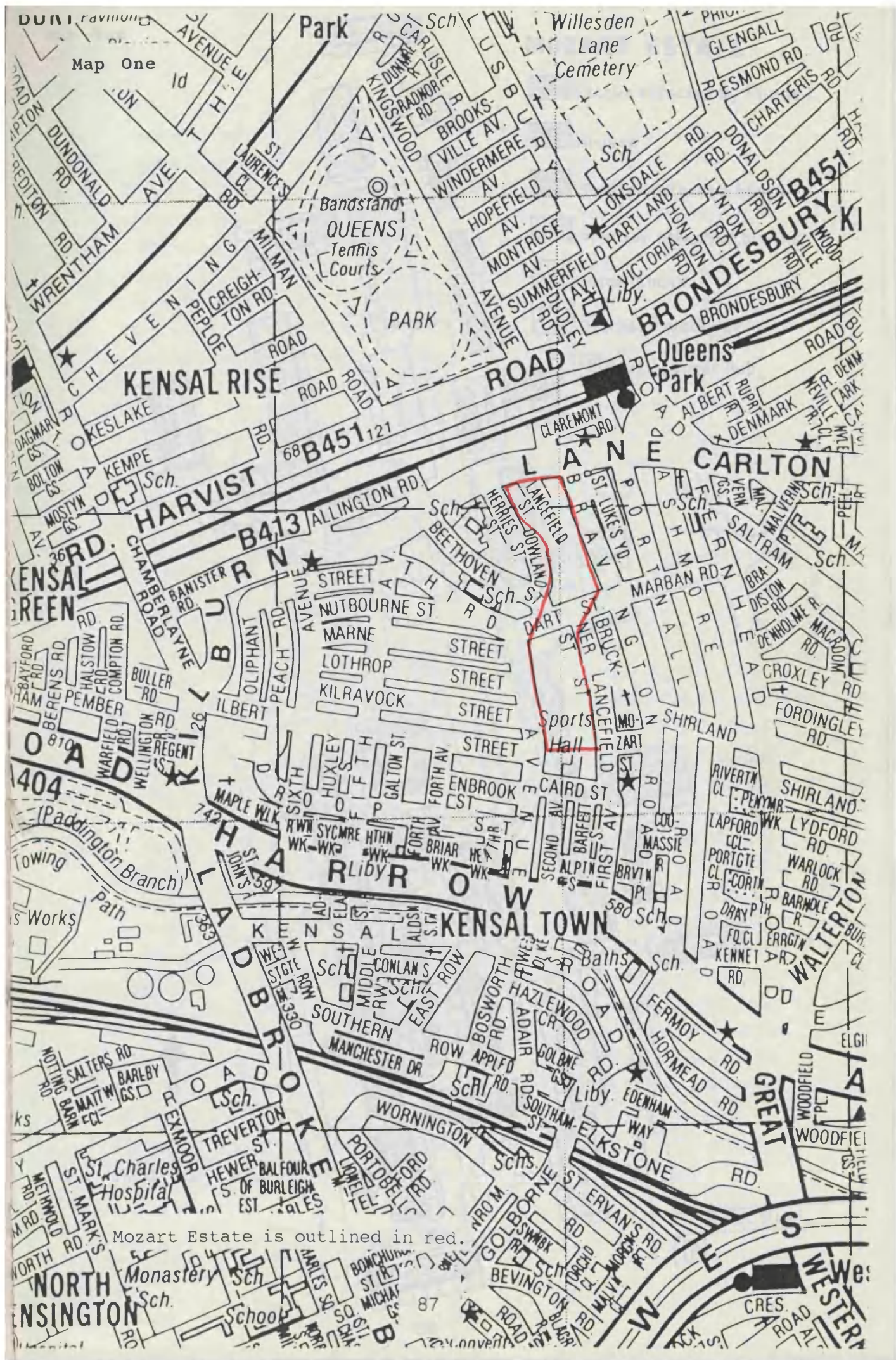
CHAPTER FIVE

An Introduction to the Estates

Within this section it is proposed to provide a comprehensive description of both estates in visual, descriptive, anecdotal and statistical terms. The aim is for the reader to gain as good an understanding of the estate as if he/she had visited it themselves. The description includes a summary of the history of the estate, an explanation of the design changes on the estates, outlines of previous research reports about the estates, descriptions of the management processes in use as well as ethnographic descriptions, opinions of relevant individuals and statistical indicators which are specific to this study.

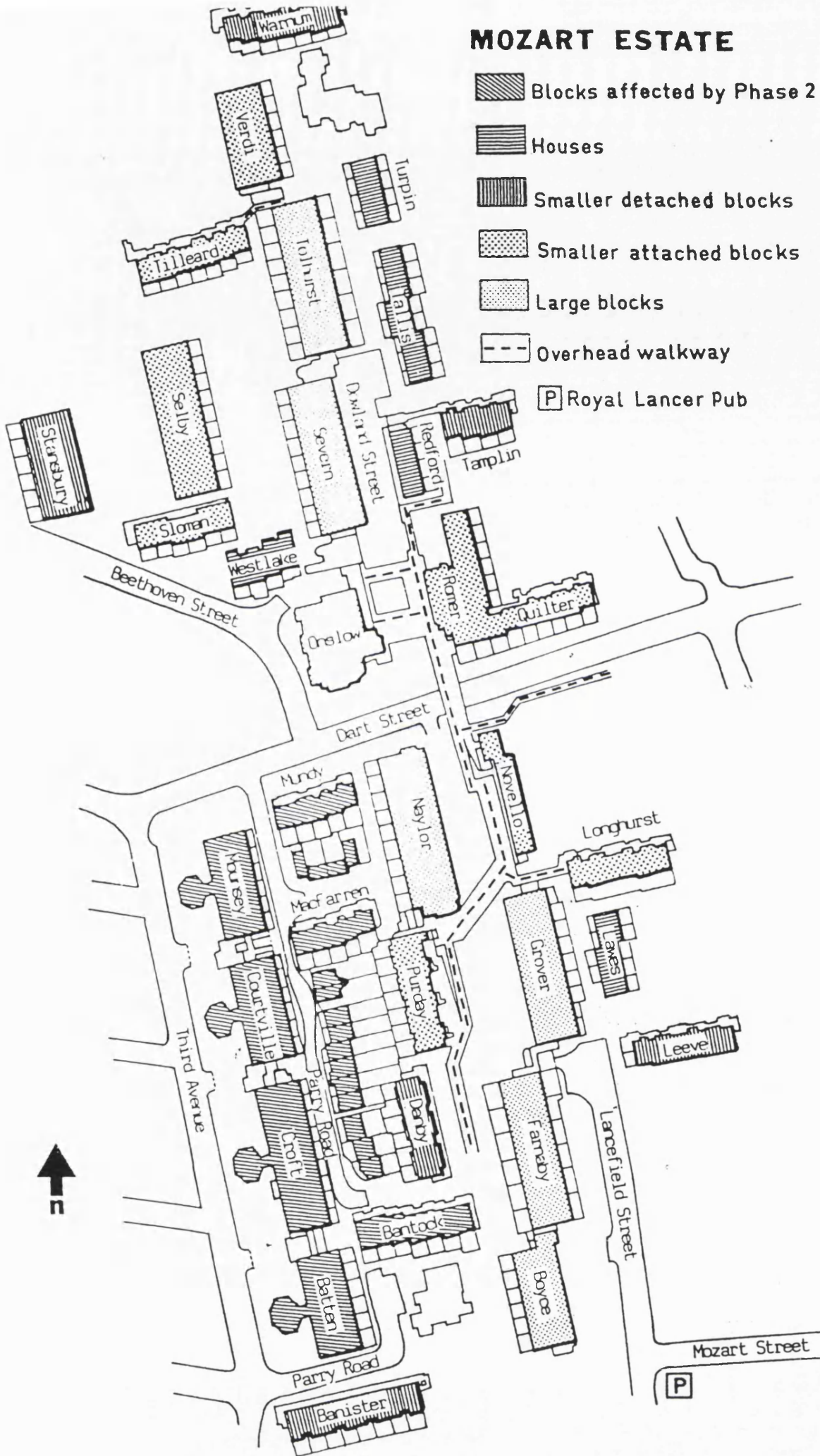
Mozart Estate





Mozart Estate is outlined in red.

MOZART ESTATE



The Mozart Estate was built between 1972 and 1977 in Queen's Park, London W10 by Westminster City Council. The estate was built as part of the slum clearance schemes in north London following the Milner Holland Report 1965. The estate comprises of 772 dwellings, 42 Houses/Bungalows and 730 flats/maisonettes of which 330 are 6-10 storeys. There are a wide variety of design features including internal and external corridors and balcony access. Some are linked by walkways and others share lifts and staircases. The estate is brick built rather than prefabricated concrete. There are also various changes in level throughout the estate. The estate is divided into two by Dart Street. There are a number of blocks of varying sizes and character. The estate won an RIBA design award and was considered to be 1 of the 56 best new estates in London.¹ The estate has a wide racial mix and 26% are lone parent families, 38% are under 18, 25% are claiming unemployment benefit, but only 25% are employed and 65% are claiming housing benefit.²

It was soon apparent that the estate had problems, at first these were primarily condensation, mould growth and water penetration. By 1982 it was estimated that 60% of dwellings were affected. In 1979 a long term improvement programme was begun. The estate gained a bad reputation and the media dwelled upon the problems of vandalism, burglary, mugging, drug-taking and gluesniffing. The estate was dubbed 'crack city' and declared a 'no-go' area. Although there is some substance to these claims they have not been wholly justified and have served to inflame the situation. A 1985 Council Press release stated that in the financial year 1983/84 £82,000 were spent on repairing vandalism. This amounts to approximately £2 per dwelling per week which was about double the unit rate for other Westminster estates. Mozart was the least popular estate in Westminster with 56% of tenants registered for a transfer in April 1983 compared to 7% on the nearby Queen's Park Estate. In response to these problems extra security was added to dwellings, additional management, technical and cleaning staff

allocated and a 'graffiti squad' set up. The 'Magic Flute' Public House was closed down in response to tenants' requests and this increased perceived security. A grant was made available to the Tenants' Association to convert it into a tenant's centre; it was opened in 1987.³

In 1984 a working party commissioned Alice Coleman to carry out a study of the estate and to recommend proposals. She produced her report in August 1984 and presented it to the working party. She believed that the provision of additional resources to the estate in the form of increased services and security had helped to stem the decline but had not dealt with the root cause of the problem. She proposed a number of phased design modifications based on her design = crime theories. The improvements were designed to halve the disadvantage score; thus reducing it from 12.8 to 6.6. With a reduction of other design variables to their thresholds, using a weighted scale, the score could be reduced to 5.1. This would take the Mozart from being among the worst 4% of estates studied to being among the best 30% of those studied. A two phased pilot scheme was proposed to start with. Phase one involved the removal of 4 overhead walkways to 4 blocks affecting 145 dwellings. This work was completed in March 1986.⁴ Phase two involved more comprehensive changes with the subdivision of blocks and the privatisation of space as well as some newbuild. This was finished in 1991.

Coleman has always seen walkways as a threat and never as a positive means to integrate areas; to her they have always been escape routes. The walkways that were removed in phase one were as follows:

Mundy House to Naylor House
Naylor House to Dart Street
Naylor House to Grover House
Danby House to the central elevated walkway

An internal Housing Department Memorandum at the time of

demolition states that walkways were selected on the basis of avoiding disruption to the welfare of tenants, means of access and escape, planning and structural considerations and public rights of way. It seems that they were removed in March 1986 as resources became available unexpectedly at the end of the financial year. Kenneth Baker, then the Secretary of State for the Environment, stated that he hoped that other councils would follow suit in removing walkways to tackle crime and vandalism.⁵

Eight blocks were affected by the Phase Two improvements. Mundy, Macfarren and Bantock are three small four storey maisonette blocks with external balcony access to the upper maisonettes. Prior to phase one the balcony of Mundy was linked by overhead walkways to the end of Mounsey and to the Dart Street end of Naylor House. From Naylor there was a walkway to the pedestrian bridge over Dart Street. Phase 1 removed all but the link to Mounsey. Now it is freestanding. Prior to Phase 2 Macfarren's external balcony was linked to the southern end of Naylor and to the open staircase between Mounsey and Courtville. Thus it was possible to gain access to almost all the internal corridors of the 4 Third Avenue blocks. Prior to Phase 2 Bantock's balcony was linked to the staircase between Croft and Batten. It also had its own staircase at the other end of the block. The ground floor maisonettes have been given small fenced gardens at the front. Access to the balconies in these blocks is now limited to an enclosed staircase. The Third Avenue blocks, Batten, Croft, Courtville and Mounsey, had three levels of internal corridors, all of which were interconnected. Prior to phase 1 it was possible to walk from Batten house through all the blocks to the central walkway at Dart Street. The main modifications to these blocks have been vertical partitioning, to form eighteen groups of two or five dwellings. Prior to phase 2 the access to ground floor maisonettes had been via the ground floor internal corridor. The small back gardens of these properties have been remodelled to form small front entrances with gardens facing onto the newly created Parry

Road. From the Third Avenue side there are now nine enclosed staircases each providing access to two sets of dwellings in groups of no more than seven. The staircases seal up the pedestrian access from block to block. The staircases are well fenestrated to provide surveillance and are well lit. The areas in front of the blocks have been divided up according to the sets of dwellings, the garages remain on the whole. Eight new bungalows have been built at right angles from the four blocks. The rest of the space is intended for the storage of dustbins and car parking. In addition the former playground between Macfarren and Mundy has been replaced by a short terrace of two bungalows and two two-bedroomed houses. The back gardens of these dwellings look onto those of Mundy House. Six two bedroom houses, formerly Purcell House, and five new-build houses between Macfarren and Bantock create a terrace of eleven dwellings. The rear gardens of these dwellings now occupy the formerly unused space behind the rear gardens of Macfarren, Purday and Danby. The rear gardens of Bantock have been extended to absorb the former pathway around the side of the Mozart Project. The new dwellings and ground floor maisonettes are served by the newly created Parry Road, thus forming a streetscape which is intended to promote social harmony and order. The road is not wide enough to park cars and has a gate to prevent through traffic. The effect has been to create a visually pleasing area.⁶

The description which follows attempts to provide a comprehensive introduction to the estate through the use of pictures.

North Site

The north site can be divided into three sections, a central spine, a section on the right which forms a street type environment and a cluster to the left.

As can be seen from the map there is a central spine of blocks: Onslow, Severn, Tolhurst, Tilleard and Verdi which are all attached together and are interaccessible by linked corridors.



Plate 1: Onslow House as seen from the central walkway, it is a large block and is attached to the walkway and to Severn House.



Plate 2: The central square containing two shops, a youth centre, the tenants association and the district housing office. Onslow fronts onto the square.



Plate 3: Severn House is a large block and is attached to Onslow House and Tolhurst House.



Plate 4: Tolhurst House is a large block and is attached to Tilleard House and Verdi House.



Plate 5: Verdi House is a smaller attached block which is joined to Tolhurst and Tilleard.



Plate 6: Tilleard House is a smaller attached block which is joined to Verdi and Tolhurst.

Another part of the north site is the blocks Romer, Quilter, Redford, Tamplin, Tallis, Turpin and Warnum. They create a street like feel to this part of the area. This is where most of the blocks of houses are situated.



Plate 7: Romer and Quilter are two smaller attached blocks which are joined together and feel like one block. One side backs onto the main square.



Plate 8: Redford House is a block of houses but its entrances face away from the path.



Plate 9: Tamplin House is a smaller detached block which is joined to Downland street by a small walkway.



Plate 10: Tallis and Turpin Houses form an almost continuous row of houses along a semi-street.



Plate 11: Turpin House.



Plate 12: Warnum House is a smaller detached block which fronts onto a surrounding road.

Westlake, Sloman and Stansbury Houses form the final section of the North Site. Contained within Westlake is the Mozart Estate Office.



Plate 13: Westlake House containing four-bedroomed houses.



Plate 14:The Mozart Estate Office.



Plate 15: Sloman, Selby and Stansbury Houses form a square around a car park and their entrances face away from the square.



Plate 16: Stansbury House.



Plate 17: The playground between Selby house and Severn and Tilleard.

South Site

The South site is the part that includes the Phase Two design modifications. This site can be divided into five sections; a spine of blocks which are all attached and inter accessible; a section to the right of the spine which is on a smaller scale; another spine close to Phase two; Phase Two; and Bannister House which stands almost alone.



Plate 18: Boyce House attached to Farnaby and Grover and the centre of the drug trade on the estate in the past.



Plate 19: Farnaby House a large block which is attached to Boyce and Grover.



Plate 20: Grover House a large block attached to Farnaby House.

Leeve, Lawes, Longhurst and Novello Houses make up the second section of the south part of the estate.



Plate 21: Leeve House a smaller detached block.



Plate 22: Lawes House; a block of houses.



Plate 23: Longhurst House; a smaller attached block which is joined to the central walkway.

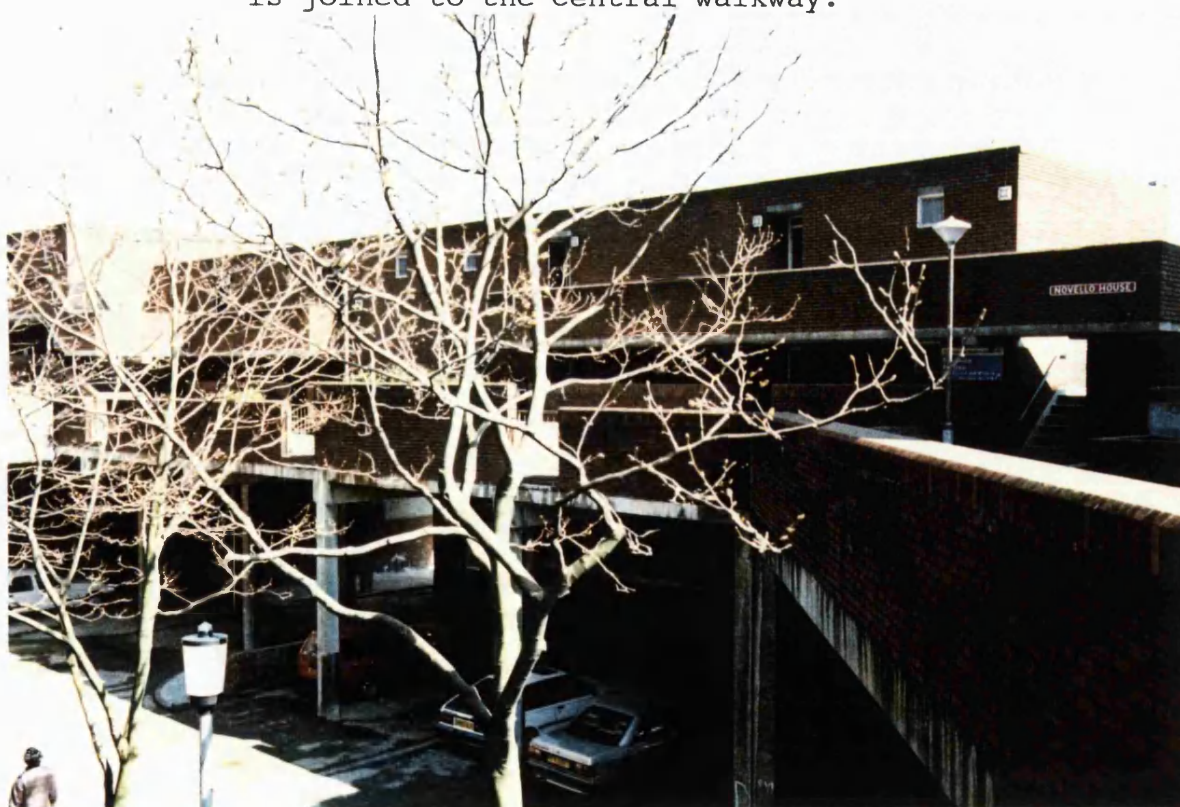


Plate 24: Novello House is attached to the central walkway and has levels which front directly onto the walkway as well as levels below the walkway.



Plate 25: Naylor, Purday and Danby Houses form another spine. Here Naylor house can be seen from the central walkway with Novello on the left. Naylor is a large block.



Plate 26: Purday House is a smaller attached block which fronts onto the walkway.

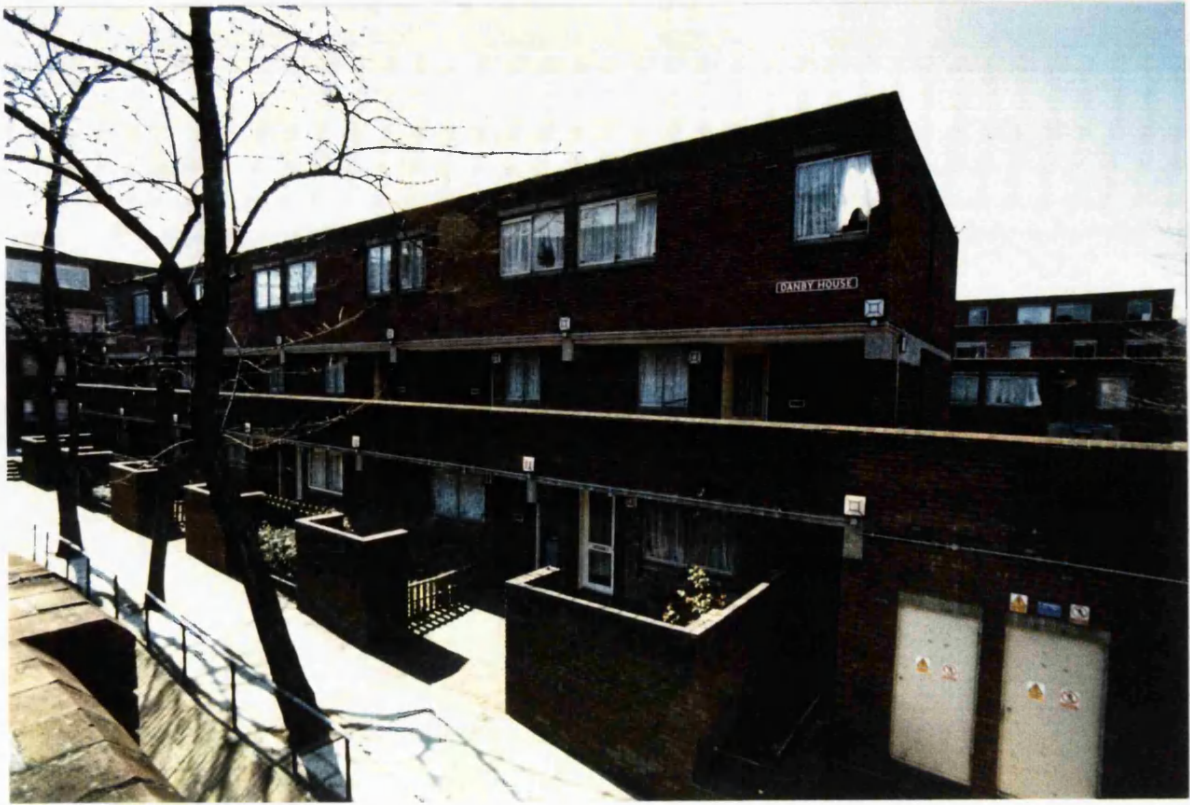


Plate 27: Danby House is a smaller detached block.



Plate 28: Mundy House is situated at the corner of Parry Road where it is possible to enter Phase Two.



Plate 29: Parry Road showing quasi houses that have been created as well as McFarren House.



Plate 30: A new row of houses that have been created along Parry Road.



Plate 31: Bantock House at the end of Parry road.



Plate 32: The Third Avenue Blocks: Batten, Croft, Courtville and Mounsey have been subdivided and new entrances added. This picture shows a new stairwell that has been added.



Plate 33: Bungalows have been built at the front of the blocks in order to increase surveillance.



Plate 34: A new stairwell that has been created between blocks by filling in the gaps.



Plate 35: The back of the stairwell as viewed from Parry Road.



Plate 36: As the blocks have been subdivided the corridors have been shortened and there are now five dwellings per corridor.



Plate 37: Bannister House which is a smaller detached blocks is located at the end of Parry Road but has not been modified as yet.

Westminster City Council were successful in obtaining approval for an Estate Action bid to improve the rest of the estate on 14th March 1994. This programme is scheduled to extend Phase Two type changes to the rest of the estate. The programme is to be spread over 7 years and Bannister, Boyce and Farnaby are earmarked as Phase 3. Each option is considered with the views of the residents firmly in mind. Bannister and Boyce redevelopments will closely mirror Phase 2 but Farnaby as it is larger will be slightly different. In future phases some demolition may be involved but only in agreement with the tenants. It is proposed that housing associations will be involved in the future both by constructing newbuild and managing existing and converted dwellings. The possibility of an Estate Residents Board is being discussed and the scheme includes employment initiatives. The residents effected will be decanted when necessary and offered a range of options.⁷

SNU has produced three reports for Westminster City Council; none of which it has been allowed to publish. The first report was a Post Phase One report. This was produced in response to a report produced by the Bartlett Architectural Unit. Bill Hillier and Alan Penn from the Bartlett were asked to produce a report on the works proposed for the estate by a group of tenants and ward councillors who were critical of the proposals (ie walkway removal). The report argued that enclosing and privatising areas by removing walkways may increase the fear and level of crime, as vulnerability to burglary is decreased by integration and proximity to pedestrian movement.⁸ The report concluded that a further study was needed. Coleman felt that a further report would vindicate her ideas.

It was on this basis that the SNU was employed to carry out a survey of the four blocks affected. This survey was carried out in August 1987. This report concluded that views about the removal of the walkways were evenly divided between tenants who thought that removal had been a good idea and those that were not so sure. 42% felt that it had

been a good idea, 32% did not and 15% felt that there had been no change. Residents of Naylor and Danby who lived on the floors that used to have walkways objected to removal and felt that access had been made worse. The removal of walkways linking Mundy to Naylor and the main system was generally welcomed as was the removal of the high level bridge between Grover and Naylor. Residents were asked to say if removing the walkways to their blocks had improved matters with respect to safety, noise, privacy, fouling, vandalism and community, in terms of friendliness of neighbours. 64% in the blocks affected felt that there had been no change.

For the estate as a whole for the two months prior to removal and the two months after removal allegations of burglary and proven attempted break-ins decreased from 26 to 11. However for the blocks affected alone in the 5 months prior to removal there were no allegations or proven attempts of burglary. In the following five month period there were 6. In terms of assaults and robberies for the estate as a whole the figures actually rose. The SNU did not feel that the removal of the walkways had significantly affected the disadvantage score.

SNU felt that dividing the corridors would have little impact on noise, general nuisance and security as there is a high child/youth density. As residents will have no choice as to those sharing their group problems may be exacerbated in some cases. They felt that friendships between people are encouraged by sharing interests rather than physical proximity. In addition closing off corridors may cause people to use less desirable routes.⁹

DC Atkinson carried out a follow-up survey in August of 1989 to assess whether tenants views had changed since the 1987 SNU study. All tenants resident before March 1986 in the blocks affected were interviewed. The majority of residents felt that removal of walkways had made no difference. Most people felt that there had been little

difference to the the rate of vandalism and 58% felt that there had been no difference to safety within the blocks. Nearly three quarters of respondents cited personal experience of crime. Many have experienced problems of access.¹⁰

The SNU was again employed by Westminster City Council in 1987 to carry out a 100% survey of the residents of the estate. The idea was that this survey in 1987 would provide the basis for future comparative analysis. The survey showed that the estate possessed many of the problems associated with the increasing social polarisation being experienced on many estates. There was no evidence to suggest that the estate was particularly unusual. The burglary rate was average for high risk inner city areas, as identified in the 1984 British Crime survey. Many of the agencies that were consulted felt that the problems of Mozart were typical of and inseparable from the area in which it is situated. SNU believe that the Phase 2 modifications would be unlikely to be successful without lettings being monitored and this would create Phase 2 as a private enclave with little relevance to the rest of the estate. SNU did not apply abuse scores as they found it too difficult to implement and of little relevance but they did correlate a number of design variables with tenant satisfaction and their perception of the problems.

They found that the relationships were not clear cut. Although there was more dissatisfaction in the longer corridors in the larger blocks, these also contain the most overcrowded households with the youngest children on floor levels unsuitable for young families. Problems of crime and fear of crime were not highest in the large blocks. Fear of break ins was highest in those blocks with low disadvantage score. The shorter internal corridors serving only four dwellings had the highest burglary rate of 1:6 compared to 1:18 for the corridors serving 15-18 dwellings. Fear of crime was high on the estate. There was no clear pattern between fear of burglary or experience of

burglary and the design variables. There was for example no significant difference in the burglary rate for free standing blocks and those with one walkway. More pedestrian movement did appear to correspond to a lower burglary rate although no firm conclusions could be drawn. They pointed out that this does not mean that there are not situations where design facilitates crime, it just means that the relationship is not simple. They feel that although the approach promoted in 'Utopia on Trial' stressed the need for imagination and tenant consultation, Colemanism has become more dogmatic and unrestrained and has become allied to the demolition lobby.

An important objective of the survey was to provide a basis for an assessment of the relative impact of the design modifications and the changes made to the delivery of housing services on residents' satisfaction with living on the estate. Westminster City Council have implemented a 'Close to the Customer' initiative which has aimed to increase the importance and the responsibilities of the Estate Manager. He was to become directly responsible for housing management, caretaking and technical staff based in an office on the estate. The aim was to provide a 'one stop' service for residents. Although the housing office for the district was located in Onslow house, in the middle of the estate, it was very crowded, the Mozart team could not sit together and there was no space for private interviews. It was felt that it would be beneficial for the team to move to an estate office in Westlake block. This would mean that residents could drop in and there would be easy access to team members. This move was made in May 1988 and at this time the office consisted of the estate manager, a senior housing assistant as well as two housing assistants, two technical assistants and a team clerk. The seven caretaking staff were based in a garage below Farnaby. The team were all relatively new to the estate as Westminster encourages experience of different estates and they appeared to have been picked to give the scheme the best chance of success. Apart from the lack of rehousing opportunities they felt that the main problems on the

estate were widespread poverty, high rents, lack of security and vandalism. They felt that the design proposals were appropriate and that residents assessment of the housing initiative would depend upon how the repairs were carried out.

A number of improvements were made to the repairs service under Direct Services Organisation (DSO); a plumber and carpenter were designated to the estate for all emergency repairs and these workers visited the Mozart team twice a day to pick up orders. Less urgent repairs were carried out by a general handy person for the estate who was based at the District Works depot. Two electricians were employed on the estate full time. Apart from painting work other work was put out to contract. The two technical assistants were an important asset to the team as they assessed the nature of the repair work and visited residents where the nature of the repair was not clear or where a complaint had been received. Tracking the progress of repairs was not easy as completed repairs were not reported quickly or systematically. They were seeking to rectify this.

Work on voids was dealt with by a separate team from the district office. 1986-1988 the number of voids halved but it is not known whether this was due to more efficient management or reduced opportunities for transfer. Lettings were effectively centralised although the District office had control of individual lettings with the estate manager having some influence on internal transfers. Rent arrears were a significant problem on the estate and rent was collected at the district office.

The upkeep of the communal areas was a major concern of residents. A special effort was made to replace doors and broken equipment for corridors where the entrydoor system worked well. Two painters were appointed to form an anti-graffiti squad but freshly painted areas were often spoiled overnight. The superintendent caretaker was together with his deputy responsible for five caretakers. The estate was notionally divided into 5 sections but in practice because

of leave and weekend working arrangements there was never a full team at any one time. Normally the daily duties of the caretakers were to clean staircases, chute rooms and hopper heads, to clean the green areas and car parks and then to remove bulk rubbish. In practice, especially at weekends, coping with the chute rooms and bulk rubbish took up so much time that other communal areas had to be left. The superintendent felt that he would like to have at least two extra staff solely to clean the internal corridors. The estate manager did not control the estate budget.¹¹

SNU were again commissioned to conduct a 100% resident survey post Phase two in order to provide a comparison. This was produced in May 1993. They identified that since 1988 there had been a number of changes to the Mozart team. Since 1991 the caretaking services have been replaced by four resident Estate Service Officers. One of their main functions is to supervise the various contractors involved in the cleaning and upkeep of the communal areas. Since April 1992 the team has been given responsibility for a further 300 acquired properties in the streets adjacent to the estate. There are now four Housing assistants to manage about 850 dwellings. The Estate Manager is no longer directly responsible for the Technical Assistants. The Estate Surveyor is now responsible for day to day repairs and maintenance and any capital programmes on the estate. Although centrally based this person works very closely with the Estate Manager and the Mozart team. DSO was dissolved in May 1992. It is possible that prior to this the repair service improved, but it was probably too costly. Recently there has been a tightening of costs centrally and housing assistants cannot issue work orders any longer, this has increased the workloads of the Technical Assistants and thus they have become less accessible to residents. On a more positive note the designation of an Estate Surveyor to the team has, together with increased flexibility in budgetary arrangements, allowed the beginnings of a more strategic repair and maintenance policy to develop.

There were a number of problems with the caretaking service prior to the appointment of the Estate Services Officers in 1991. There was never a full team at any one time and they were unable to provide adequate 24 hour cover as they did not have phones. The Estate Service Officers were intended to present a customer friendly profile, to provide help in emergencies and to have a general remit for the upkeep of the appearance of the estate's communal areas. Their functions include monitoring the various contractors responsible for cleaning and maintenance, dealing with abandoned vehicles, dealing with minor repairs, accompanied viewings and providing the first point of contact in an emergency. The cleaning contractors' supervisor is based on the estate and the estate is cleaned seven days a week.

There has been an additional programme, apart from Phase Two, which has involved retiling of floors, repainting of the walls and ceilings with anti-graffiti paint, new lighting in the corridors and stairwells and repainting of communal and entrance doors to each dwelling. This programme was scheduled to include the whole of the estate including Phase Two. This programme has now been terminated in view of the expected Phase Three works. It involved Sloman in 1992 and Batten, Croft, Courtville, Mounsey, Onslow, Tolhurst and Naylor early-mid 1993 and Grover, Romer, Quilter, Selby and Stansbury in late 1993/ early 1994.

The report also made a number of other important findings. The population of Mozart Estate had grown by approximately 330 since 1987/88. Two thirds of this increase was accounted for by residents aged under 16. This group represented almost 40% of the estate's population. The proportion of households with at least one child under 10 has increased from 39% to 48%. Despite this increase in population overcrowding has fallen from 23% to 19%. Although this has not been uniform throughout the estate: in the largest blocks overcrowding has risen from 13% to 19%, in Phase Two blocks it has fallen from 16% to 11%.

Between 1988 and 1992 there has been a turnover in voids equivalent to over half the dwellings on the estate and the actual proportion of households resident for less than five years has increased from 33% to 45%. The highest turnover has been in the largest blocks and the lowest turnover in the small detached blocks and in Phase Two. The majority of new households to the estate are categorised as 'homeless'. Just over half the respondents are trying to move, 63% are trying to move in the large blocks. The main change in the ethnicity of the residents of Mozart has been an increase in the proportion of black Asian households from 6% to 12%. The lowest proportion of white households is in the large blocks. Only a quarter of respondents in Naylor were white. The blocks with the highest proportion of white respondents are the houses (45%) and the detached blocks (44%). The majority of households are on low incomes. Only 9% had an income of more than £12000 and only 25% aged 16-60 were in full-time employment.

Excluding Phase Two the proportion of residents satisfied with living on the estate has declined from 37% 1987/88 to 33% in 1992. In the large blocks the proportion has fallen from 28% to 19%. The largest rise has been in Parry Road and Third Avenue where satisfaction levels are 86% and 81% respectively. The majority of residents are concerned with safety and security, nuisance and anti-social behaviour. They also see the lack of safe play areas, disturbances from teenagers and youths and drug dealing and abuse as some of the biggest problems.

When asked about relations with neighbours Phase two did not stand out from the other block types with 89% chatting to a few neighbours (at least) compared to 91% for detached, 100% for houses, 88% for attached and 63% for large. When asked if they would recognise most people who live on their floor or their part of the street 92% in Phase 2, 88% in attached, 91% in houses, 84% in attached and 75% in large blocks said yes.

If Phase Two is excluded concern about burglary has changed

little, from 73% to 71%. In Phase two concern amongst women respondents has fallen from 77% to 56%. This decrease in concern is despite a considerable increase in successful burglaries. The burglary rate has increased from 1:14(the 1984 average for poorest council estates) to 1:7. The average for poorest council estate in 1991 was estimated at 1:12. The burglary rate in Phase two is twice this rate at 1:6. With the Third Avenue blocks having a rate of 1:5 which has increased from 1:13. The decrease in concern about burglary within these blocks may possibly be explained by a 63% decrease in incidents of damage and defacement to the outside of dwellings. In comparison the decrease on the rest of the estate was only 15%. Concern about crime against the person has fallen a little since 1987/88 from 73% of women respondents to 67%. In Phase Two concern amongst women has fallen from 70% to 66%. Concern has fallen in all but the large blocks where concern remains at 80%. A significant difference between the areas north and south of Dart Street has developed. In 1987 61% of all respondents on the north site worried about personal crime in 1992 this has dropped to 52%, in the South site concern has risen from 64% in 1987 to 66% in 1992. For those on South site but not in Phase Two the proportion of residents who worry is now 74%. For Naylor, Farnaby and Boyce the figure is 79% while for the large blocks in the North site the figure expressing concern is 61% the average for the whole estate. In the large blocks the main areas of concern were the staircases, lifts and internal corridors. Elsewhere on the estate the main areas of concern are around the Royal Lancer pub, on or beneath the main walkway between Naylor and Grover, on the bridge over Dart Street, in the shopping precinct area and in the garage areas below. There appears to be some degree of concern anywhere near the larger blocks. Concern around Phase Two was not high in 1987 and has been reduced since improvement. 77% of incidents involving thefts, robberies or assaults occurring on the estate happened to residents of the South site; almost half living in Grover. 55% of incidents involving insults, threats, harassment or being followed occurred in the South site. Autocrime rates have changed little in both

surveys there were approximately 140 incidents to 140 vehicles during both time periods. Involvement in the Tenants Association remains low with 10% saying they are heavily or reasonably involved. 22% of those who know of the Tenants Association believe it represents the views of the residents. Most parts of the estate appear to be represented.

SNU have assessed the effects of design modifications on the manageability of Phase Two. There has been a significant improvement in tenant satisfaction in these blocks increasing from 37% in 1988 to 74% in 1992. The greatest improvements have been in Parry road and Third Avenue. There has been little significant change in Mounsey, McFarren and Bantock although satisfaction levels remain below that of other detached blocks on the estate. The main benefits for residents appear to be a more attractive environment, improved relations with neighbours, a reduction in noise and anti-social behaviour, removal of problems associated with internal corridors and a reduction in concern about break ins. The design modifications were considered by residents to be most successful in terms of making dwellings feel safer/more secure (74%), making the inside of the block feel safer (69%) and improving cleaning and maintenance (69%). The modifications have been less successful in reducing problems of noise from neighbours (35%), making the block friendlier (52%) and encouraging residents to stay (54%). Residents feel that the installation of entryphones would lead to an improvement. Concern was expressed about the removal of the play area. Despite these improvements it is not clear whether there will be any marked long term effect on turnover, particularly among residents living on the first and second floors of Third Avenue blocks. Here almost half of respondents are trying to move, this was about average for the whole estate. On the whole those trying to move has reduced from 40% in 1987 to 37% in 1992. Almost half of the respondents from Third Avenue are trying to move compared to 25% for the rest of Phase 2. The average for the whole estate is 51%. The problems of internal corridors that have

been solved by modification would seem to account for increases in satisfaction.

SNU feel that reductions in concern about burglary can be attributed to the design modifications but the increases in burglary have wider causes. It remains to be seen whether these changes can be sustained. The financial cost of design modification has been considerable. The cost to date was £4.2 million, about £28000 per dwelling. The final cost has not been determined. The annual unsubsidised loan payment has been calculated at £720000 for 20 years. After subsidy and less the rental income from the new dwellings the net annual revenue cost is approximately £176000 for 20 years. No significant savings were identified in terms of fewer communal repairs, reduced void servicing charges, reduced turnover, reduced repair and maintenance expenditure or reduced cleaning costs.

SNU feel that it is too soon to assess whether the new arrangements will have any effect on social cohesion. The decrease in levels of damage to communal areas is encouraging, but the steep rise in burglary is not. The concern is that the residents' positive response to the improvements may not outlast wear and tear or the reemergence of problems caused by children and young people. Residents do appear to feel safer despite the segregation and burglary has risen throughout the estate. There seems to be no evidence as to whether the design changes have affected behaviour and this forms an unsound basis upon which to formulate extensive changes to the rest of the estate.

SNU also looked at the respective roles of design modification and housing management. They felt that design modification is not necessarily a less expensive alternative to housing management innovation and is not necessarily a substitute for effective housing management arrangements. The physical, social and management contexts of design modification need to be appreciated in order to assess the success of such modifications. On council

estates with high proportions of residents on low incomes and a large mixed transient population there are limits to what an estate based improvement strategy can achieve. They may be able to make a difficult situation more manageable. It is extremely unlikely that design modification throughout the estate will significantly reduce the problems caused by high numbers of children and young people on the estate. The management on the estate does not appear to adhere to the PEP model but it does appear to be very efficient and has the potential to move towards a PEP model. This move would be facilitated by introducing a tenant participation and community development initiative with a particular emphasis upon provision for children and young people.¹²

The Department of Environment have considered these reports when assessing the Estate Action bid on the estate and decided that it was still appropriate to grant funding. They carried out no assessment of their own.

Turning to the results from this study; the estate as a whole has a threatening air about it. This may be a product of the layout which is multi-level and has many changes in form. In general the estate is not unpleasant, there is little litter and much of it is well cared for. There is some vandalism and graffiti but not an inordinate amount. The Phase Two blocks appear to be successful; they are very clean and people have begun to customise their environments with doormats and plants. There is little vandalism, graffiti and excrement. This may be a product of the fact that the 'improvements' are well established. It may of course be a reflection of the fact that the estate is cleaned each day by a team of 8 cleaners working until lunchtime.

The recently exposed 'Homes for votes' scandal may also have some bearing on the way that the introduction of the improvements is viewed.

The Housing Officers believe that there is a general feeling that the problems of the estate have improved since the mid-1980's. The Estate Officer feels that the estate has many problems and that these cannot all be solved by design. He feels that the root of the problem is economic. Coleman should be mixed with on the ground experience and the outcome should not be purely design led. The estate has large numbers of children: 40% of residents are under 16. In addition the estate is predominantly Afro-caribbean/Asian/ African accounting for 65% with 35% white. There are 12% Bengalis and they feel isolated and there are a number of racial problems. The estate office does not at present control allocations and they feel that they should and that allocations policy should be looked at carefully.

Barry the caretaker lives on site. He feels that the allocations policy is the most important factor in improving the estate. Mozart has been seen as a sink estate where the homeless, ex-offenders and ex-policemen are housed. The estate has a large drug problem which has recently manifested itself in a number of petrol bomb attacks. The caretaker felt that Third Avenue had been a success, indeed he lives in this part of the estate. He identifies the interconnectivity of the blocks as a contributory factor to the estate's problems.



Plate 38: A flat in Boyce House that has been petrol bombed.



Plate 39: The door from the inside; the whole corridor was blackened in the blaze.

The Estate Surveyor felt that the effects of the refurbishment were initially good. Parry Road was considered to be highly successful and its success continues. In Third Avenue vandalism, particularly with respect to the glass in the entrances, continues to be a problem. There is a feeling that entryphones would help to solve this problem.

The Sector Inspector from Harrow Road Police Station clearly stated that 'We do not feel that the estate is our biggest problem'. They do not deny that the estate did have a major drugs problem, which became uncontrollable in

summer 1992, but they feel that this problem was largely solved by an undercover drugs bust, Operation Trudos in May 1993, which centred on The Royal Lancer Pub opposite Boyce House. There are still some muggings and burglaries but not on previous scales. The stairwells are the most dangerous areas for mugging as people are followed home. The underground parking areas and garages are a haven for storing stolen cars. Although the estate is no longer seen as a major problem they do acknowledge that it does need improving.

The estate is policed by Harrow Road Police Station. This station converted to Sector Policing on 31/4/93. This has meant that although there are no more officers two 'spare' shifts have been created. This means that the officers on these shifts do not have to answer calls and they are able to be pro-active in beginning schemes and visiting residents. The area policed by Harrow Road is split into three sectors and each sector is split into 6 sub-sectors; there is one team per sub-sector. Mozart Estate is one sub-sector within the Queens Park sector. There are 5-8 PC's which are dedicated to the Mozart Estate.

To ease relations between residents and police the Queens Park sector have set up a Sector working group which meets bimonthly. Representatives from all groups that are involved with the local estates are invited, this includes voluntary groups, housing officers councillors and MP's as well as the local policemen. The meeting discusses anything that is felt to be relevant and the police explain the way they are working.

The police opened up a sub-police station on 2/3/94 on the corner of Lancefield street, on the edge of the estate in order to increase police presence and to decrease the fears of the local residents. The office is open Sunday to Thursday 10 am. to 12 pm. and additionally on Tuesday it is open from 6 pm. to 8 pm. This office performs all the functions of a normal police station accepting that prisoners are not held there. The office is intended for

the whole of the sector, not just the estate, but it is also hoped that it will act as a deterrent to the return of drug dealing which was prevalent opposite; underneath Boyce House. At the present time they are receiving about 5-10 callers per 2 hour shift for a variety of reasons and are assessing whether it would be worthwhile to open the office longer hours.

The Mozart police seem to look upon sector policing positively and have been pro-active within the community. They have a lot of support from the council and local community groups. The Sector Inspector and the Sub-Sector Sergeant have worked hard to ensure good relations. One of the Mozart officers said that the inspector had announced that the Queens Park sector now has the lowest crime rate at the station, it is lower than the other two sectors added together.

In addition there has been a Westminster Crime Prevention initiative which has involved better lighting and closed circuit cameras in high risk zones, increased security for houses as well as the circulation of leaflets on personal safety, home security and bogus callers. The scheme has also included pub and vehicle watch, citizens' task force and a focus on schools to discourage youngsters from offending.¹³



Plate 40: The Royal Lancer Public House opposite Boyce House the control room of Operation Trudos.



Plate 41: The Queens Park Police Office in Mozart Street opposite Boyce House.

For the main part the views of the tenants have been taken account of by consulting with the Tenants Association. The chairman of the Tenants Association Muriel Agnew herself lives in one of the Phase Two blocks. There is a general feeling that the scheme has been successful. However the tenants do not feel they have been properly consulted, particularly in relation to the Estate Action bid. They feel that they always had to ask what was going on and that at meetings opinions were not asked for but that theories were merely explained. The general opinion is that the changes are necessary and that a rolling programme is the way it should be approached. Some reservation was expressed about problems with continuity which may subsequently arise. They feel that the problems of the estate are also contributed to by the way the media has treated the estate and the nature of allocations policy. The Tenants Association supported the Phase Two works but there was, briefly, a group of tenants who opposed these changes and who called in UCL to help support their claims.

The case officer from the Planning department involved with

Phase Two believed that the scheme had been a success. There was no opposition at the time to granting planning permission. There were no reservations expressed in the committee report or in the minutes of the committee meeting itself. The planning department has not at present been consulted regarding the further phases of development.

The Architectural Liaison Officer for the area was not consulted about the Phase Two works. He had not seen a copy of the SNU report and was at present happy with progress on the next phases. He considered that there were three levels to his involvement: firstly Estate Action bids have to have crime statistics input and this is ongoing; secondly he has been consulted at every stage giving his views about the proposed layout; thirdly it is his job to listen to tenant's views and thus to assess policing levels.

To summarise although the estate has a number of problems they do not seem to be much different from those experienced elsewhere. In general the Phase Two works are considered to be a success. The following section will examine whether these opinions are borne out by other statistical indicators.

In September 1988 15 properties had been sold under RTB, by October 1993 this number had increased to 65. This seems to suggest that there is some degree of satisfaction with the estate.

There has been no reduction in the number of voids since refurbishment. In 1988 there were 72 voids this increased to 79 in 1989, decreasing to 64 in 1990, rising to 80 in 1991 and 91 in 1992. Between 1986 and 1993 there was a turnover equivalent to 55% of the estate's dwellings. This would suggest that there is a degree of dissatisfaction on the estate. However in April 1983 56% of tenants were registered for a transfer and this has reduced to 29% in October 1993. This is opposed to 12% for local authority stock as a whole in October 1993. This would seem to

suggest that although satisfaction has increased on the estate that the estate is still worse than average for the borough. No dwellings are classified as difficult to let as pressure for suitable accommodation means occupation levels are high despite the estate's problems and reputation.

In 1981 42% of the population was under 19 and 67% of households on the estate contained children. There was little change in 1993. Similarly the ethnic composition of the estate has remained stable with 35% white and 40% black non-asian. Although there has been an increase in Asians from 6% to 12% 1988-1992. There has been a reduction in the number of tenants resident for more than five years from 64% in 1988 to 54% in 1993. The 1993 Borough average was 75%. This suggests that the Mozart population is transient. In October 1993 25% of residents were registered as unemployed but only 25% were in full time employment. In addition 65% were claiming housing benefit. This suggests that there is a large amount of deprivation on the estate.

In October 1993 47% of tenants were in rent arrears compared to 38% for the borough.

In October 1993 the annual management costs per dwelling stood at £870 and the annual repair and maintenance costs per dwelling stood at £530.

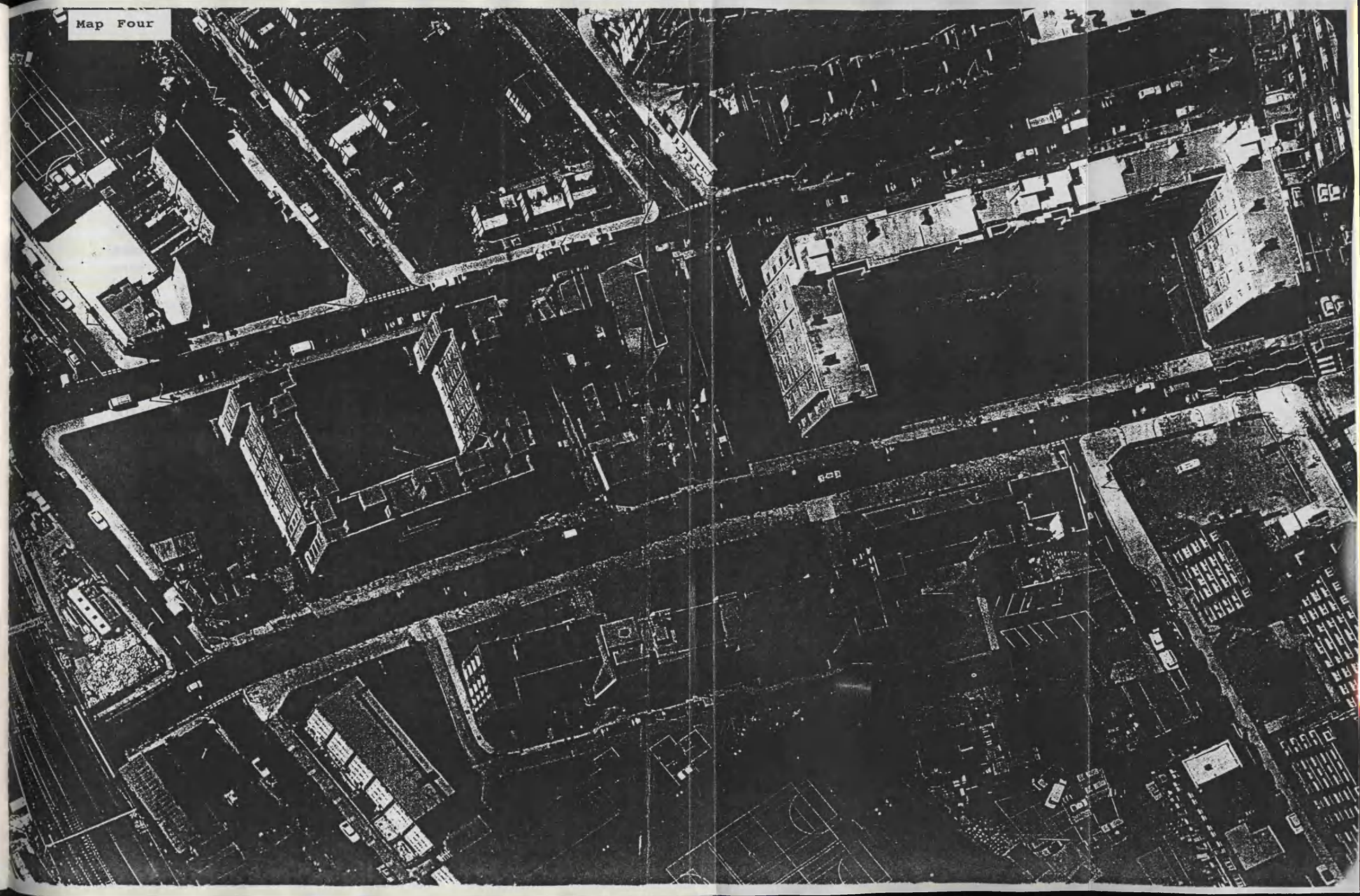
It is not clear from looking at these indicators whether the estate has improved over the time period 1988-1993. The number of voids have increased but the number of tenants registered for a transfer has decreased. In contrast there has been a reduction in the % of residents living on the estate for more than five years. There has been an increase in the number of properties sold under Right to Buy.¹⁴

Map Three



Rogers estate is outlined in red.

Map Four



Rogers Estate is situated in the Globe Town Neighbourhood of Tower Hamlets, near to the Roman Road and the Central Line tube station. It is much smaller than Mozart Estate. Built in 1949 it consists of two five storeyed blocks; one containing 50 flats and the other 70. The blocks had balcony access with entrances on each corner and in the middle of the long side. The blocks each formed a squared semi-circle around a grassed area which was not well cared for. The entrances were doorless apertures leading into dark dog-leg holes and the stairs and lifts could not be seen at first. Children travelled to school through the estate and there was a large number of incidences of anti-social behaviour. The estate has a high proportion of Bengali residents.

In response to an invitation from the Globe Town Neighbourhood, the DICE team and representatives from the DOE visited various estates in April 1989, after which Rogers was nominated as a suitable DICE candidate by the DOE. The go ahead was announced in October 1990. Stage 1 of the project was a survey by the DICE team and the preparation of a design disadvantage report. Sixteen specific variables were observed.¹⁵ DICE found that the variables for dwellings per block and per entrance were breached as was the number of interconnecting exits and the number of dwellings per corridor. In addition the blocks had doorless communal entrances and individual entrances with no front gardens. Although there was only one block per site there were multiple access points. The south block was found to have a disadvantage score of 11 and the north block 12. A score of 11 places it in the 20% worst designed of those surveyed and a score of 12 comes into the 10% bracket. The average of 11.5 is among the 15% worst. Abuse scores were also calculated and in the south block it was 11 and in the north 13.7.¹⁶

Following the production of the report a series of meetings were established with the tenants, approximately 20 being invited to each group meeting. Response was good and all

ethnic groups attended with interpreters being available where necessary. Professor Coleman outlined her principles and the results of the survey and tenants were invited to comment. Further consultations were held after three dimensional models had been produced. This was followed by a door to door survey by the Estate Management Team so that each tenant could be consulted individually and could vote on the initial proposals in principle. In the event of a no vote the scheme would have been dropped. The result was 73% in favour, 19% against, 2% Didn't know and 6% did not vote. The Estate Management team invited tenant volunteers to form a project liaison group which would continue to represent the tenant's views in the development of the project. They met monthly and their contribution was passed on via the Estate Team's Project Leader. A committee report was submitted to the Standing Neighbourhood Committee in September 1989 seeking to proceed to feasibility study and design stage of the project. Following the approval of the committee a design team was set up comprising of the Property Services Section and consultants Mitchell McFarland & Partners.¹⁷

DICE thus proposed solutions to the problems. It was proposed that the ground floor flats be turned around so that they had front gardens that fronted onto the road and back gardens. Thus the communal space within the blocks was used up. The ground floor flats were given new porches and a slight extension to their living rooms to allow for surveillance. Thus the opportunities for short cuts were eliminated and resident anonymity was reduced by lowering the numbers using one entrance. To reduce this further the blocks have been vertically partitioned and the balconies split up by extending bedrooms onto them or removing sections of them. The south block has had two new staircases added, with modifications to the other four and a net gain of one lift. In the north block there are seven new staircases, modifications to three existing staircases, three new lifts and two refurbished lifts. Lifts are located close to the staircase and have glazed doors to

allow surveillance. Generally speaking they only serve the third and fourth floors. The theory is that a community atmosphere will be fostered and that strangers will be readily identifiable. Entrances have been orientated towards the roads in order to deter criminals. The spaces outside the entrances have been fenced off and within them are refuse cupboards and in some cases parking spaces. The north block has had a terrace of eight bungalows built along the Globe road frontage in order to fence off the gardens. A pitched roof has been put on in order to eliminate the problems of the flat roof. A new road has been built to connect Globe road and Sceptre Road so that the entrances could open onto a through road. Unfortunately Highway restrictions have prevented this road from becoming a through road.¹⁸ The project was begun in 1991 and was finished in February 1993. The improvements to the physical appearance are startling but there is still a large amount of vandalism and social abuse. The DICE team have recently conducted a follow up survey of tenants.

The pictorial survey which follows aims to show what the estate was like both before and after the design changes.

South Block

This block is the smaller of the two blocks and the major changes here have been to convert ground floor flats into quasi houses with front and back gardens. The communal grass area now forms a parking forecourt and the area that the quasi houses front onto. The blocks have been subdivided and new entrances built. Extra bedrooms have been built onto the balconies in order to restrict access.



Plate 42: These two photographs show the block as viewed from Sceptre Road prior to refurbishment.



Plate 43: The block post-refurbishment from Sceptre road showing the parking forecourt the quasi houses and extra room.



Plate 44: A view of a balcony at present and an extended room.



Plate 45: The block as viewed from Globe Road.



Plate 46: Another view from Globe Road showing a new entrance and the proximity to a public house.



Plate 47: The corner of the block is marked by a piece of waste ground which is used for horseriding. To get from the front of the block to the back of the block it is now necessary to walk around this piece of waste ground around the corner and past the pub.

North Block

This block is the larger of the two blocks. The main changes to this block have been to convert ground floor dwellings into quasi-houses which front onto a newly created access road or Sceptre Road. These quasi houses

have both front and back gardens. Their back gardens have been created from what was a communal grassed area in the centre of the blocks. Across the open end of this U shaped block a row of Bungalows has been created. Blocks have been subdivided and new entrances created as well as parts of the balconies removed to restrict access.



Plate 48: The two blocks are separated by a row of shops.

The three photographs that follow show the block as viewed from Globe Road prior to refurbishment.



Plate 49



Plate 50



Plate 51



Plate 52: A view of the block prior to refurbishment from Sceptre Road.



Plate 53: Post refurbishment a view from Globe Road showing the newly created stairwell and bungalows.



Plate 54: A new stair tower and part of the access road that had to remain a cul-de-sac.



Plate 55: A view from Sceptre road showing the new access road by the side of the block and the shops as well as the Quasi Houses and new entrance.



Plate 56: These new entrances are of two types; small and large both of which are displayed here.



Plate 57: The front of the block on Sceptre Road where the main entrance was situated previously.



Plate 58: The Fountain Public House opposite the north block next to the neighbouring estate.

It should be noted that the post refurbishment photographs were taken when the new entrances were being installed in order to receive entryphones and reduce the amount of glazing to be vandalised. The previous entrances contained more glazing.

The management of the estate has remained largely the same. The Estate Office has moved off the estate but is in a neighbouring street. The housing function is completely decentralised, however the lettings are controlled by the lettings section in the Neighbourhood Office which is also very close to the estate. The Housing Office deals with voids. There is a team of caretakers who clean the estate once a week and report maintenance that is needed. The Estate Officer also patrols the estate periodically looking for jobs that need doing. There is a move at present to employ a caretaker for 20 hours a week to clean more thoroughly. It is hoped that this will be instituted by May. In addition with the cooperation of Coleman entryphones have been introduced onto the estate using DOE funding and it is anticipated that their installation will be completed by May. The Estate Officer would like to see railings or a barrier put up along the front walls in order to ameliorate the problem of low walls. They are hoping to receive DOE funding for this too.

Tony Babbage writes in Housing and Planning Review, that the scheme is felt by most to be successful although there have been problems of vandalism which can be attributed to the lack of controlled access.¹⁸

East London has also been identified as a special case as there used to be a highly articulated network of kinship relations which acted as a welfare state. This was accompanied by a sense of family, community and class solidarity. It is probable that this still exists in some cases particularly among the older residents.²⁰

The estate is policed under a system of sector policing

which was introduced on 12/10/92. Previously the estate was policed by four teams consisting of up to 25 PCs, 3 sergeants and an inspector. These teams worked a four week shift cycle. This team was supplemented by a community policeman who was a permanent beat officer who worked mainly day shifts. His remit was to familiarise himself with the locals and he would cover a specific area. The Rogers community policeman runs the youth club and visits residents and rarely arrests anyone. His role has changed little under the new regime. Since October 1992 the number of officers has remained the same but they have split into six teams in order to meet the demand. More of them now work in the day. One week one team is on the day shift and they get more involved with the community. The idea is to give each sector a smaller area and to allow them to become more familiar with the locals, in reality it seems that they have become spread even more thinly. There is little positive feeling among the policeman in this area towards sector policing.

The scheme looks great from the outside and appears to be successful. Upon entering the flats it is obvious to see that the scheme has problems. There are large amounts of litter, urine, faeces, vandalism and a certain amount of graffiti. It seems that the flats have been refurbished not in accordance with common sense or by taking notice of local conditions but with the objective of purely reducing the disadvantage score. There are often people leaning out of windows on the neighbouring estate and talking to neighbours and generally looking around this is something which is rarely witnessed on Rogers Estate.

The housing officers feel that the scheme has not been a success. Vandalism has been identified as the primary problem along with urine pollution, littering and the dumping of rubbish. They feel that a number of the fittings that have been specified are easy to vandalise, especially the light fittings. A major problem is that the new rubber flooring cannot be cleaned with water and the substance which can be used is expensive. The ceilings are low and

the lights are easy to reach. The dry riser doors and glass lobbies are also easy targets. The frames are easy to bend and the glazing is very expensive. The refurbished entrance areas with tiled floors and wide window sills have provided a welcoming and warm area for tramps to sleep in. The entrance halls are also used by children from local schools to eat their chips at lunch time. The lifts have been badly vandalised. None of them were working the first time that the officers were interviewed. It is easy to enter the lift mechanics as all that is needed is a FB key, and these are widely available. Even the people who have gained gardens are not happy as they have not been dug up properly and people who live on upper floors throw rubbish over the balconies. They have received complaints of isolation as it is more difficult to visit neighbours now. They feel that the designs were not thought through completely. The fact that there are some corridors with only two dwellings has meant that people have taken matters into their own hands by putting locks on the external doors and adding security to their front doors. They also question the removal of the children's play area. They feel that if the estate stays as it is then there will be more problems. The feeling is that although the estate looks good there are still a number of problems. The walls are too low and upper floor tenants have gained little benefits. There is still a large problem with the dumping of rubbish. In addition there have been no internal improvements. There is a strong feeling that the scheme would benefit from the introduction of security entry phones. The housing office feel that although the tenants were consulted their views were not really accounted for. The tenants did not like what was proposed but there was a general feeling that they wanted something to be done. They could not think of anyone who was pleased with the changes excepting the bungalow dwellers.

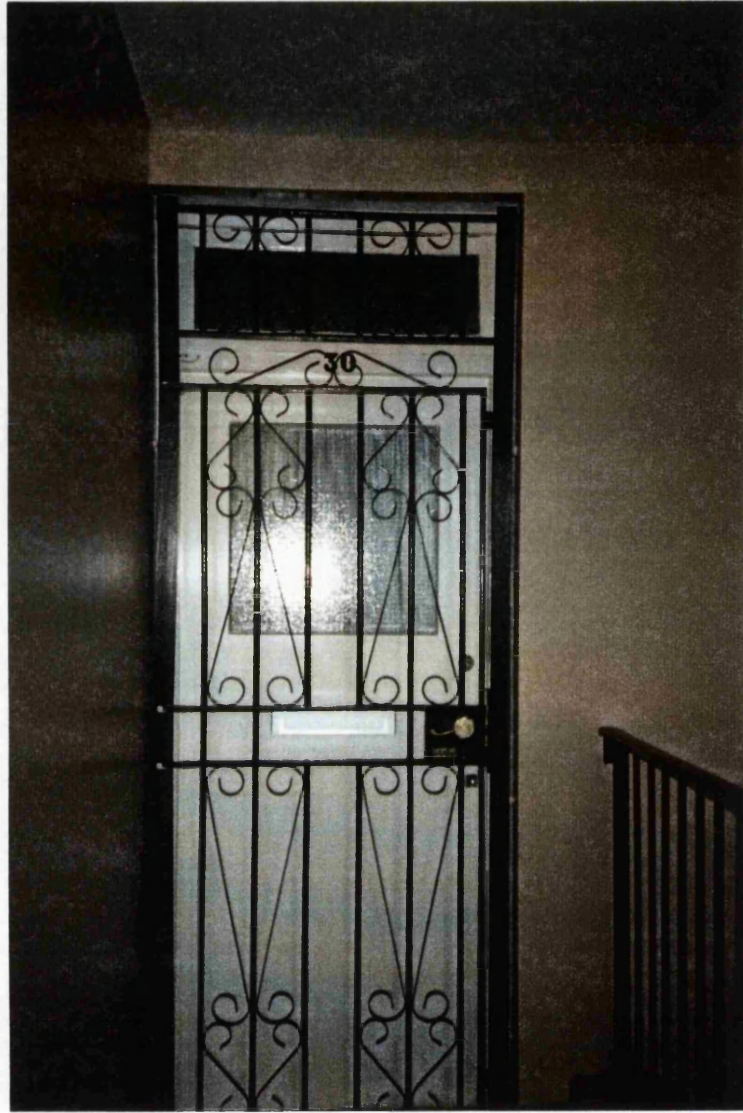


Plate 59: Increased security introduced by residents.

These next two photographs illustrate the problems of dumped rubbish that are experienced on the estate.

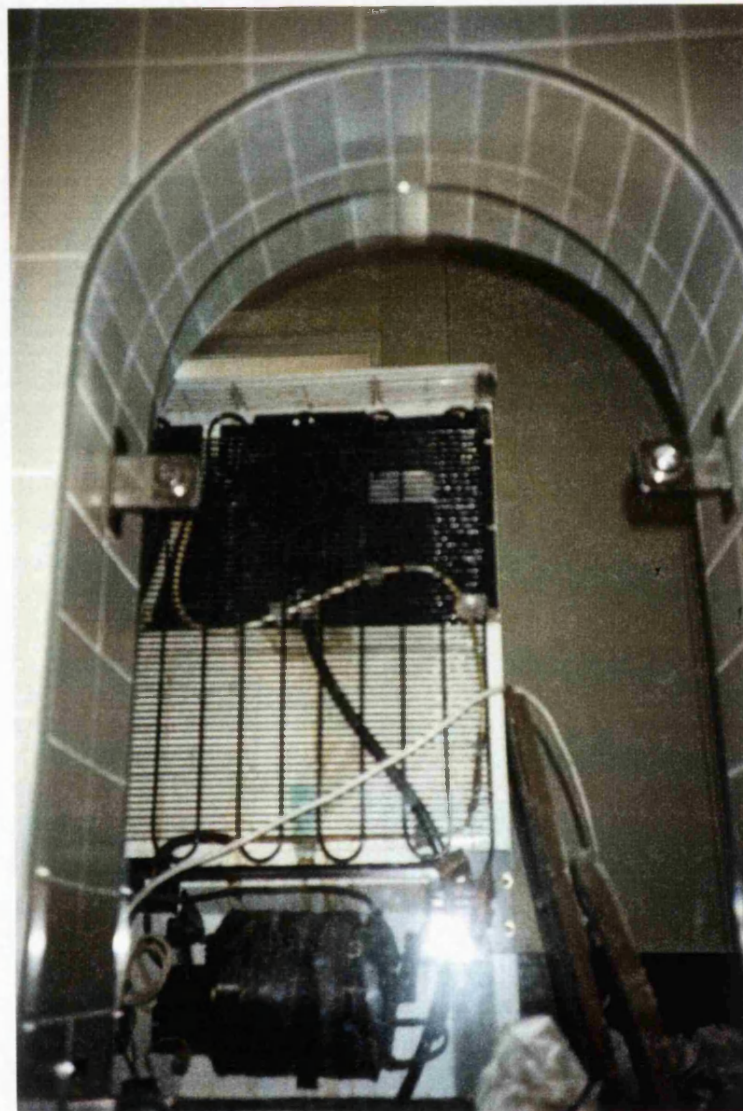


Plate 60



Plate 61

These next two photographs illustrate problems experienced with broken glazing. The second may be attributed to bad design.



Plate 62



Plate 63

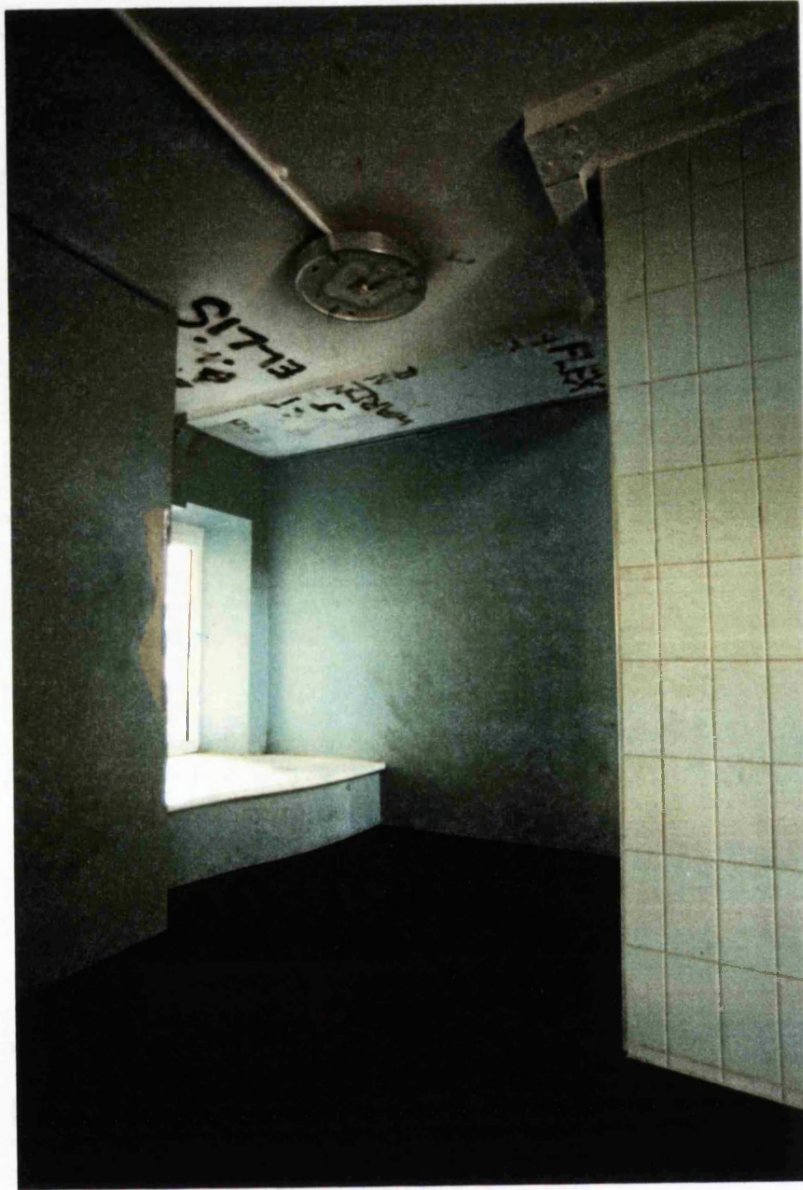


Plate 64

This photograph illustrates many types of abuse that are commonly experienced on Rogers; building damage, vandalism and graffiti. It is also easy to see how dirty the block is generally.

The case officer, from the planning department who dealt with the application has now left. Talking to the planners at the Globe Town Neighbourhood office it appears that there were no real planning reasons for refusal as the estate is not in a conservation area. There was also a certain amount of political pressure, the scheme was seen

to constitute good publicity and the councillors were pleased that money was being spent on the estate. The committee report recommended acceptance with no reservations.

The Police explained that at first there were problems with large letterboxes on the porches of ground floor quasi houses. This meant that the properties were easy to burgle as people could put their hands in and open the doors. The community policeman felt that through movement would be better than segregation and that the children need somewhere to play. He felt that Coleman's ideas were suitable for middle class people but were not appropriate for working class areas. The police identify a large number of problems on the estate including drug abuse and prostitution as well as related crimes. There was no Architectural Liaison Officer assigned to the borough at the time and the Crime Prevention office at Bethnal Green police station were not consulted about the plans for design changes.

The surveyor who was in charge of the project felt that the scheme had been successful for the most part although he felt that its success would be increased by introducing entryphones.

The architects had complete control over the specification of materials. The architect felt that the scheme had been successful although it could be more effective with entryphones.

The views of tenants have mostly been obtained by attending the DICE surgery on the estate which was intended to canvas opinion about the scheme. The overwhelming opinion was that the tenants would have preferred to have had entryphones. Many others felt that they were now isolated and could not visit friends and did not feel safe. The ground floor residents still experienced trespass in both front and back gardens as the walls were not considered to be high enough.

Ground floor dwellers also experienced problems with litter being thrown into their back gardens. Reservations were also expressed about the removal of the play area. Other problems that were commonly cited were the problems of loitering youngsters on external walls and stairwells and the general state of repair of the lifts and stairwells. At this surgery Professor Coleman was present to answer questions. She constantly blamed others for the problems that existed on the estate. She admitted that the walls were probably too low and that entryphones may have been appropriate. However she was quick to blame the estate's problems on the fact that two generations of children had grown up on the estate since it was completed 47 years ago and that their attitudes could not change overnight.

I was a witness to another event on the estate, A women was talking to an old friend who used to be a neighbour on one of the balconies. As the women find it too hard to climb down one set of stairs and up another flight of stairs they are forced to chat leaning around one of the extra bedrooms that have been built out onto the balconies in order to segregate the blocks. These two elderly women are no longer able to support each other. In addition there has been a lift provided for no. 60 and not for no. 64 where there are more dwellings. The women were aggrieved that nothing had been done to the inside of the properties. At number 60 the original bath remains!

It seems that the estate is considered to be a success in visual terms but levels of abuse still remain high. In addition tenant satisfaction has not significantly improved. The indicators that are presented below are intended to clarify the situation.

Since refurbishment the number of properties sold under right to buy has increased from 3 in 1989 (all north block) to 4 in 1993 (the extra one being in South Block). This does not seem to be a large number but this may be a reflection of economic conditions and the fact that the improvements have not been finished that long. There

appears to have been an increase in the number of vacant properties; in November 1989 there was 1 vacant property, in December 1993 there were 8 vacant properties. Between November 1988 and November 1989 9 properties became vacant. Between February 1993 and February 1994 11 properties became vacant. In 1989 the average period to relet dwellings was 10.85 weeks, in 1993 it had reduced to 7 weeks. Thus the number of voids appears to have increased but the turnaround period has decreased. The annual turnover has increased from 7.5% in 1989 to 8.6% in 1993.

In 1989 the estate was not classified as 'difficult to let' as the borough does not classify its stock in this way. However the comments of Globe Town's principal lettings officer, John Harkin suggests that Rogers exhibited many of the characteristics associated with the phrase:

Although not officially classified as low demand, Rogers Estate has in the past proved difficult to let amongst higher priority applicants. As a result, offers have tended to be made to applicants on lower priorities, and to homeless families, who are only entitled to one offer of accommodation.

Mr Harkin's comments at present indicate that the estate is no longer difficult to let although there are rarely specific requests to move onto the estate. For the most part tenants wishing to move are requesting more bedrooms or a flat nearer to the ground floor. In November 1989 there were 50 (42%) live applications to transfer off the estate. In February 1994 this number had reduced to 34 (27%). It seems that although the number of voids has increased satisfaction has increased on the estate.

In 1989 there were 147 children (ie < 17) on the estate as compared to 221 adults and 49.5% of households contained children. The ethnic composition of the estate was 61% White British and 21% Bengali.

Unfortunately it has not been possible to obtain comparable statistics post refurbishment. The 1991 census seems to suggest that the situation has remained stable.

In 1981 63.8% of residents received housing benefit this suggests that large numbers of residents were unemployed. 1981 statistics for Holy Trinity Ward show that 13% were unemployed (413 men ie 18.7% of men, 92 women ie 5.5% of women) but a survey of the neighbouring Burnham Estate indicated that there was a 45% unemployment rate. Rogers is probably closer to this figure as a high proportion of residents receive housing benefit. For the borough as a whole 13.1% are unemployed. 53% of the council's tenants receive housing benefit, Rogers was therefore worse than average in this respect.

In 1989 62 (52%) of tenants were in arrears with their rent and rates payments. For the borough as a whole 48% of council tenants were in arrears with rent and rates, this suggests that Rogers is worse than average in this respect.

For the period 1988/89 there was a £350 average management/maintenance cost per dwelling for Rogers /Victoria Park Square Estate Office. The area average was £453 and the borough average £600. This suggests that Rogers was reasonable. There was no comparable figure for post refurbishment although detailed maintenance records have been examined. These records show that little has changed on the estate since refurbishment. The main problems still relate to the lifts and clearing dumped rubbish. There has been an added problem which is replacing broken panes of glass and vandalised light fittings.

In 1989 the estate was felt to be a real problem in terms of noise, dogs, litter, vandalism, graffiti and dumping of furniture and rubbish. This view has not changed and these aspects, with the exception of dogs as there are no longer grassed communal areas, are still considered to be major problems.

From 1979 to 1989 56.3% of Rogers households had been in contact with the social services. In November 1989 there were currently 7 cases allocated to social workers and three children (from the same family) on the 'at risk'

register. In April 1994 there were currently 6 cases allocated to social workers and two children on the 'at risk' register and no children in care. New referrals averaged 2 per month in November 1989 in April 1994 they are thought to stand at an average of 36. There may have been a difference in the way this figure was calculated.

The health visitor, Kate McGuire who had a caseload of 106 children commented, in 1989:

There's a lot of depression on the estate.. there are no facilities for young children to go out and play. There is a great deal of real poverty and unemployment.... the standards of housekeeping and cleanliness is almost universally low in households with young children. Problems like chest infections have reduced since the central heating was put in. The estate has an air of violence..... what a contrast between Rogers and the other estates where I work.

As compared to the rest of the borough Rogers was considered worse or worse than average with regard to the need for social services support. At present Rogers Estate is considered about average with respect to the need for social services support.²¹

To conclude Mozart Estate is considered to be and appears to be successful. The statistical indicators do not provide a clear picture as to the processes involved on the estate and are often contradictory. SNU have identified that there have been improvements in satisfaction and fear of crime, particularly in Phase Two, since modification. However those wanting to move and the crime rates still remain high. They express reservations as to the sustainability of the improvements in the long term.

Rogers Estate is widely thought to be a success in visual terms. However there are high degrees of dissatisfaction and levels of abuse. The statistical indicators show reductions in those wanting to move off but other indicators are contradictory.

Summary

Mozart Estate was built in the 1970's and has a large number of blocks, some of which are joined together by walkways and the estate is multi-level.

The improvements have been in two phases: Phase One involving the removal of some walkways which affected four blocks; Phase Two which involved the subdivision of some blocks and the creation of a streetscape and enclosure of a section of the South Site.

The improvements are felt to be successful.

Improvements have been implemented with management changes.

SNU express reservations about the success of the project in the long term.

Statistical indicators are inconclusive.

Rogers Estate was built in 1947 and consists of two blocks which formed a semi-circle around grassed areas.

The improvements on Rogers have been part of the DICE project and have involved partitioning of blocks, enclosure of space and some newbuild bungalows.

The improvements are seen to be a visual success but levels of abuse and dissatisfaction remain high.

Statistical indicators are inconclusive.

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CHAPTER SIX

Design Disadvantagement Scores, Abuse Scores and Crime

At First the design disadvantagement scores were analysed in tabular form, these can be seen on the pages that follow. This analysis revealed that the situation was complex and for this reason it was decided to analyse the scores further. Elements of the disadvantagement score were separated out and their effects upon the abuse score calculated separately. These results are presented as regression scattergrams later in the discussion.

Mozart Estate

The north site which has not been improved at all had an abuse score of 1.22 which was lower than the south site average of 2.74. The south site blocks that were not improved had an average of 2.9 and the Phase Two blocks had an average of 2.6. The estate as a whole had an average abuse score of 2.14. All these scores are much lower than DICE would predict according to their graphs which are displayed in appendix 2. In order to see whether there were other factors involved in producing this trend the estate was broken down into dwelling type. These types are as follows: large Blocks of which there are seven, four on the north site and three on the south site. With the exception of Onslow and Boyce they have 57-63 dwellings and are six and seven storeys high. Boyce and Onslow have been included as they are similar to other blocks in this category and are part of two central spines of the estate, being attached to other large blocks. Smaller attached blocks, of which there are nine, six on the north site and three on the south. They have 12-30 dwellings and with the exception of Selby and Sloman are linked to the central walkway or the northern or southern spines. Smaller detached blocks, of which there are six, three on each site. These are small stand alone blocks with 12-20 dwellings. Houses of which there are five sets, 4 on the north site and one on the

south totalling 25 dwellings and all are two storey. Phase Two, which are the 'improved' blocks all of which are on the south site.¹

The highest abuse scores are to be found in the large blocks, 4.7, but they are still lower than would be expected. The next highest abuse scores are in Phase Two, 2.6, followed by smaller attached blocks, 1.11, smaller detached blocks and houses have similar scores of 0.67 and 0.69 respectively. All scores, even for non-improved blocks, have substantially reduced since design modification although Phase Two scores do remain relatively high. The discussion that follows will attempt to assess whether these reductions can be attributed to the design changes.

Rogers Estate

The abuse score for the north site is 4.24 and for the south site the score is higher, 5.5. The average score for the estate is 4.68 which is equivalent to the large blocks on Mozart. These abuse scores are higher than would be expected by DICE.

It should be noted, however, that the graph that DICE provided of expected abuse scores plotted against disadvantage score had a small sample size for blocks with scores of 0,1,2 and 3.

Prior to design modification the North block had a disadvantage score of 12 and an abuse score of 13, the South block had a disadvantage score of 11 and an abuse score of 11.² These are higher than would be expected by DICE. The scores have reduced substantially since design modification although they still remain high.

Design Disadvantage and Abuse Scores

Table 1:

Mozart Estate

South Site (part improved)

Italics denote improved blocks
 numbers in brackets () represent values before design
 modification

	disadvantage score	abuse score
Boyce	14	4 (8)
Farnaby	12	8(10)
Grover	14	6(10)
Novello	12	0(15)
Longhurst	11	0(14)
Leeve	11	2(11)
Lawes	6	1 -
Naylor	14	6(15)
Purday	9	3(14)
Danby	8	0(11)
Bannister	10	2(12)

AVERAGE	11	2.9
EXPECTED ABUSE SCORE		7.5
<i>Mundy</i>	<i>3 (13)</i>	<i>1(5)</i>
<i>McFarren</i>	<i>3 (13)</i>	<i>4(6)</i>
<i>Mounsey1</i>	<i>3.5(15)</i>	<i>1(7)</i>
<i>Mounsey2</i>	<i>3.5</i>	<i>2</i>
<i>Croft1</i>	<i>3.5(13)</i>	<i>3(11)</i>
<i>Croft2</i>	<i>3.5</i>	<i>5</i>
<i>Croft3</i>	<i>3.5</i>	<i>3</i>
<i>Courtville1</i>	<i>3.5(13)</i>	<i>4(11)</i>
<i>Courtville2</i>	<i>3.5</i>	<i>3</i>
<i>Batten1</i>	<i>3.5(14)</i>	<i>5(10)</i>
<i>Batten2</i>	<i>3.5</i>	<i>1</i>
<i>Bantock</i>	<i>5.5(14)</i>	<i>3 (8)</i>
<i>Parry Road</i>	<i>0.4 (av)</i>	<i>0.7(av)</i>
<i>Third Ave Houses</i>	<i>0.07(av)</i>	<i>0.77(av)</i>

AVERAGE	3.31	2.6
EXPECTED		4.1
Total South Average	6.7	2.74
EXPECTED		5.2

Design Disadvantagement and Abuse Scores

Table 2:

Mozart Estate

North Site

	disadvantagement score	abuse score
Onslow	14	3 (11)
Severn	15	2 (11)
Tolhurst	15	4 (9)
Verdi	13	0 (9)
Tilleard	15	0 (6)
Tamplin	11	0 (6)
Redford	8	0 -
Warnum	12	0 (8)
Selby	15	1 (6)
Sloman	15	0 (8)
Stansbury	13	1 (7)
Quilter	13	3 (11)
Romer	12	3 (10)
Tallis	6.25 (av)	1.12 (av)
Westlake	7.33 (av)	0.33 (av)
Turpin	6.5 (av)	1 (av)
	-----	-----
AVERAGE	11.94	1.22
EXPECTED		7.75
 Estate Average	 8.75	 2.14
 EXPECTED		 6.95

Design Disadvantage and Abuse Scores by Block Type

Table 3:

Mozart Estate

Large Blocks

names in plain text indicate north site

italics indicates improved

shadow indicates south site not improved

	disadvantage score	abuse score
Tolhurst	15	4 (9)
Severn	15	2 (11)
Onslow	14	3 (11)
Naylor	14	6 (10)
Grover	14	6 (10)
Farnaby	12	8 (10)
Boyce	14	4 (14)
	-----	-----
Average	14	4.7
EXPECTED		8.25

Smaller Attached Blocks

Verdi	13	0 (9)
Tilleard	15	0 (6)
Selby	15	1 (6)
Sloman	15	0 (8)
Romer	12	3 (10)
Quilter	13	3 (11)
Novello	12	0 (7)
Longhurst	11	0 (8)
Purday	9	3 (14)
	-----	-----
Average	12.79	1.11
Expected		8.1

Smaller Detached Blocks

	disadvantagem score	abuse score
Warnum	12	0 (8)
Tamplin	11	0 (6)
Stansbury	13	1 (7)
Danby	8	0 (3)
Leeve	11	1 (6)
Bannister	10	2 (8)
AVERAGE	10.8	0.67
EXPECTED		7.4

Houses

Turpin	6.5	1
Tallis	6.25	1.12
Redford	8	0
Westlake	7.33	0.33
Laves	6	1
AVERAGE	6.82	0.69
EXPECTED		5.4

Phase Two

Mounsey1	3.5	1 (7)
Mounsey2	3.5	2
Croft1	3.5	3 (11)
Croft2	3.5	5
Croft3	3.5	3
Courtville1	3.5	4 (11)
Courtville2	3.5	3
Batten1	3.5	5 (10)
Batten2	3.5	1
Bantock	5.5	3 (8)
Parry Road	0.4	0.7
Third Avenue	0.07	0.77
McFarren	3	4 (6)
Mundy	3	1 (5)
AVERAGE	3.31	2.6
EXPECTED		4.1

Design Disadvantage and Abuse Scores

Table 4:

Rogers Estate

North Site

	disadvantage score	abuse score
Rogers1	2	8
Rogers2	1.5	4
Rogers3	2	6
Rogers4	2	6
Rogers5	1.5	7
Rogers6	1.5	4
Rogers7	1	1
Rogers8	1	4
Rogers9	1.5	1
Rogers10	1.5	5
Rogers11	1	0.63

AVERAGE	1.5 (12)	4.24(13)

EXPECTED		4.2

South Site

Rogers12	1	9
Rogers13	0.5	3
Rogers14	0.5	6
Rogers15	1	7
Rogers16	1.5	4
Rogers17	1.5	4

AVERAGE	1 (11)	5.5(11)

EXPECTED		1.2

ESTATE AVERAGE	1.32	4.68

EXPECTED		1.6

It was felt that there were some other factors that were affecting the abuse score other than the disadvantage score. For this reason the abuse scores that were calculated have been correlated against a number of other measures in order to try to explain the results. The results are presented using regression scattergrams and tables. These measures were chosen as they made up the calculation of the disadvantage score or they provided a means through which to assess whether other factors were affecting the results.

Mozart Estate

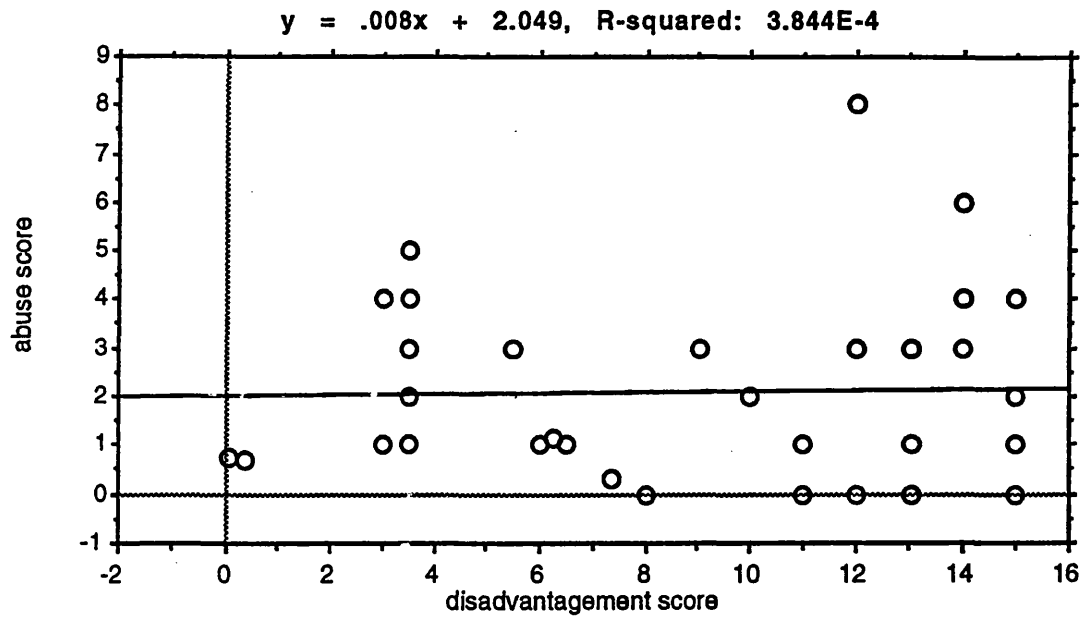
For the Mozart Estate the measures that were chosen were disadvantage score itself, number of dwellings per block, number of dwellings per entrance, number of dwellings per corridor, number of storeys, the presence of stilts or garages, block size, whether the block is improved or not, whether the block was located on the south or north site and within Phase Two whether the application of Coleman was complete. Within each category where appropriate the factors were subdivided. Not all subdivisions are appropriate for each category

Disadvantage Score

For all the blocks together there was no relationship between disadvantage score and abuse score (see Figure 1). According to Coleman's theory the lower the disadvantage score is the lower the abuse score will be. Breaking down the blocks into two groups according to number of dwellings per block for the group with 4-40 and 40-63 dwellings per block there was a negative relationship (see figures 2 & 3). For blocks with 1-25 dwellings per entrance the relationship was not significant, but there was a negative trend. For blocks with 25-63 dwellings per entrance there was a negative relationship (see figure 4). For blocks with 2-8 dwellings per corridor there was a negative relationship (see figure 5) but for blocks with 9-18 the relationship was not significant but a negative trend was displayed.

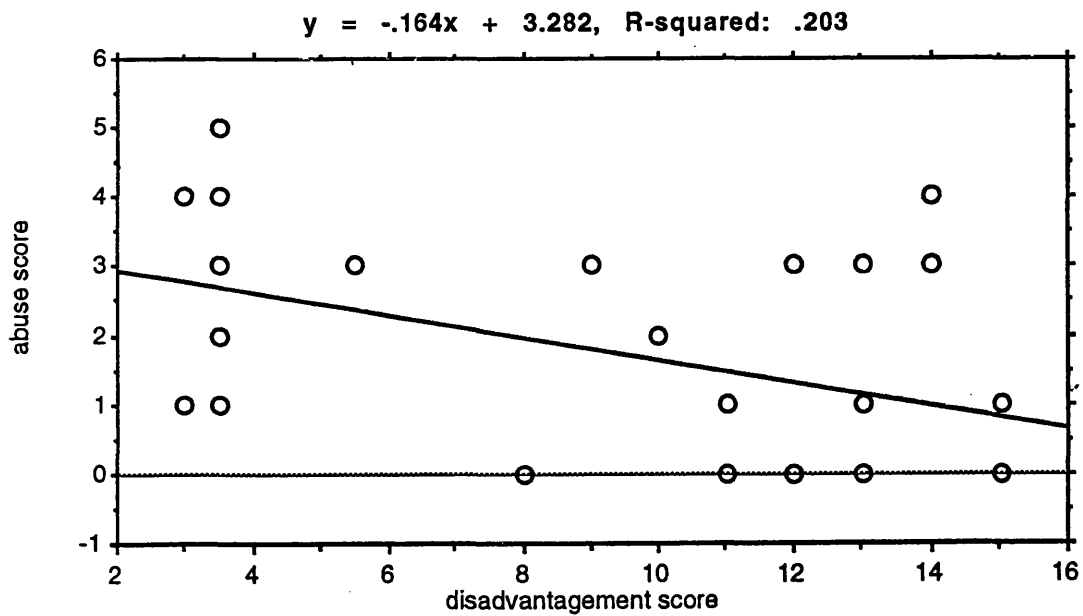
Within block size for houses and large blocks there was a negative relationship between abuse score and design disadvantage (see figures 6 & 7). For the smaller detached and Phase Two blocks the relationship was not significant but there was a positive trend. For the smaller detached blocks there was no relationship but a negative trend. For both improved and non improved blocks the relationship was not significant but there was a positive trend. For both the north site and the south site the relationship was not significant but there was a positive trend. For Phase two complete/incomplete the relationships were not significant but for the complete there was a positive trend.

It should be noted that there were no clear cut positive relationships between design disadvantage scores and abuse scores as would be expected according to Coleman. In fact for dwellings per block, houses and large blocks there were significant negative relationships. It is possible that there are other factors affecting the abuse score or it may be that elements of the disadvantage score are influential on their own. In addition the disadvantage score may not be an effective measure as it is an on/off switch, all measures have equal weighting and because of the cut off point 13 dwellings per blocks, for example, count for the same as 300 dwellings per block.



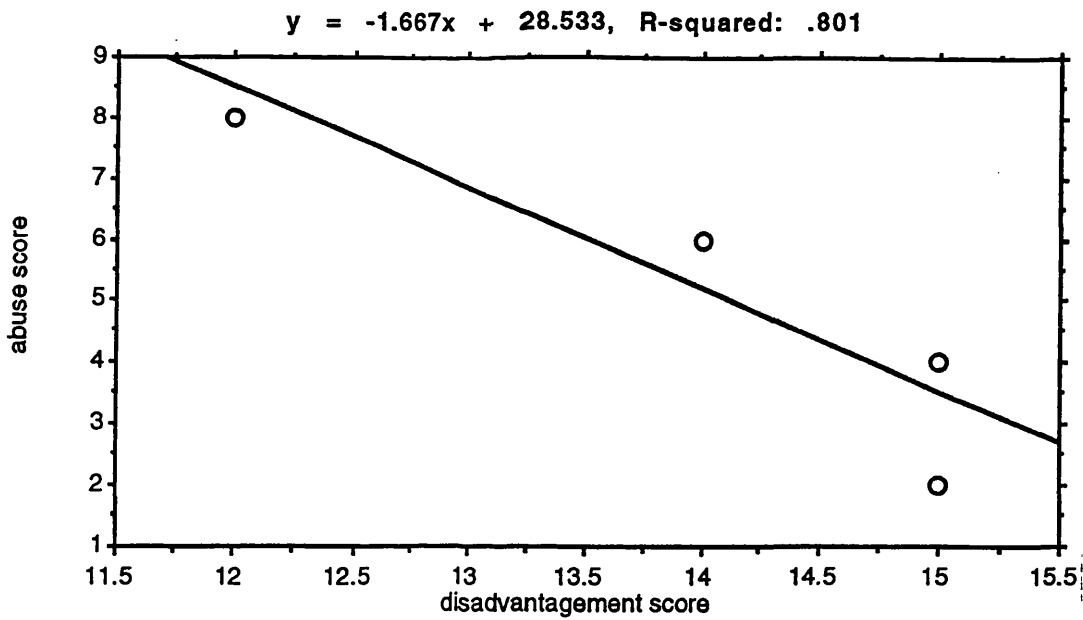
$R=.02 \quad p=.9032$

Figure 1: Design Disadvantage by Abuse score for all blocks.



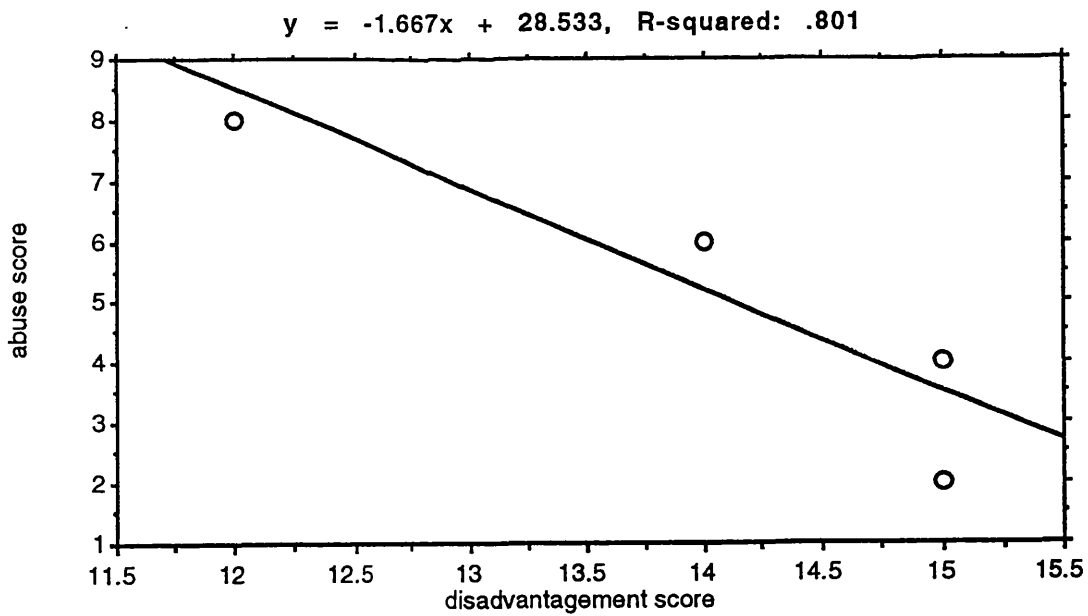
$R=-.451 \quad p=.0124$

Figure 2: Design Disadvantage by Abuse Score for blocks with 4-40 dwellings.



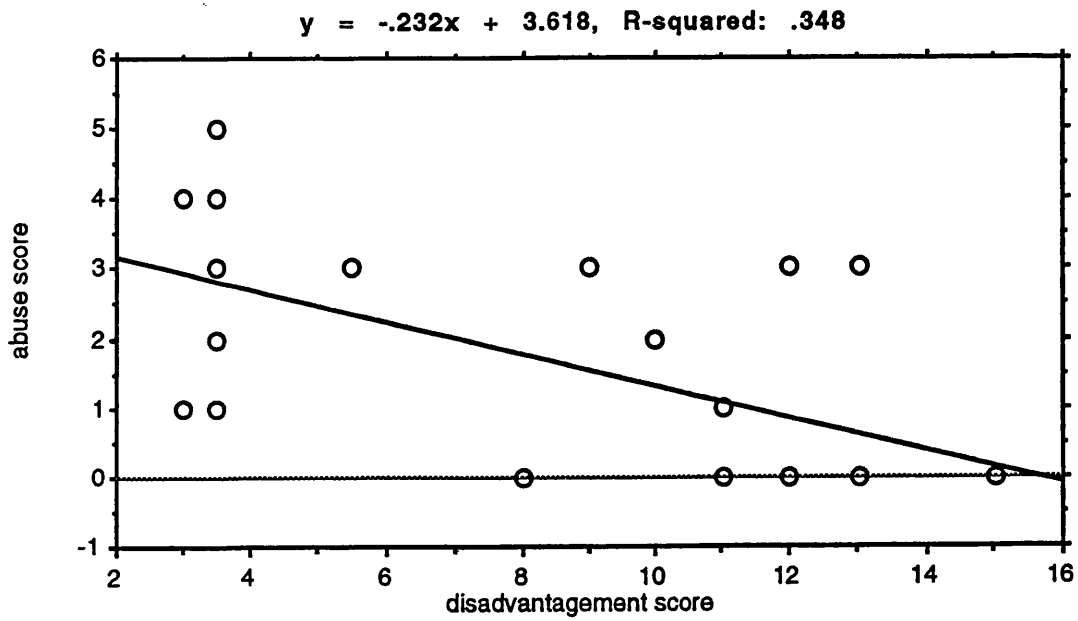
$R = -.895$ $p = .0401$

Figure 3: Design Disadvantage by Abuse Score for blocks with 40-63 dwellings.



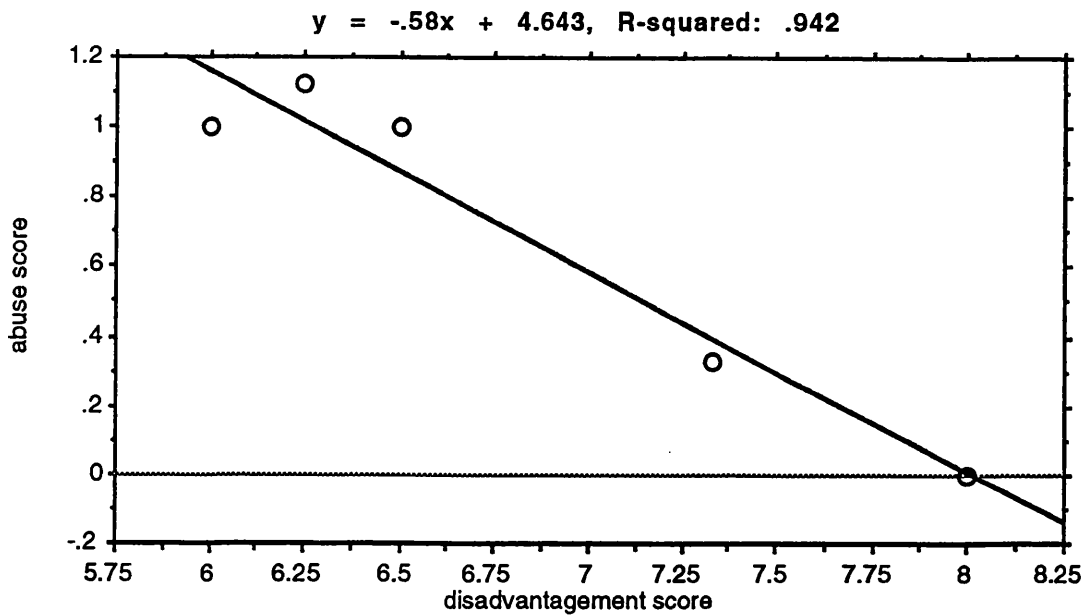
$R = -.895$ $p = .0401$

Figure 4: Design Disadvantage by Abuse Score for blocks with 25-63 dwellings per entrance.



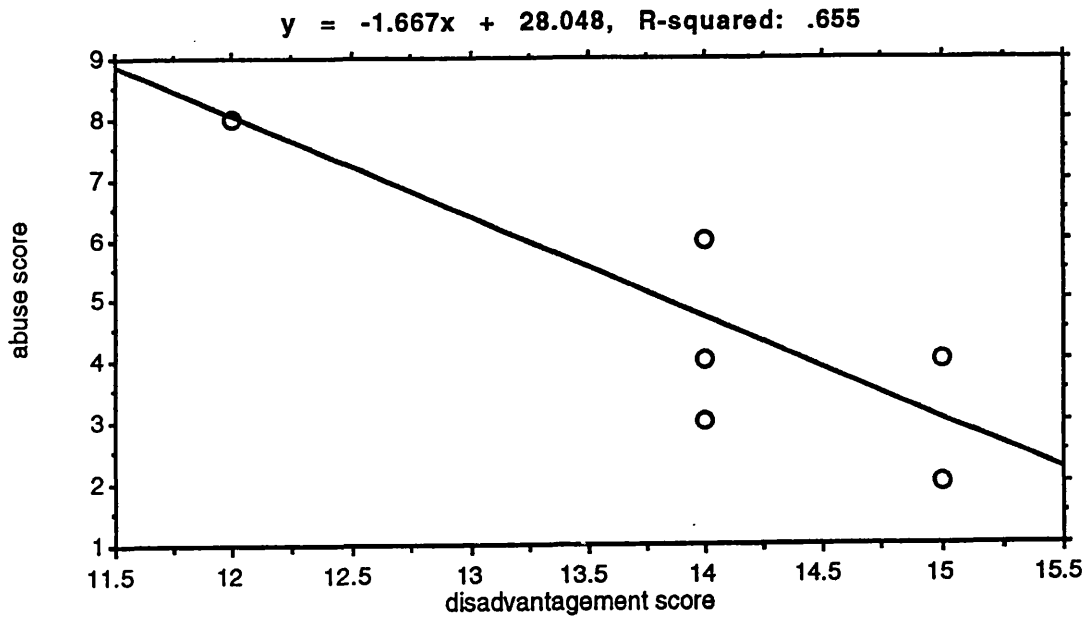
$R = -.59$ $p = .0015$

Figure 5: Design Disadvantage by Abuse Score for blocks with 2-8 dwellings per corridor.



$R = -.971$ $p = .006$

Figure 6: Design Disadvantage by Abuse Score for Houses.



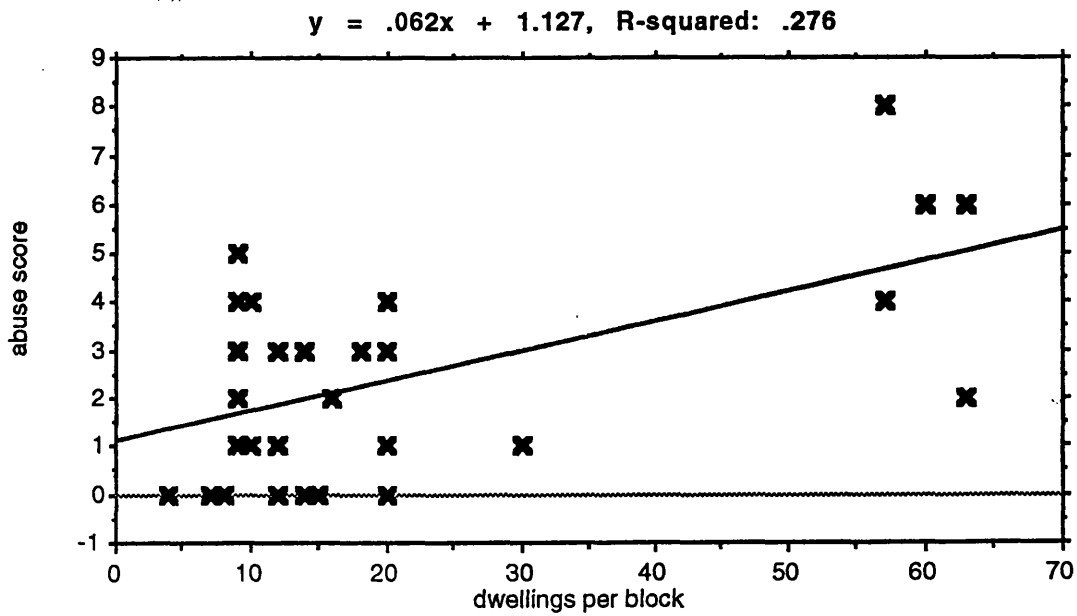
$R = -.81$ $p = .0273$

Figure 7: Design Disadvantagement by Abuse score for Large blocks.

Number of Dwellings per Block

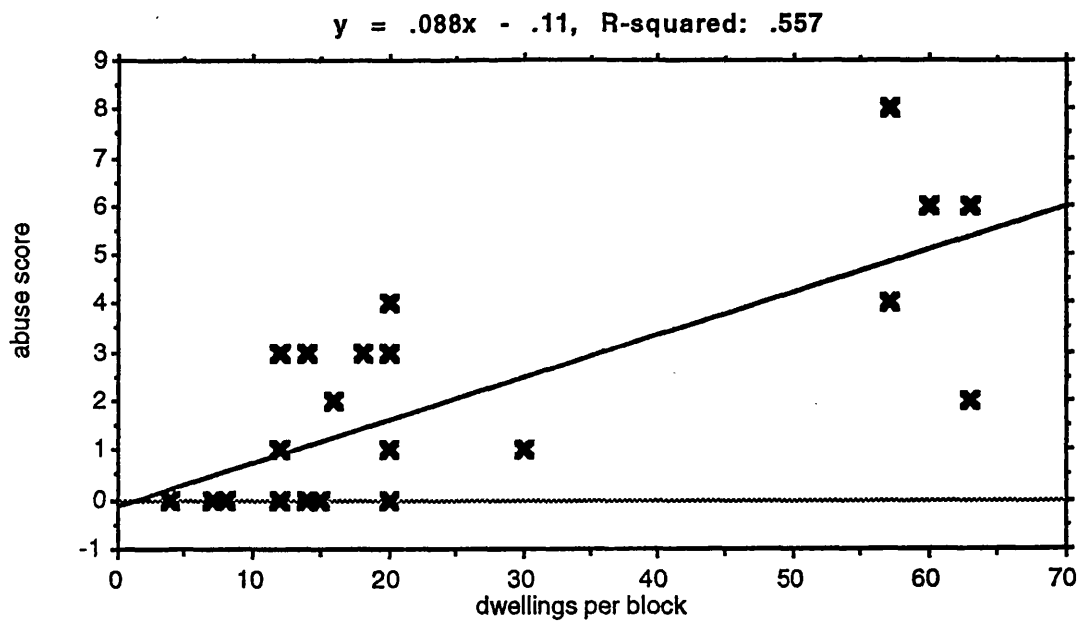
For all the blocks as a whole there was a positive relationship between the number of dwellings per block and abuse score (see figure 8). When this was broken down for the unimproved and the north and south sites independently there was a positive relationship between the number of dwellings per block and abuse score (see figures 9-11). For blocks with 4-40 dwellings and 40-63 dwellings and 25-63 dwellings per entrance the relationship was not significant, but there is a negative trend. For blocks with 1-25 dwellings per entrance and 2-8 dwellings per corridor, smaller attached blocks, improved and Phase Two there was no significant relationship. For blocks with 9-18 dwellings per entrance, smaller detached and large blocks the relationship was not significant but there was a positive trend. Some of the largest blocks have the lowest abuse scores. Phase Two complete could not be computed and the incomplete did not have a significant relationship.

As a whole the larger the number of dwellings per block the higher the abuse score. Perhaps this is to be expected as there would be more people using the block therefore there would be more people to drop litter.



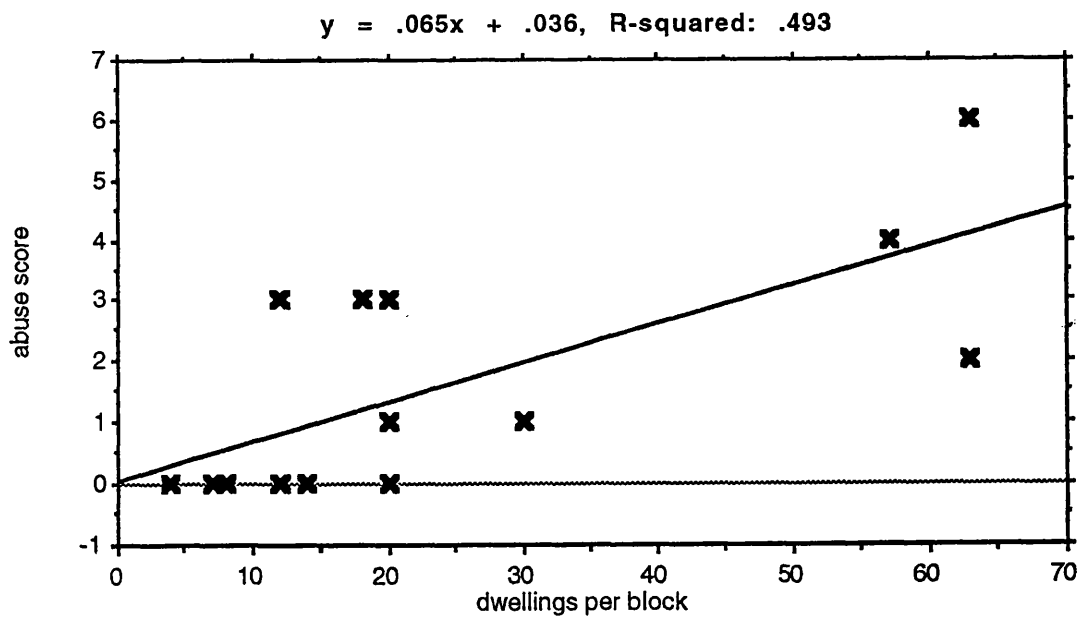
R=.526 p=.0012

Figure 8: dwellings per block by abuse score for all blocks.



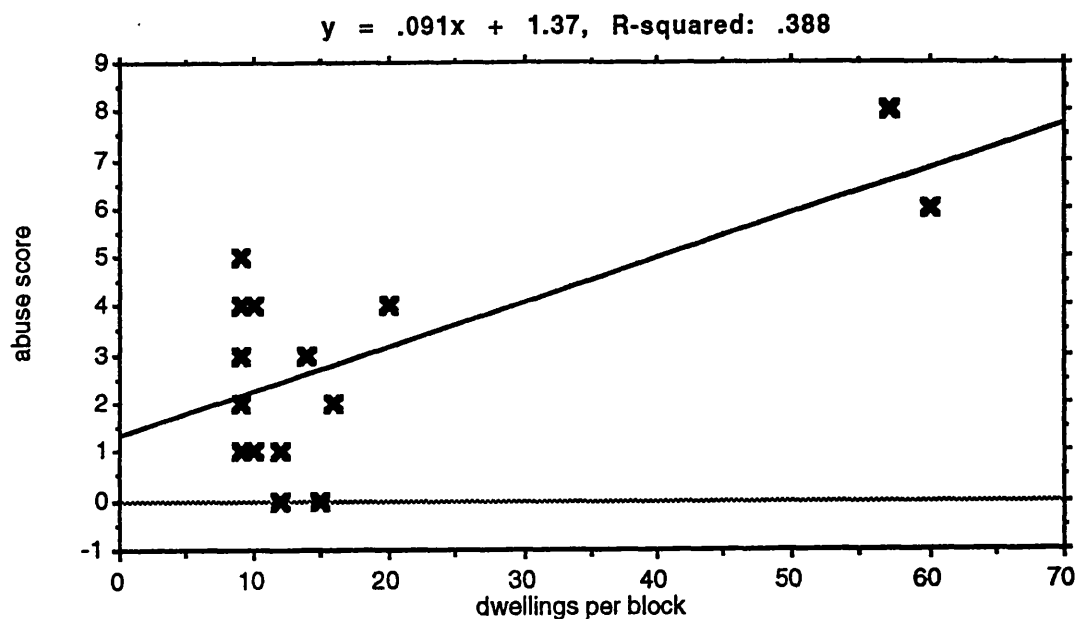
$R = .747$ $p = .0001$

Figure 9: dwellings per block by abuse score for unimproved blocks.



$R = .702$ $p = .0051$

Figure 10: dwellings per block by abuse score for north site.



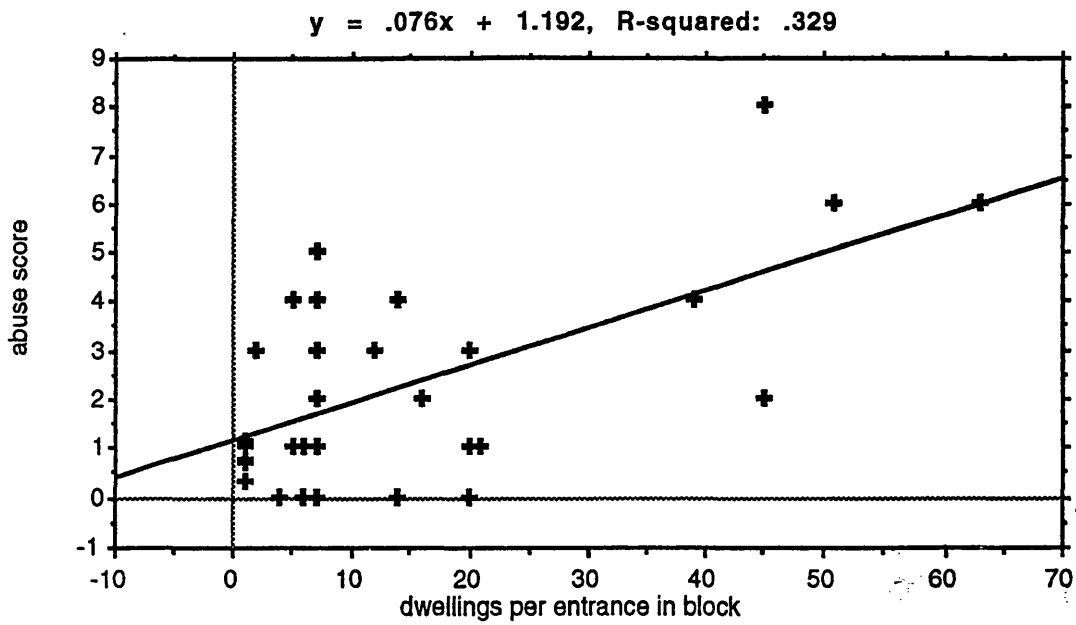
$R=.623 p=.0026$

Figure 11: dwellings per block by abuse score for south site.

Dwellings per Entrance

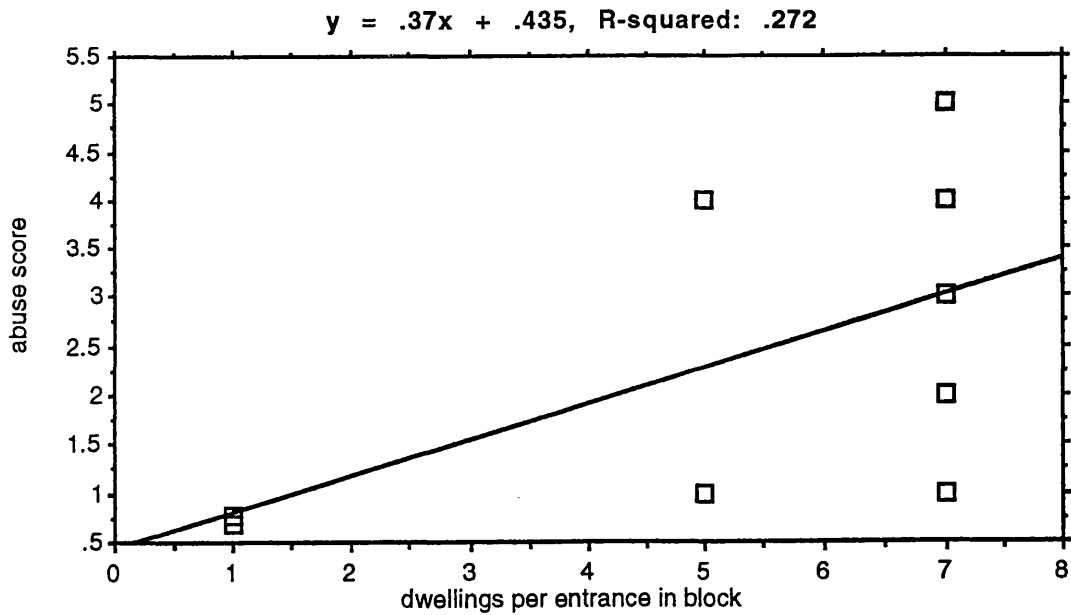
For all the blocks as a whole there was a positive relationship between the number of dwellings per entrance and abuse score (see figure 12). This trend was repeated for Phase Two, improved and not improved blocks and north and south site (see figures 13-17). For blocks with 4-40 dwellings there was no significant relationship. For blocks with 40-63 dwellings, 1-25 and 25-63 dwellings per entrance, 2-8 and 9-18 dwellings per corridor, smaller detached and large blocks and Phase Two complete and incomplete the relationship was not significant but there was a positive trend. For houses and smaller attached blocks the relationship was not significant but there was a negative trend.

On the whole there was a positive relationship between abuse score and number of dwellings per entrance. Again perhaps this is to be expected as more people drop more litter.



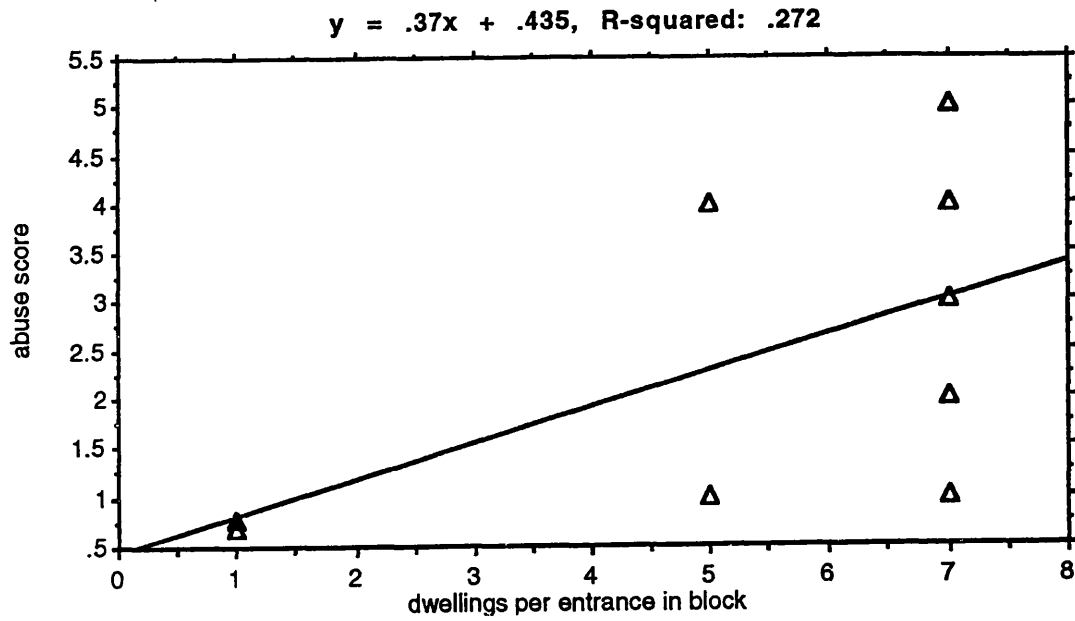
$R = .574$ $p = .0001$

Figure 12: Dwellings per entrance by abuse score for all blocks.



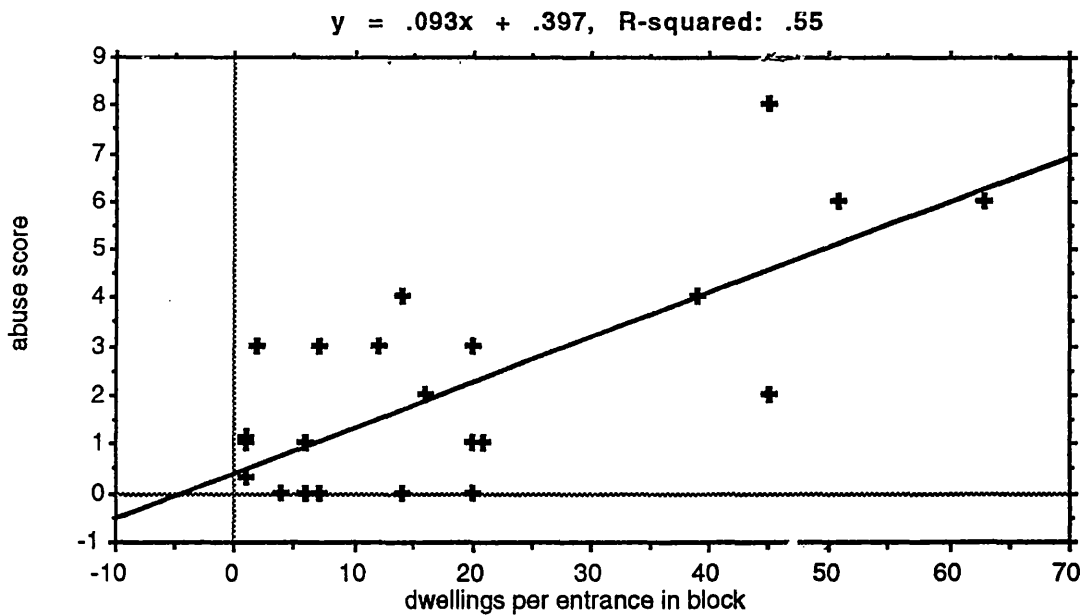
$R = .522$ $p = .0555$

Figure 13: dwellings per entrance by abuse score for Phase Two.



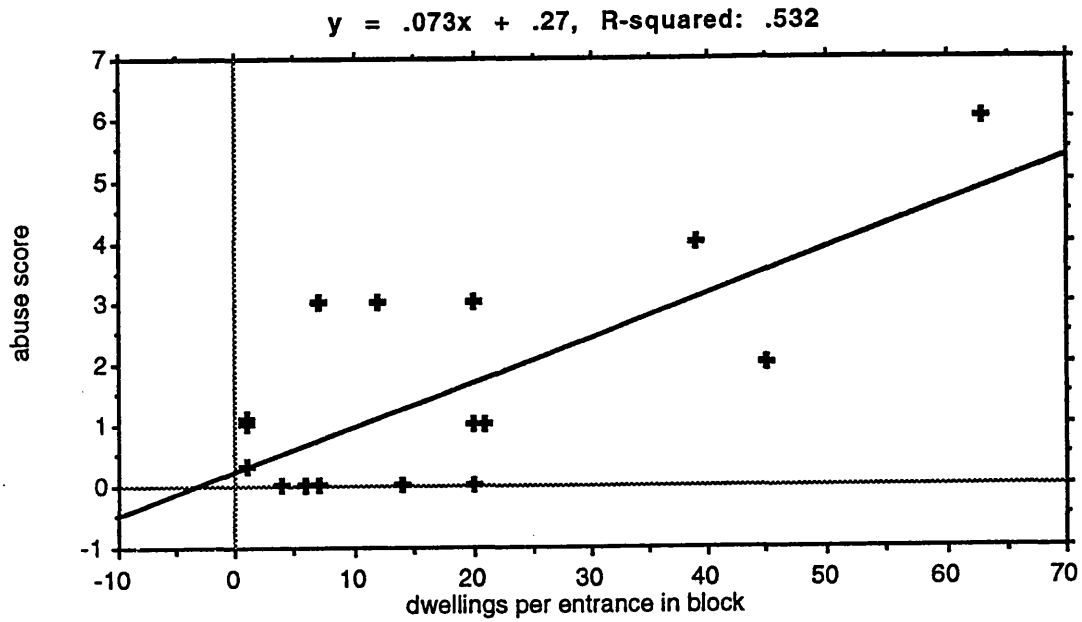
$R = .522$ $p = .0555$

Figure 14: dwellings per entrance by abuse score for improved blocks.



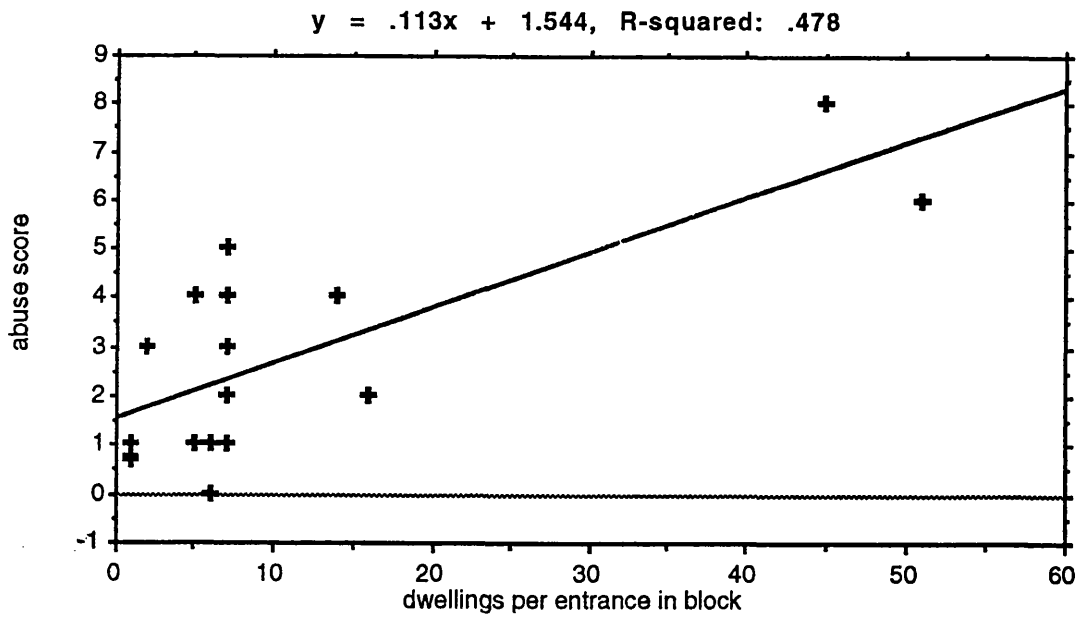
$R = .742$ $p = .0001$

Figure 15: dwellings per entrance by abuse score for unimproved blocks.



$R = .729$ $p = .0009$

Figure 16: dwellings per entrance by abuse score for north site.



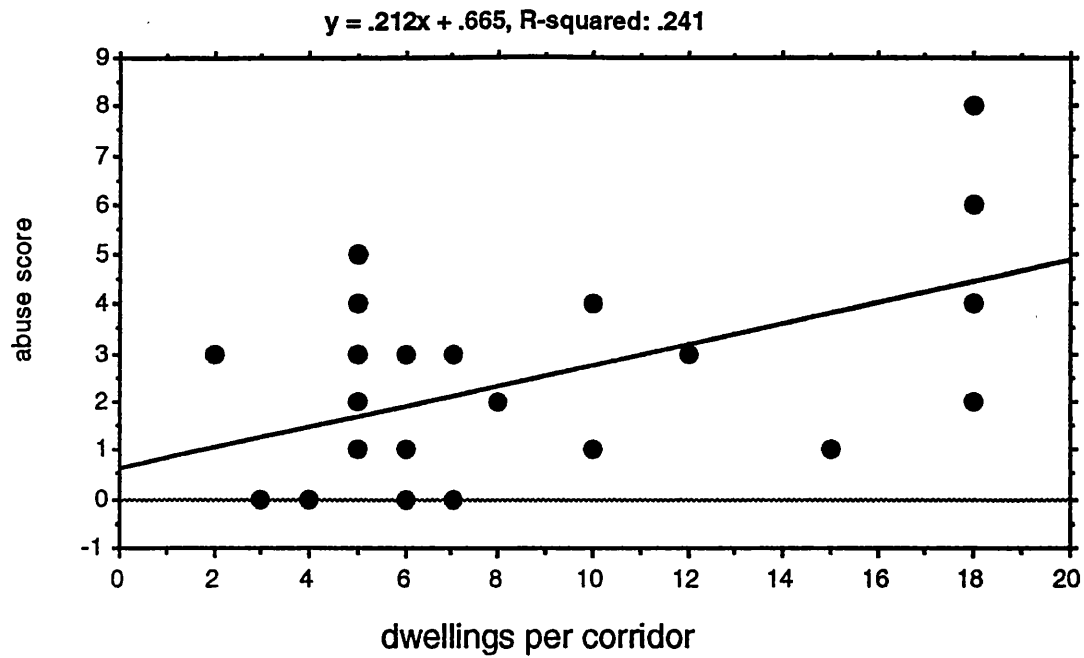
$R = .692$ $p = .0003$

Figure 17: dwellings per entrance by abuse score for south site.

Dwellings per Corridor

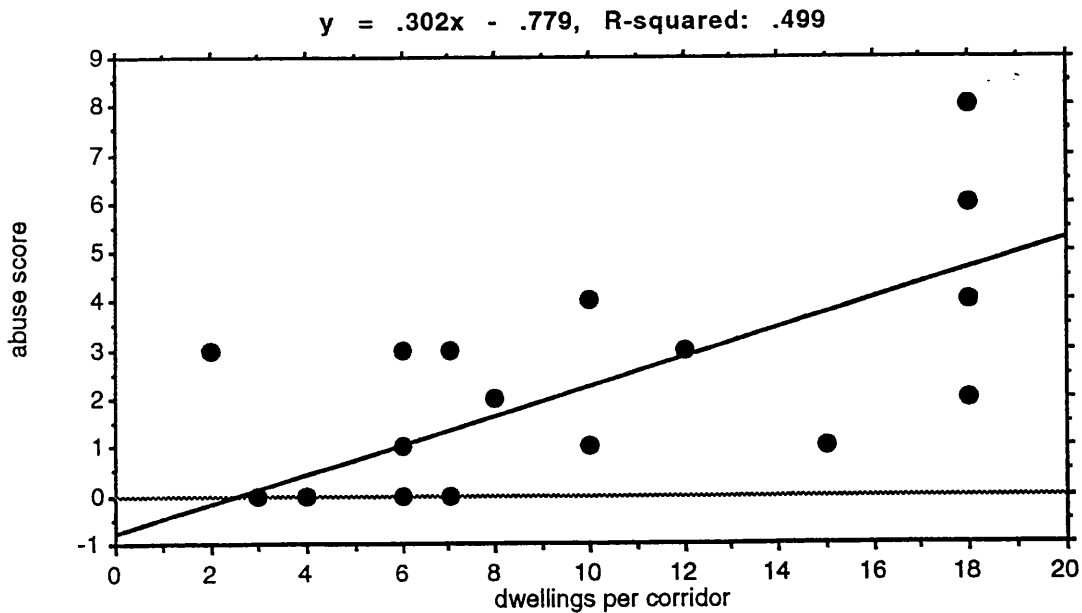
For all the blocks as a whole there was a positive relationship between the number of dwellings per corridor and abuse score (see figure 18). This trend was continued with non improved dwellings and north and south sites independently where a positive relationship was displayed (see figures 19-21). For blocks with 4-40 dwellings, 1-25 dwellings per entrance and 2-18 dwellings per corridor, as well as smaller attached, Phase Two, improved and Phase Two incomplete blocks there was no significant relationship. For blocks with 9-18 dwellings per corridor and smaller detached and large blocks the relationship was not significant but a positive trend was displayed. 40-63 dwellings per block, 25-63 dwellings per entrance and Phase Two complete could not be computed.

For the most part there was a positive relationship between abuse score and number of dwellings per corridor; as it would be reasonable to expect.



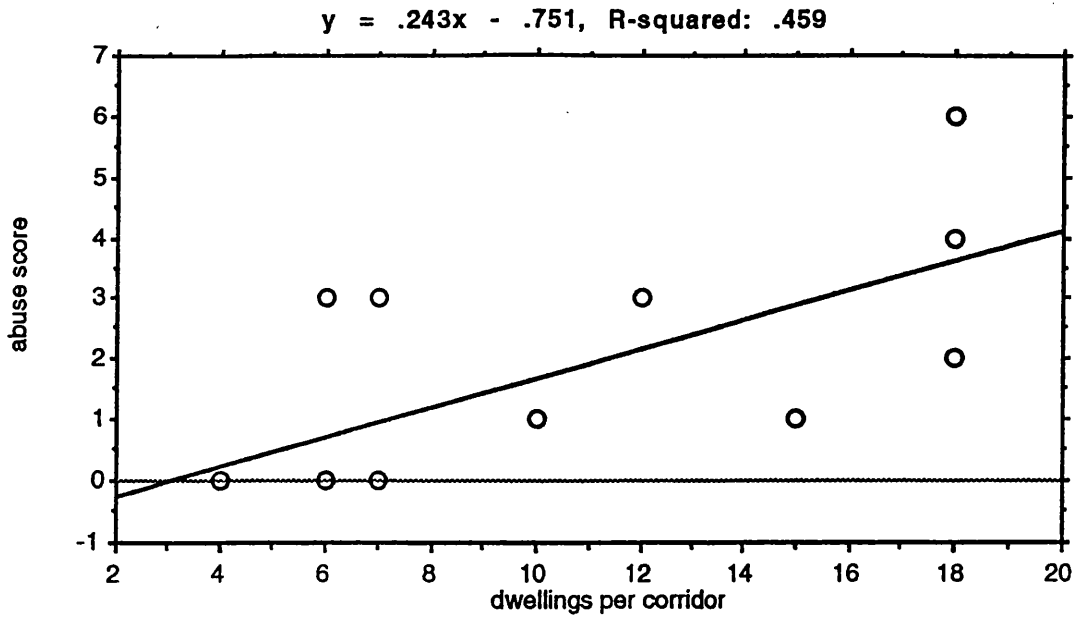
$R = .491$ $p = .0028$

Figure 18: dwellings per corridor by abuse score for all blocks.



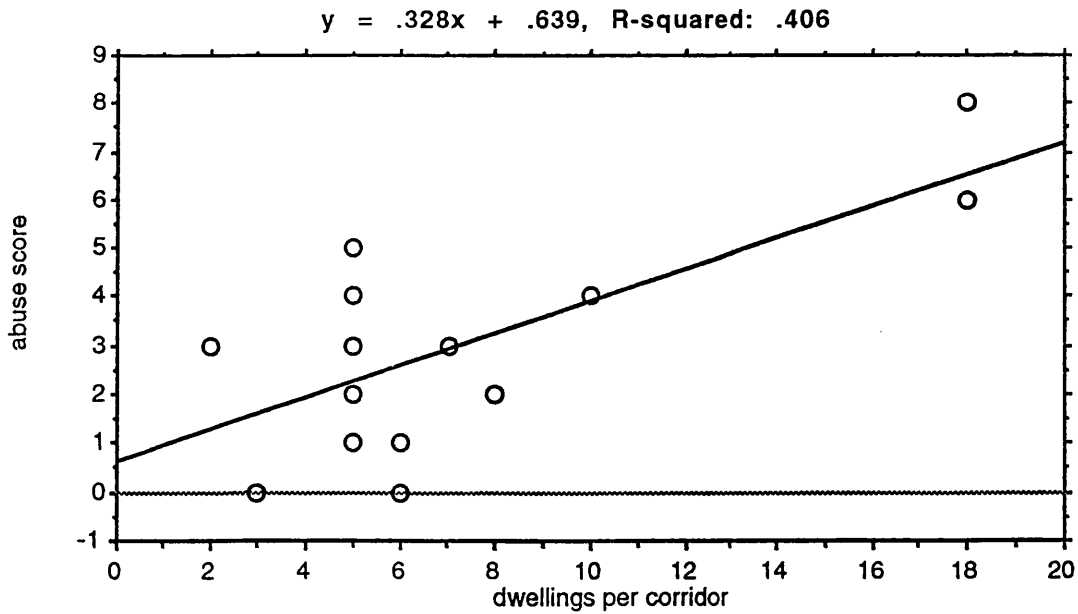
$R = .707$ $p = .0002$

Figure 19: dwellings per corridor by abuse score for unimproved blocks.



$R = .678$ $p = .0077$

Figure 20: dwellings per corridor by abuse score for north site.



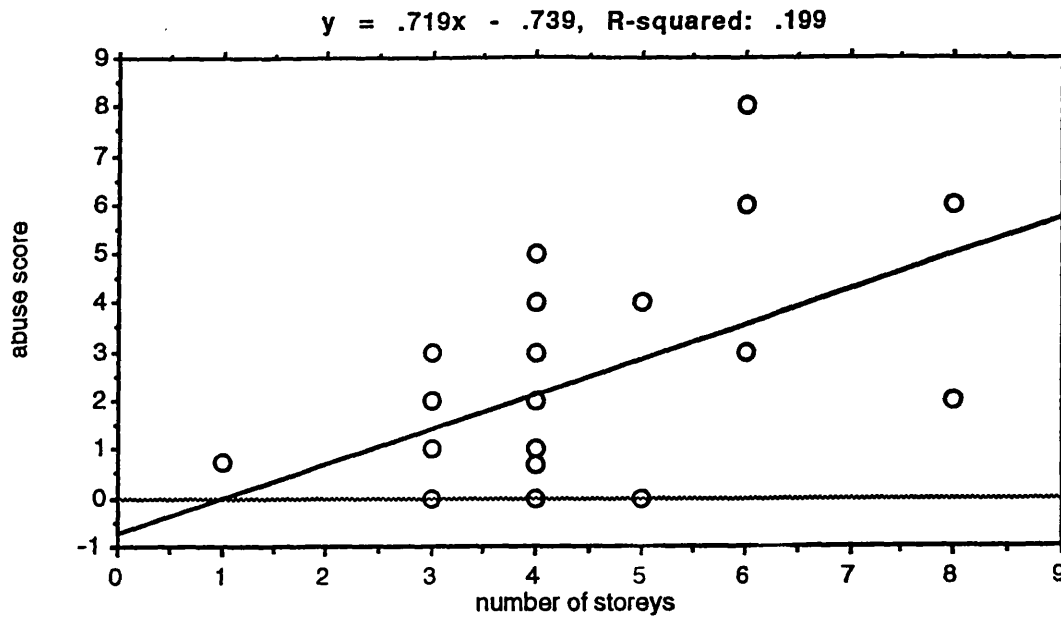
$R = .637$ $p = .0019$

Figure 21: dwellings per corridor by abuse score for south site.

Number of Storeys

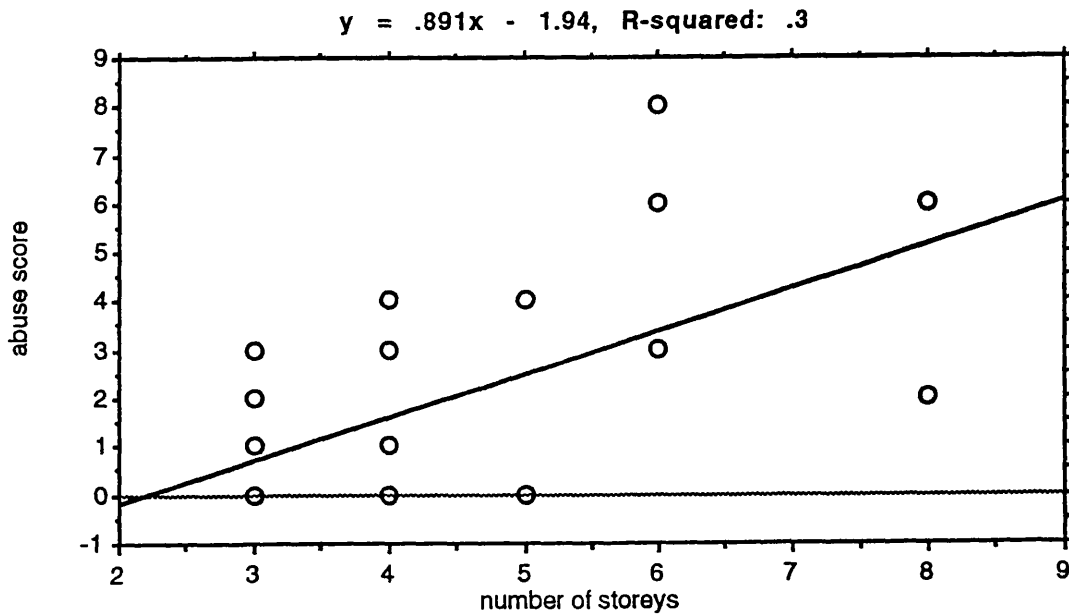
For all the blocks as a whole there was a positive relationship between the number of storeys and the abuse score (see figure 22). For the unimproved blocks there was a positive relationship, but the highest storeys did not have the highest scores (see figure 23). For both the north and south sites independently there was a positive relationship (see figures 24 & 25). For blocks with 4-40 dwellings and 2-8 dwellings per corridor, Phase Two, Large and improved blocks there was no significant relationship. For blocks with 40-63 dwellings and 25-63 dwellings per entrance and smaller attached and smaller detached blocks the relationship was not significant, but there was a negative trend. For blocks with 1-25 dwellings per entrance and 9-18 dwellings per corridor and Phase Two complete the relationship was not significant but there was a positive trend. Phase Two incomplete could not be computed.

The number of storeys probably had an effect upon abuse score but it should be noted that the blocks with the most storeys did not have the highest abuse scores.



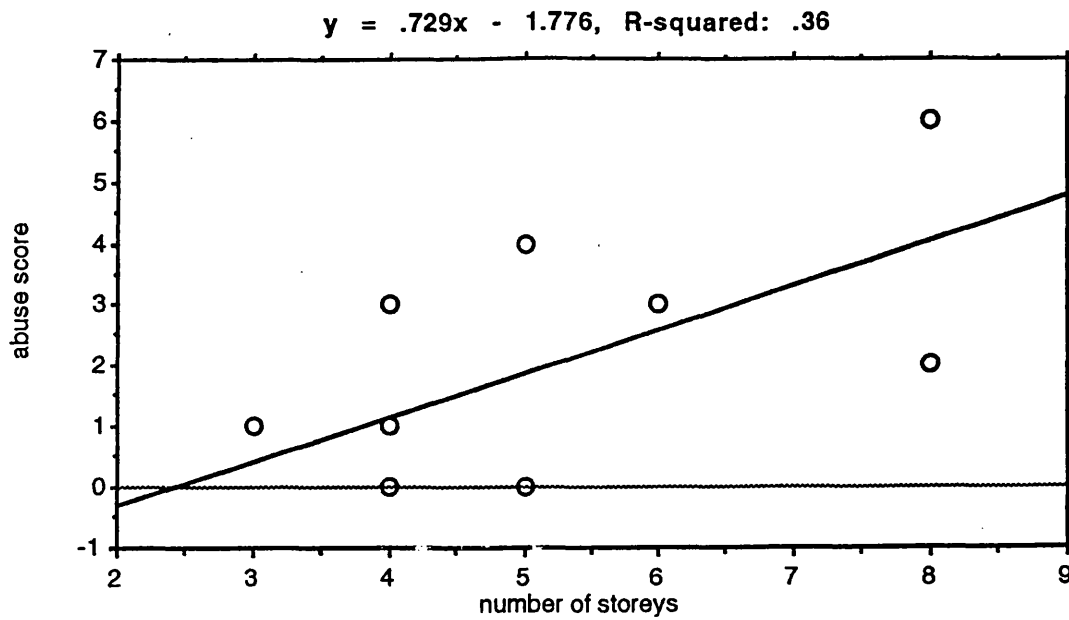
$R = .446$ $p = .0064$

Figure 22: Number of storeys by abuse score for all blocks.



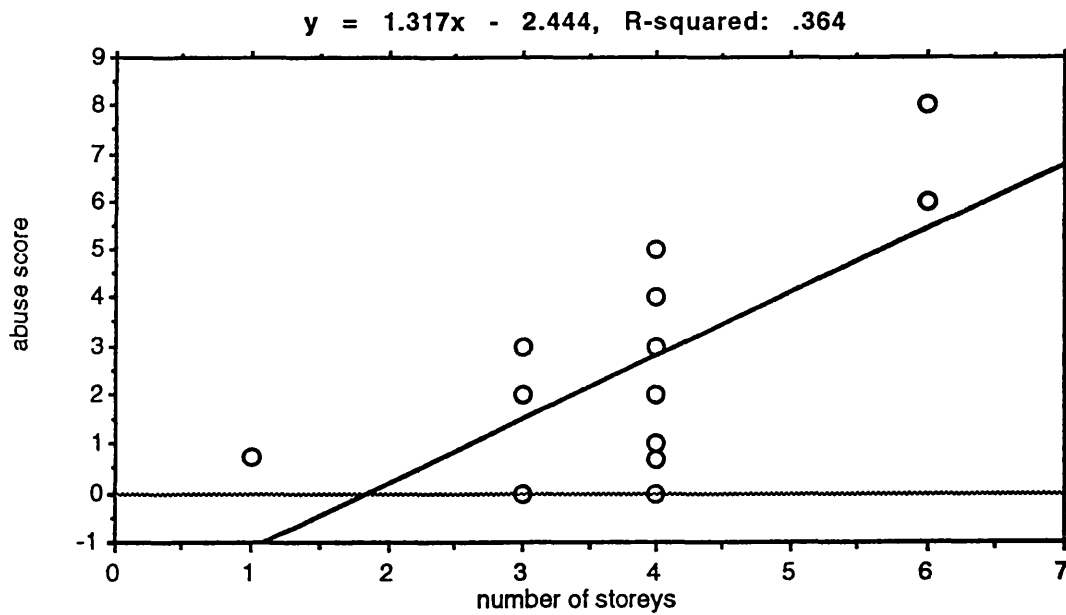
$R = .547$ $p = .0069$

Figure 23: number of storeys by abuse score for unimproved blocks.



R=.6 p=.0233

Figure 24: number of storeys by abuse score for north site.



R=.604 p=.0029

Figure 25: number of storeys by abuse score for south site.

Stilts and Garages

The mean abuse score for blocks with stilts was almost double that of those without, however it is possible that this result could have been produced by chance (see figure 26). This pattern was repeated when the south and north site were examined independently as well as with the smaller blocks and Phase Two and when dividing the blocks into improved and unimproved categories. For the larger blocks the abuse scores for those with stilts were lower than those without, although it was possible that this could have happened by chance.

It seems that this finding supports Coleman's theory that abuse scores will increase if garages, stilts or facilities are present as the ground floor.

Unpaired t-Test X₁: stilts/garages Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
33	1.94	.061

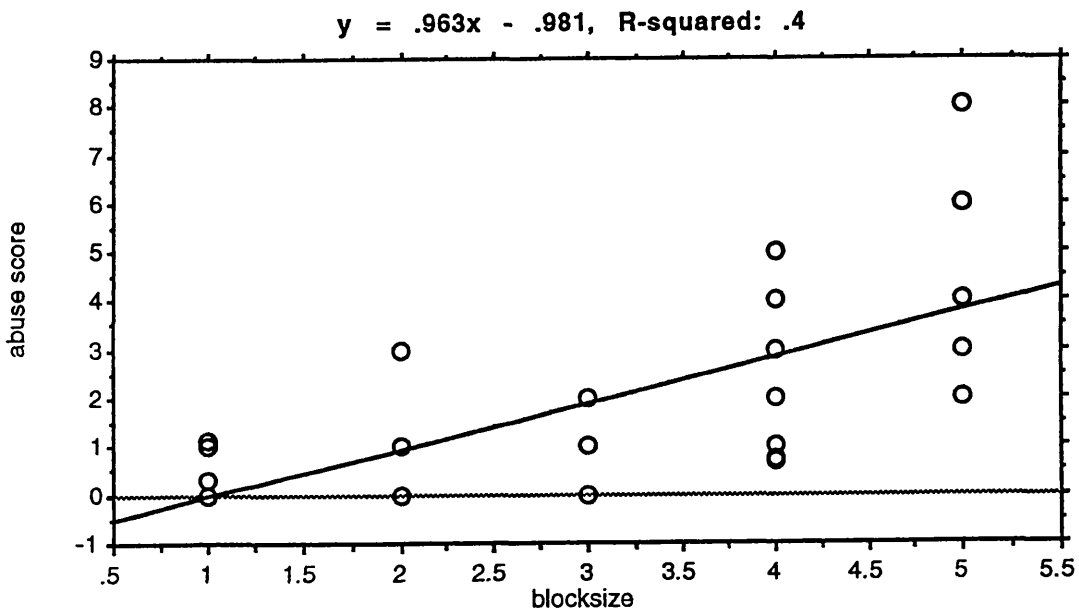
Group:	Count	Mean:	Std. Dev.:	Std. Error:
yes	22	2.864	1.781	.38
no	13	1.515	2.303	.639

Figure 26: t test computed for stilts/garages by abuse score for all blocks.

Block size

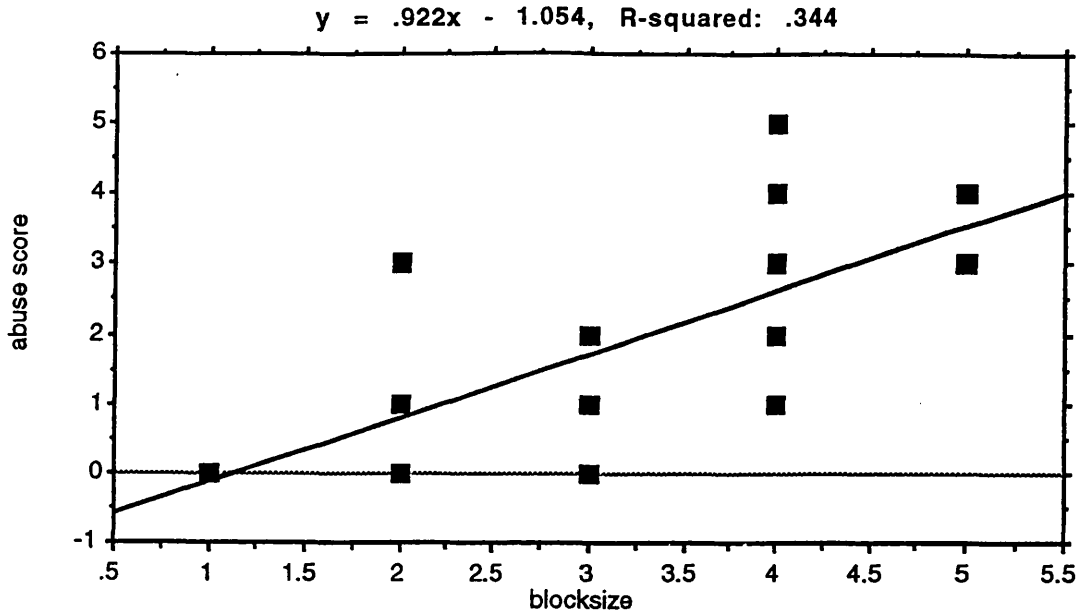
For all the blocks as a whole there was a positive relationship between block size and abuse score (see figure 27). This was repeated for all the other categories (see figures 28-34). Categories 25-63 dwellings per entrance and 40-63 dwellings per block could not be computed.

It seems that the larger the block the higher the abuse score is likely to be.



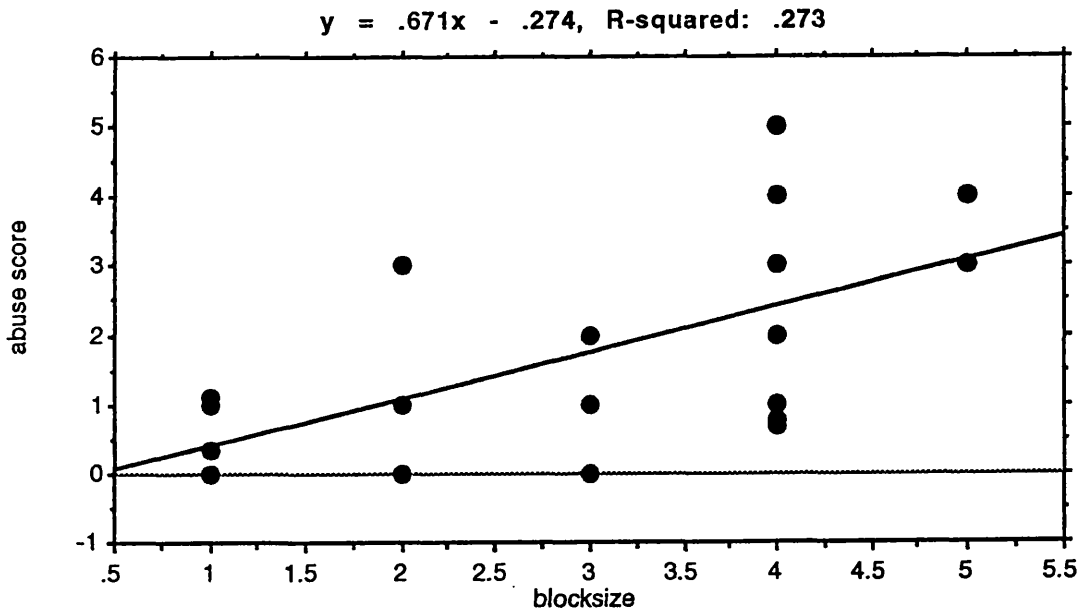
R=.632 p=.0001

Figure 27: blocksize by abuse score for all blocks.



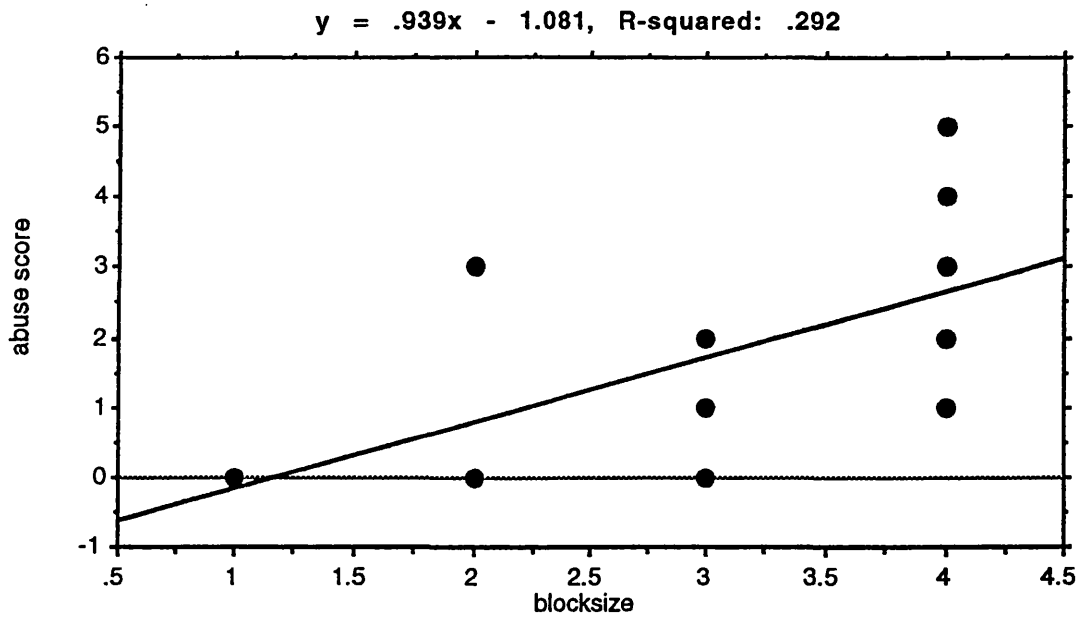
R=.587 p=.0007

Figure 28: blocksize by abuse score for blocks with 4-40 dwellings.



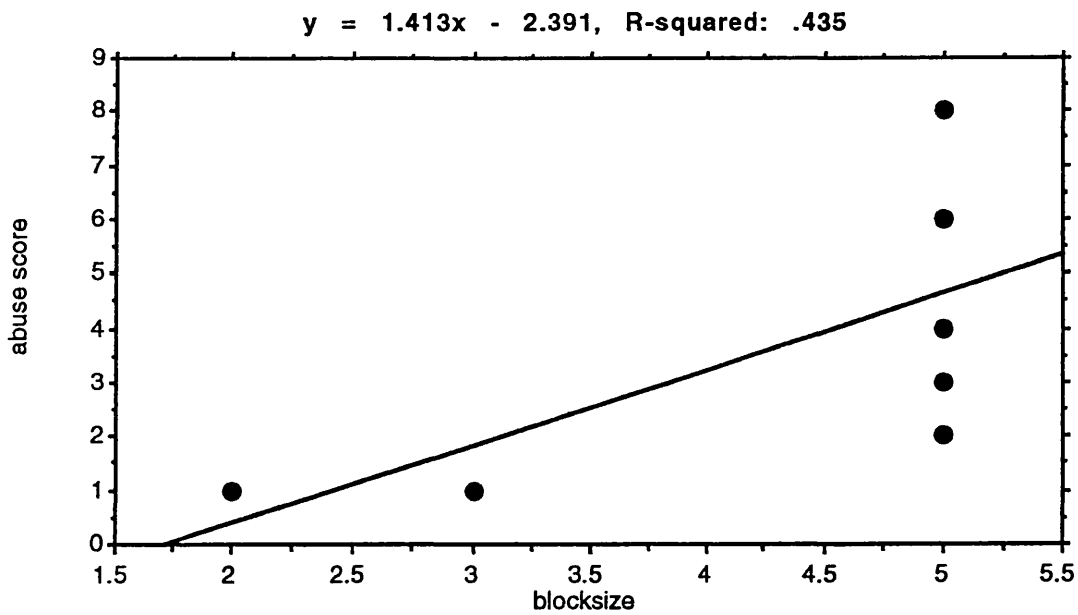
R=.523 p=.0013

Figure 29: blocksize by abuse score for blocks with 1-25 dwellings per entrance.



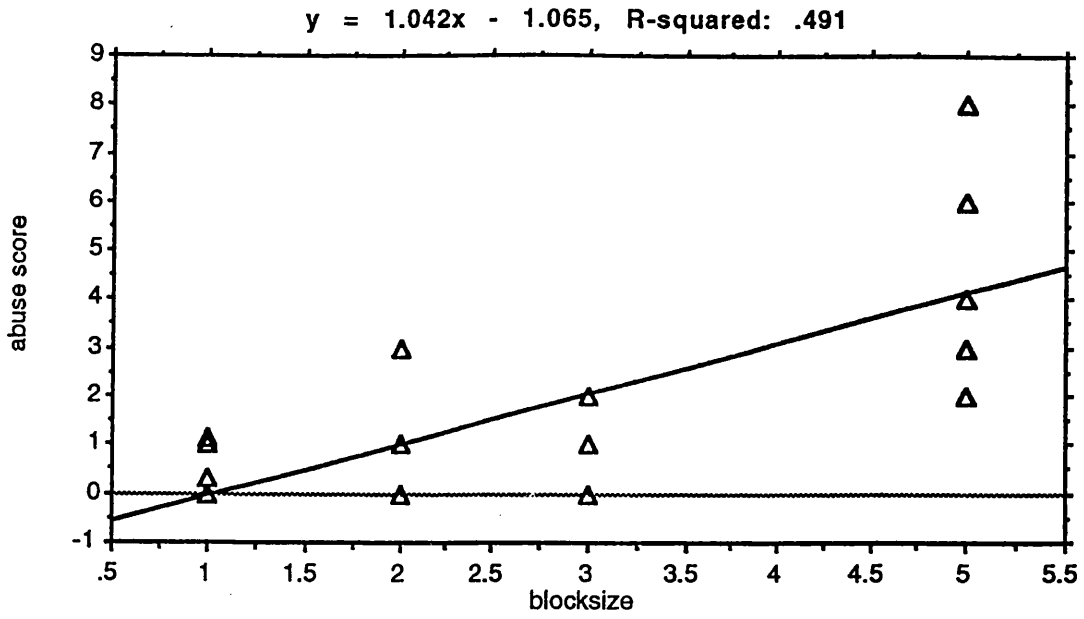
$R=.54$ $p=.0044$

Figure 30: blocksize by abuse score for blocks with 2-8 dwellings per corridor.



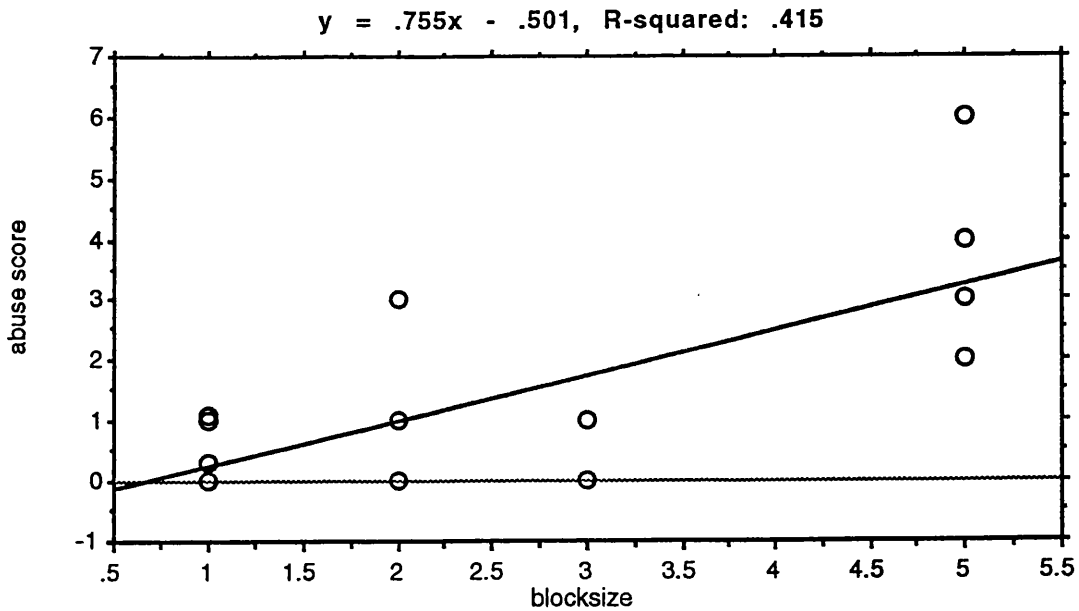
$R=.66$ $p=.0532$

Figure 31: blocksize by abuse score for blocks with 9-18 dwellings per corridor.



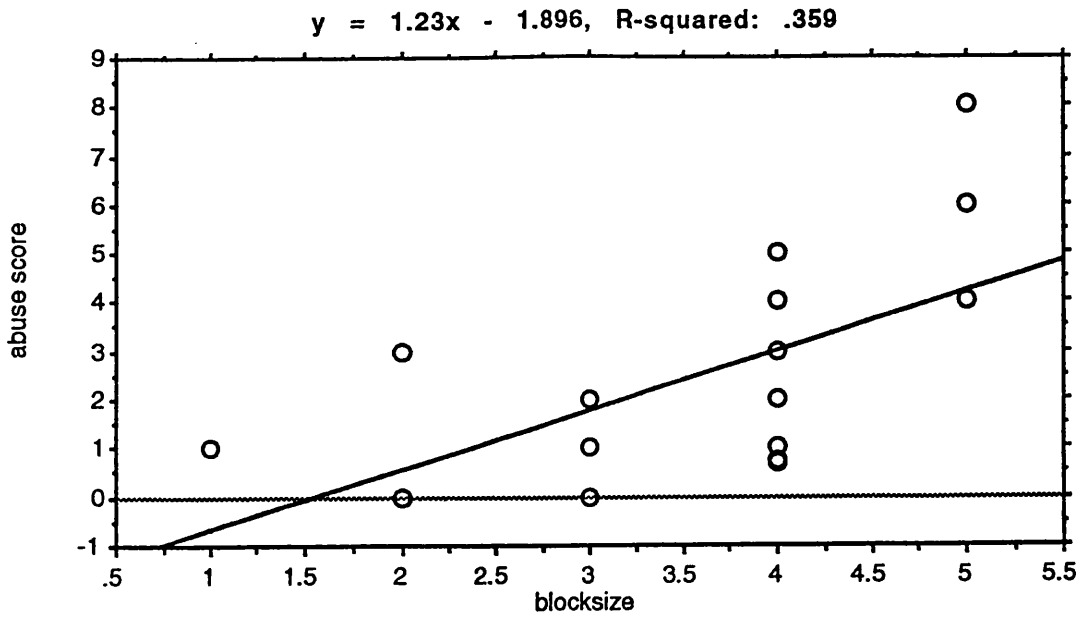
$R=.701$ $p=.0001$

Figure 32: blocksize by abuse score for unimproved blocks.



$R=.644$ $p=.0053$

Figure 33: blocksize by abuse score for north site.



R=.599 p=.002

Figure 34: blocksize by abuse score for south site.

Improved or not

Looking at all the blocks as a whole the mean abuse score for improved blocks was higher than those that had not been improved, but it is possible that this result could have been produced by chance (see figure 35). This result was repeated for categories of 4-40 dwellings per block, 1-25 dwellings per entrance and 2-8 dwellings per corridor, but it was significant in these cases (see figures 36-38). All other categories could not be computed.

These findings seem to show that Coleman's improvements have not been successful in her own terms.

Unpaired t-Test X₁: improved-not Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
39	1.121	.2691

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
yes	14	2.605	1.546	.413
no	27	1.869	2.185	.42

Figure 35: t test of improved or not by abuse score for all blocks.

Unpaired t-Test X₁: improved-not Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
28	3.279	.0028

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
yes	12	2.917	1.443	.417
no	18	1.167	1.425	.336

Figure 36: t test of improved or not by abuse score for blocks with 4-40 dwellings.

Unpaired t-Test X₁: improved-not Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
33	2.976	.0054

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
yes	14	2.605	1.546	.413
no	21	1.164	1.302	.284

Figure 37: t test of improved or not by abuse score for blocks with 1-25 dwellings per entrance.

Unpaired t-Test X₁: improved-not Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
24	3.839	.0008

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
yes	12	2.917	1.443	.417
no	14	.857	1.292	.345

Figure 38: t test of improved or not by abuse score for blocks with 2-8 dwellings per corridor.

South or North Site

The south site had a higher abuse score than the north site but this result may have been created by chance (see figure 39). This relationship was repeated for houses, smaller detached and large blocks as well as blocks with 40-63 dwellings per block and 25-63 dwellings per entrance. For blocks with 4-40 dwellings per block, 1-25 dwellings per entrance and 2-8 and 9-18 dwellings per corridor this relationship was repeated but it was significant (see figures 40-43).

It seems that location on the south or north site may be a contributory factor to the size of the abuse score.

Unpaired t-Test X₁: south-north Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
39	1.718	.0937

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
south	24	2.561	2.081	.425
north	17	1.497	1.755	.426

Figure 39: t test of south or north by abuse score for all blocks.

Unpaired t-Test X₁: south-north Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
28	2.345	.0263

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
south	19	2.368	1.64	.376
north	11	1	1.342	.405

Figure 40: t test of south or north by abuse score for blocks with 4-40 dwellings.

Unpaired t-Test X₁: south-north Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
33	2.62	.0132

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
south	21	2.26	1.578	.344
north	14	.961	1.191	.318

Figure 41: t test of south or north by abuse score for blocks with 1-25 dwellings per entrance.

Unpaired t-Test X₁: south-north Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
24	2.291	.031

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
south	18	2.278	1.638	.386
north	8	.75	1.389	.491

Figure 42: t test of south or north by abuse score for blocks with 2-8 dwellings per corridor.

Unpaired t-Test X₁: south-north Y₁: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
7	2.287	.056

Group:	Count:	Mean:	Std. Dev.:	Std. Error:
south	3	6	2	1.155
north	6	2.833	1.941	.792

Figure 43: t test of south or north by abuse score for blocks with 9-18 dwellings per corridor.

There are a number of interesting results that have emerged from this analysis. Firstly there was no relationship between disadvantage score and abuse score. However there was a positive relationship between the number of dwellings per block, per entrance and per corridor and the number of storeys and abuse score. Perhaps these variables are the most important factors of the disadvantage score. In addition block size, location on the south or north site and the presence of stilts or garages seem to have an effect. The findings seem to lend weight to the criticisms of Coleman's method that were described earlier, principally expounded by Hillier. The fact remains that the Phase Two blocks had higher abuse scores than other blocks on the estate as a whole.

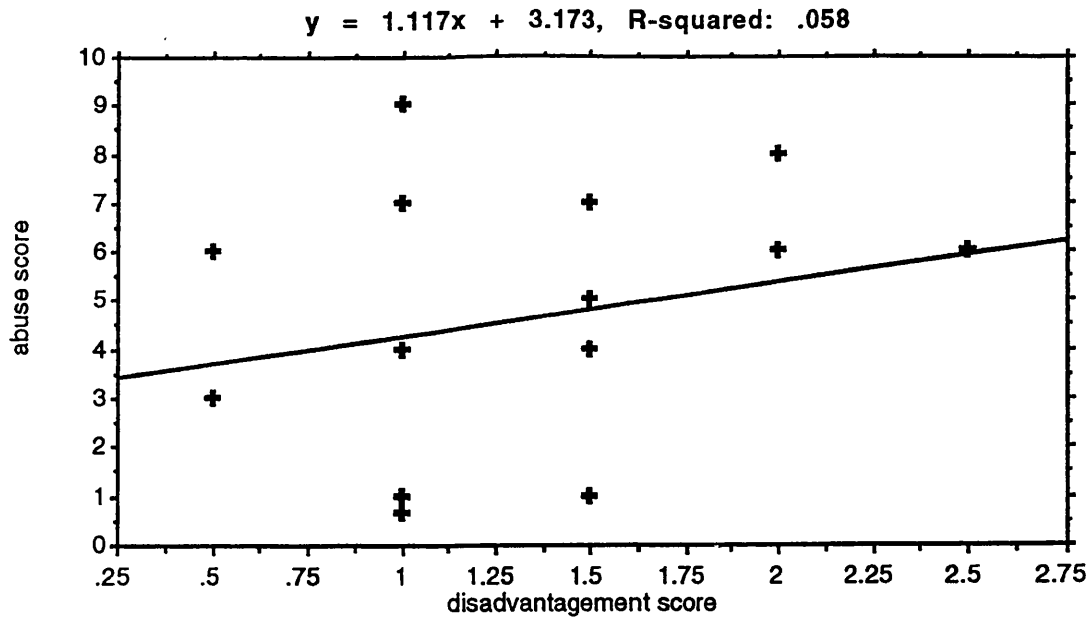
Rogers Estate

The breakdowns that were chosen for the Rogers Estate are slightly different than those chosen for Mozart as there are less distinguishing factors between blocks on Rogers. All blocks have the same number of storeys, excepting the bungalows, there are no stilts or garages as ground floor level and all blocks have been 'improved'. In addition the number of dwellings per block are the same as the number of dwellings per entrance. The breakdowns that have been chosen allow comparisons between blocks with different numbers of dwellings per entrance and per corridor and between the north and south site.

Design Disadvantage Score

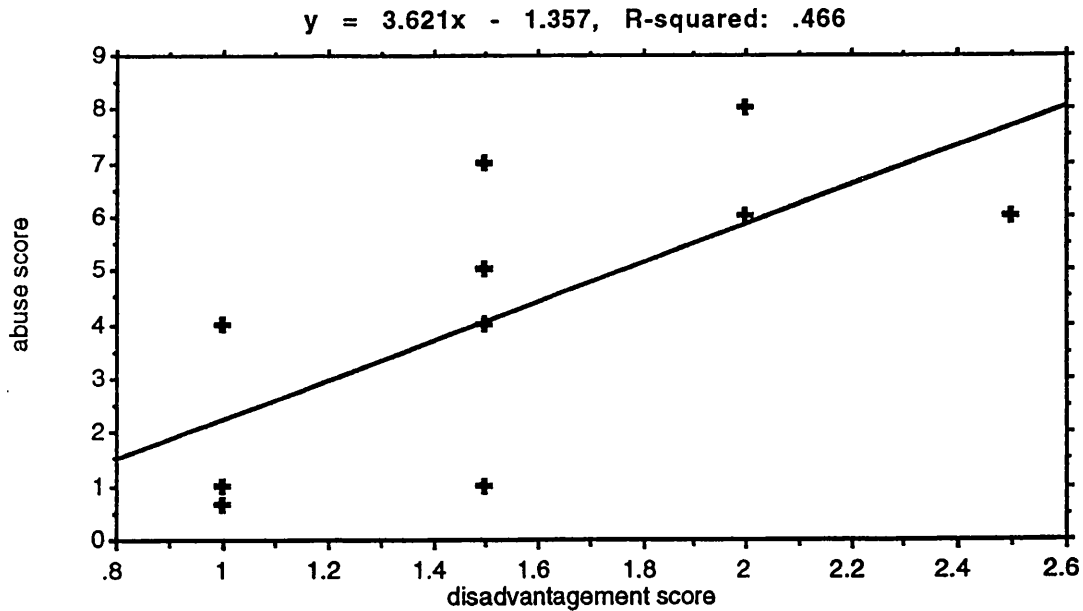
For the whole estate there was no significant relationship between abuse score and design disadvantage score. (see figure 44) For the north block there was a positive relationship (see figure 45) but for the south site there was no significant relationship. This suggests that on the south site there were other factors effecting the situation. For blocks with 1-6 dwellings per entrance and 1-2 dwellings per corridor the relationship was not significant but there was a positive trend. For blocks with 7-12 dwellings per entrance the relationship was not significant but there was a negative trend. For blocks with 3-5 dwellings per corridor the relationship was not significant.

There does not appear to be a conclusive relationship between abuse score and design disadvantage score.



R=.241 p=.3521

Figure 44: design disadvantage by abuse score for all blocks.



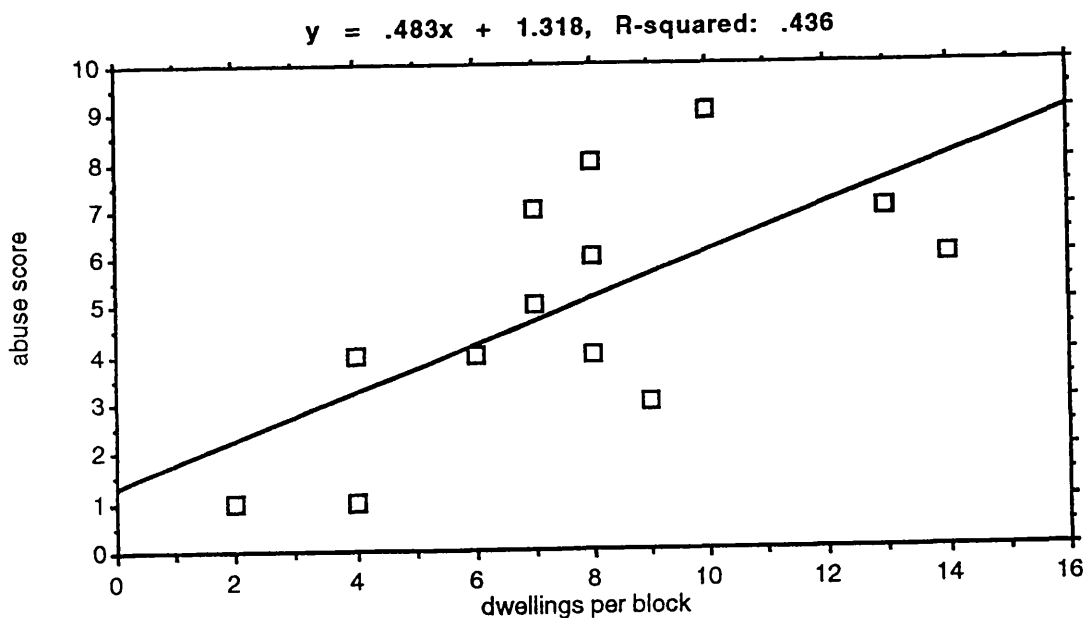
R=.682 p=.0207

Figure 45: design disadvantage by abuse score for north site.

Dwellings per Block

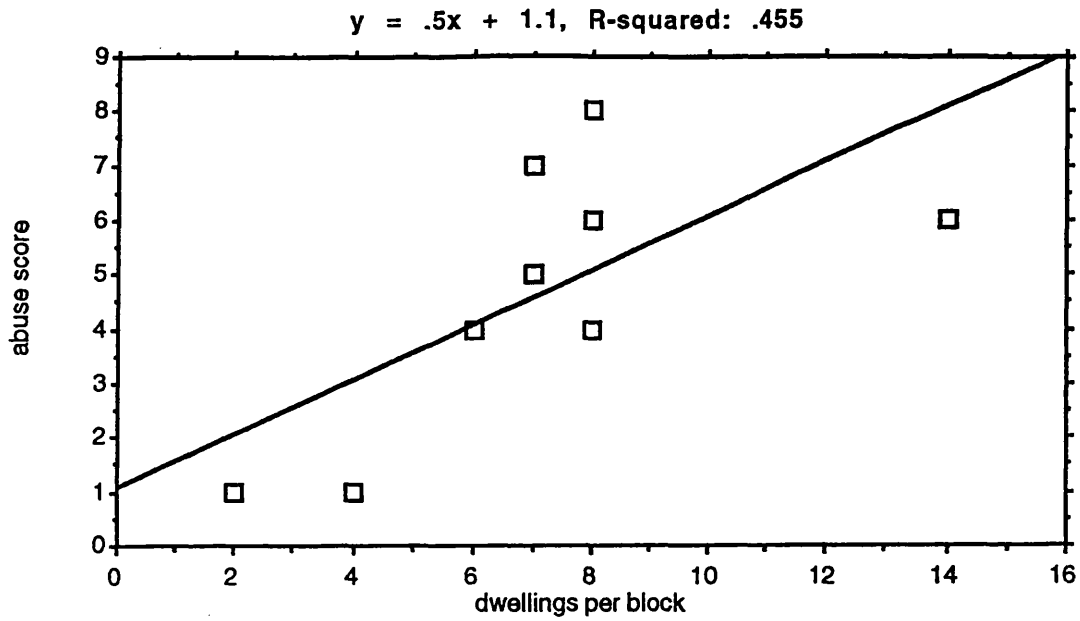
For the estate as a whole there was a positive relationship between dwellings per block and abuse score (see figure 46). For the north block there was a positive relationship (see figure 47) but for the south site the relationship was not significant but there was a positive trend. For blocks with 1-6 dwellings per entrance there was a positive relationship but for 7-12 there was a negative relationship (see figures 48 & 49). For blocks with 1-2 dwellings per corridor there was a positive relationship (see figure 50) but for 3-5 the relationship was not significant but there was a positive trend.

On the whole there seems to be a positive relationship between the number of dwellings per block and abuse score.



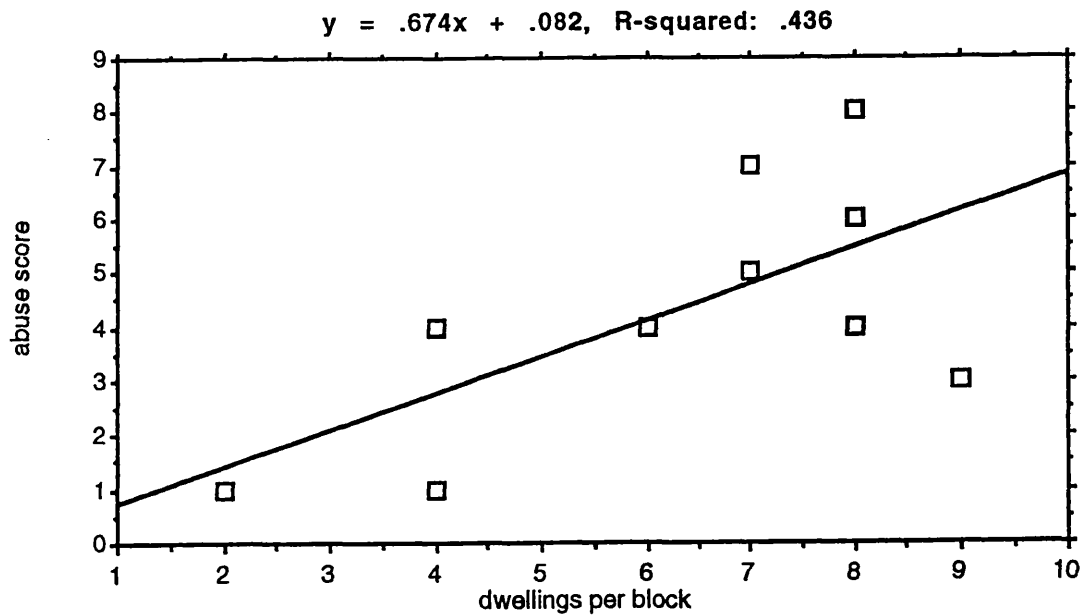
$$R = .66 \quad p = .0054$$

Figure 46: Dwellings per block by abuse score for all blocks.



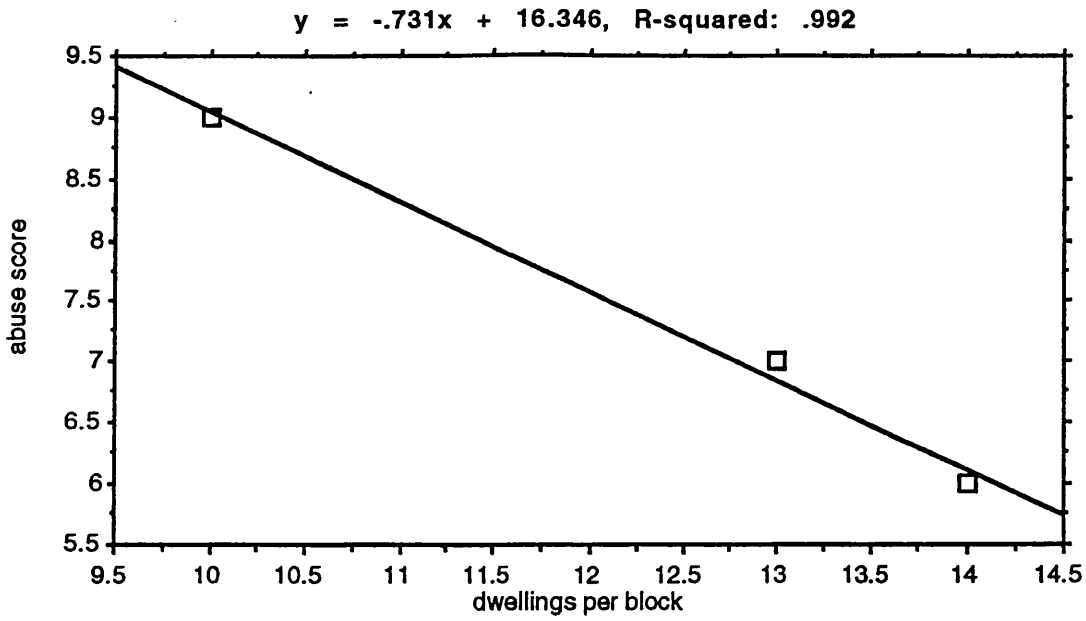
$R = .674$ $p = .0325$

Figure 47: Dwellings per block by abuse score for north site.



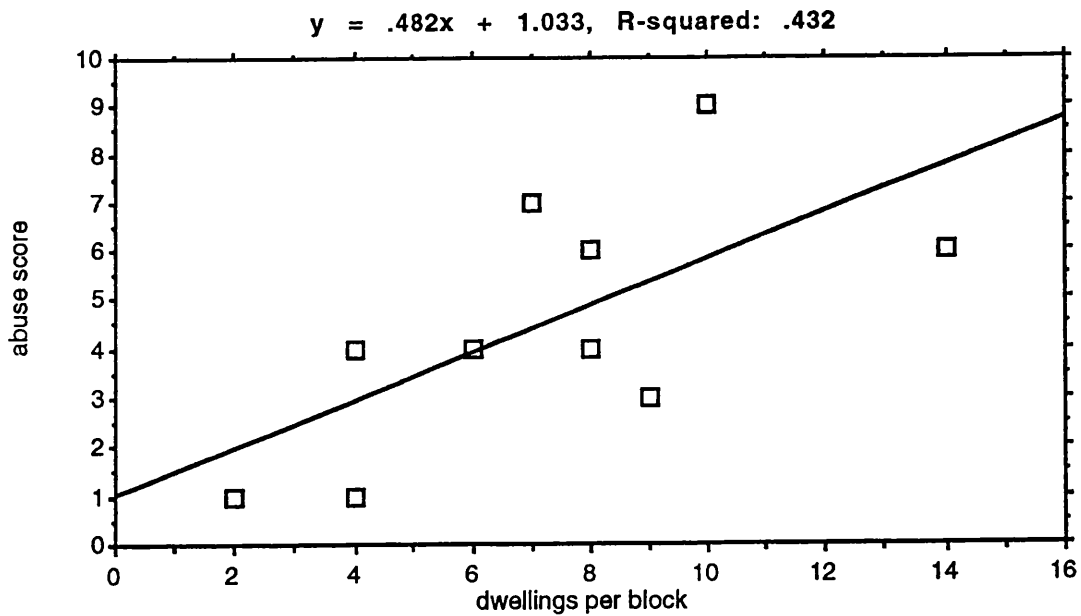
$R = .661$ $p = .014$

Figure 48: Dwellings per block by abuse score for blocks with 1-6 dwellings per entrance.



$R = -.996$ $p = .0579$

Figure 49: Dwellings per block by abuse score for blocks with 7-12 dwellings per entrance.



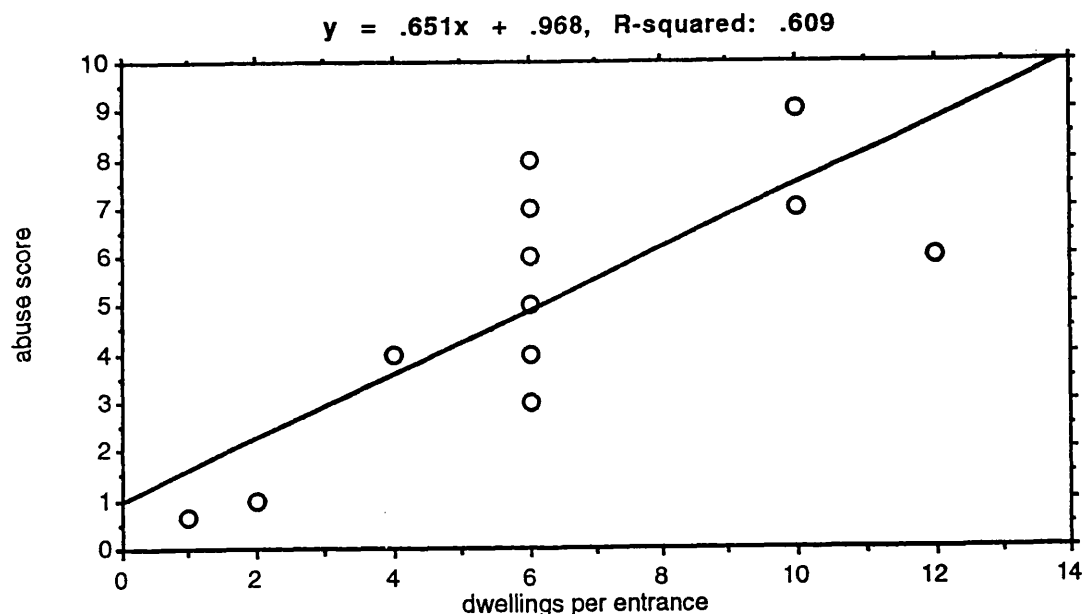
$R = .657$ $p = .0281$

Figure 50: Dwellings per block by abuse score for blocks with 1-2 dwellings per corridor.

Dwellings per Entrance

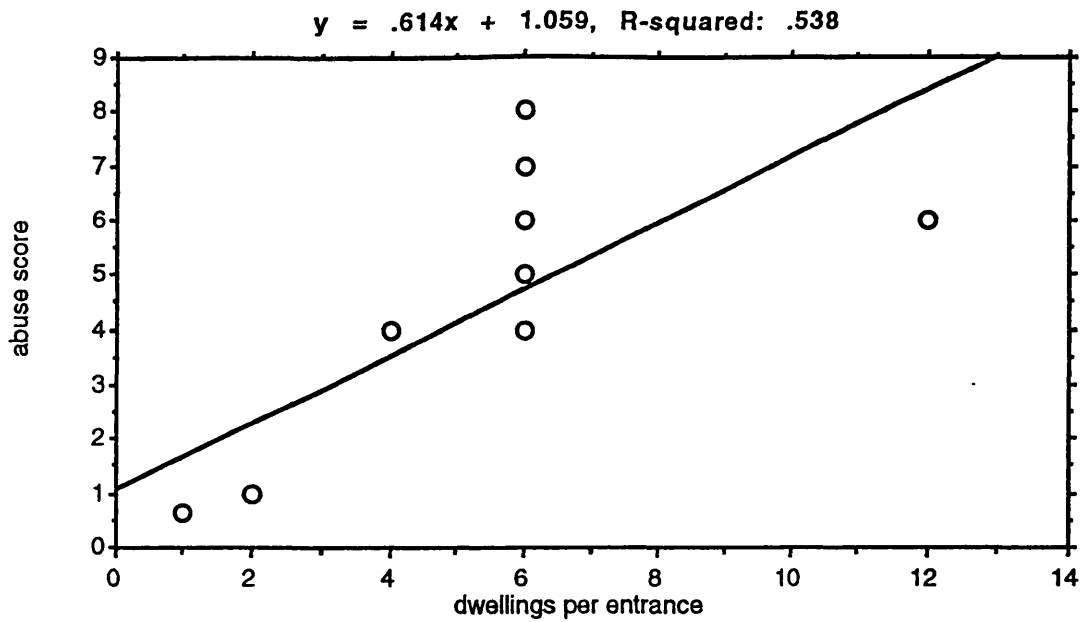
For the estate as a whole there was a positive relationship between dwellings per entrance and abuse score (see figure 51). On both the north and south site a positive relationship was displayed (see figures 52 & 53). For blocks with 1-6 dwellings per entrance there was a positive relationship (see figure 54), for 7-12 the relationship was not significant but there was a negative trend. For blocks with 1-2 dwellings per corridor there was a positive relationship (see figure 55). For 3-5 the relationship was not significant but there was a positive trend.

As a whole this was as expected with the smaller blocks being less abused, this is because less people use the entrance and is probably as these entrances are smaller and are not so attractive to congregate in.



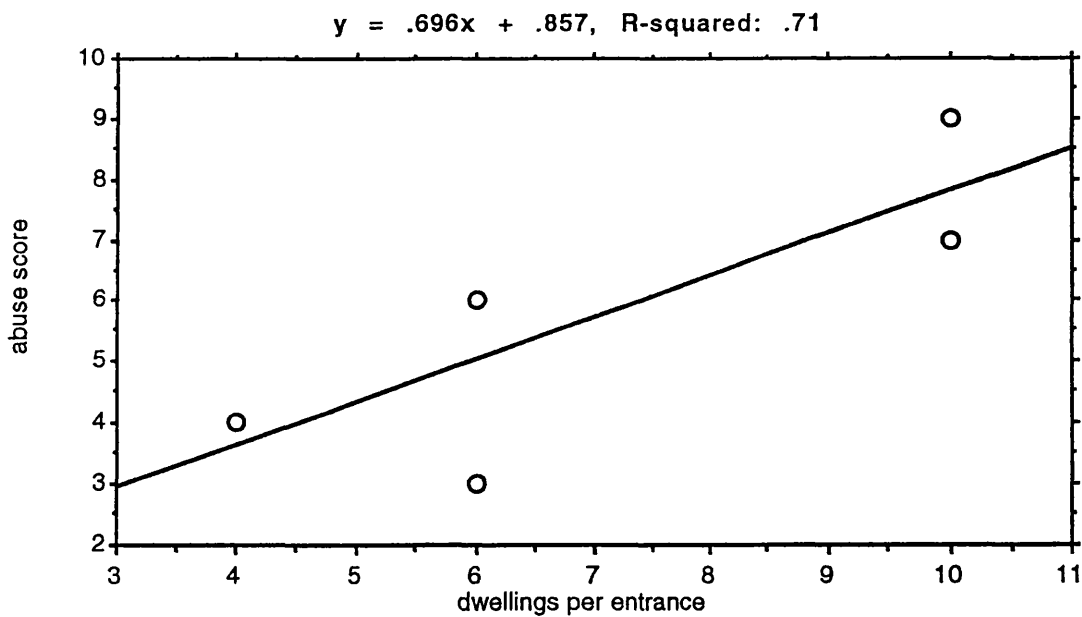
$R = .78, p = .0002$

Figure 51: Dwellings per entrance by abuse score for all blocks.



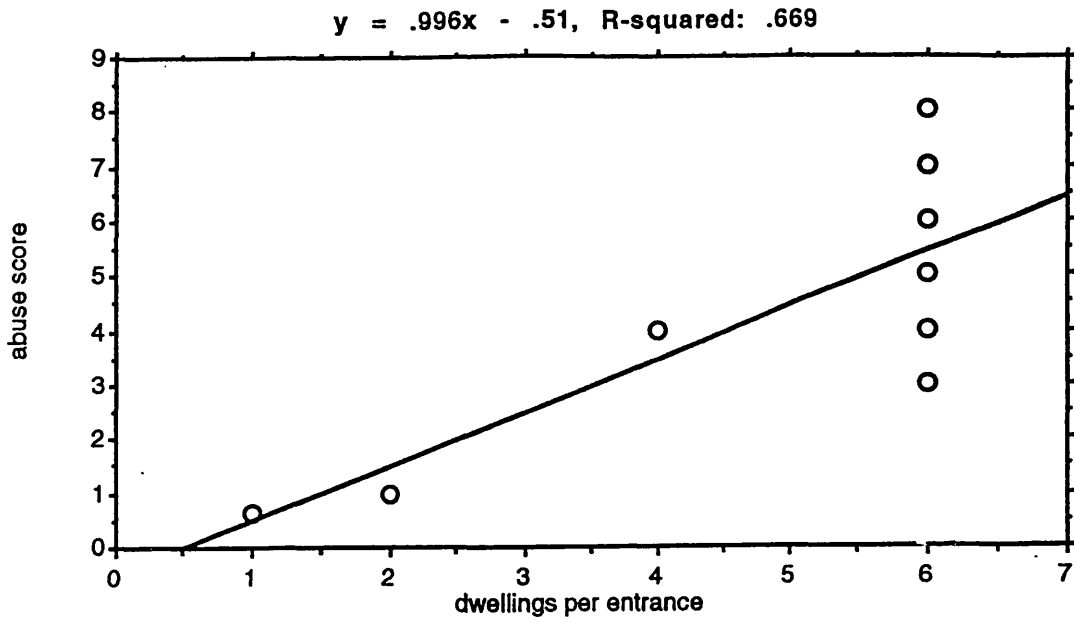
$R=.734$ $p=.0102$

Figure 52: Dwellings per entrance by abuse score for north site.



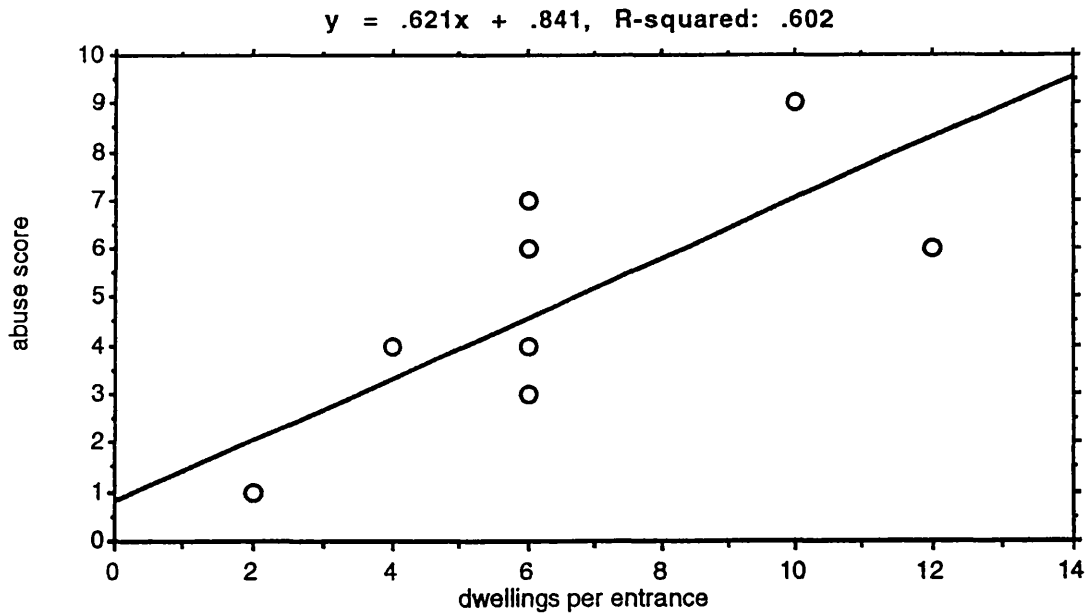
$R=.843$ $p=.0352$

Figure 53: Dwellings per entrance by abuse score for south site.



$R = .818$ $p = .0004$

Figure 54: Dwellings per entrance by abuse score for blocks with 1-6 dwellings per entrance.



$R = .776$ $p = .005$

Figure 55: Dwellings per entrance by abuse score for blocks with 1-2 dwellings per corridor.

Dwellings per Corridor

For all of the estate the relationship between dwellings per corridor and abuse score was not significant but there was a positive trend (see figure 56), this was the same for all the other factors.

It seems that dwellings per entrance and per block have more effect than dwellings per corridor.

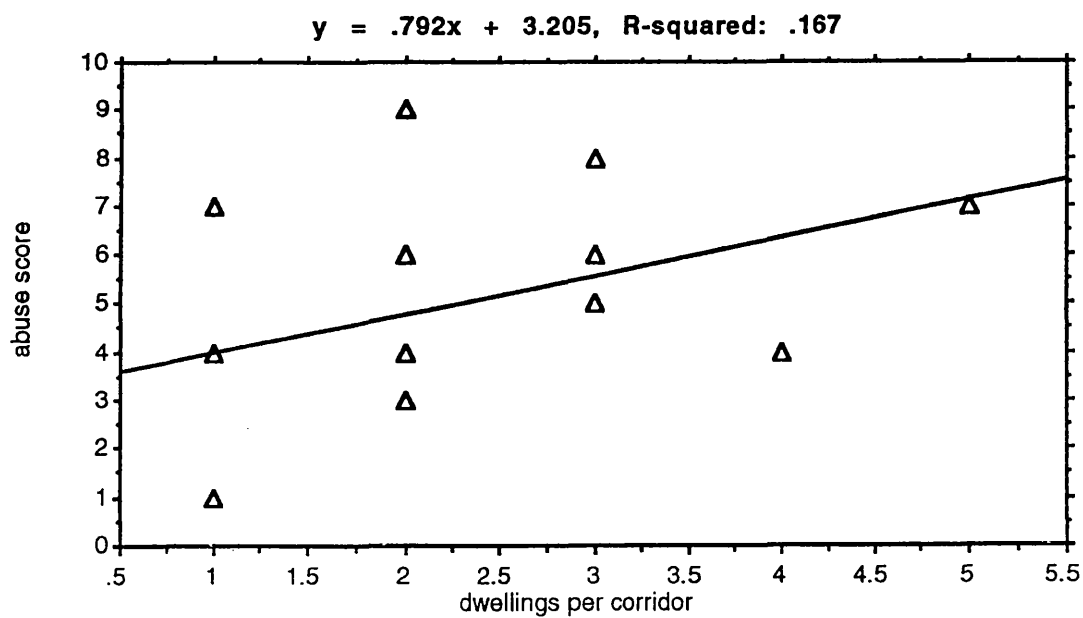


Figure 56: Dwellings per Corridor by abuse score for all blocks.

North or South Site

The south site had a higher abuse score than the north site when looked at as a whole but it is possible that this situation could have arisen by chance (see figure 57). This trend was repeated throughout the other categories.

Unpaired t-Test X₁: north or south Y₂: abuse score

DF:	Unpaired t Value:	Prob. (2-tail):
15	-1.024	.3219

Group:	Count	Mean:	Std. Dev.:	Std. Error:
north	11	4.239	2.505	.755
south	6	5.5	2.258	.922

Figure 57: t test of south or north by abuse score for all blocks.

Again there was no relationship between abuse score and design disadvantage score; it appears that dwellings per block and per entrance were more influential. There also appeared to be some other factors involved which have affected the way that the south block performed. The south block is the smaller of the two blocks and it is located next to a chip shop and Public House, it is also the nearer of the two blocks to the school. These factors may have been influential in causing increased abuse.

Perhaps the most important result is that there was no clear cut relationship between design disadvantage and abuse score on both the estates. It is possible that this result can be attributed to the fact that these scoring methods are fundamentally flawed. There are a number of shortfalls that can be identified within the method. Looking at the calculation of design disadvantage; both survey forms seem to be tailored to allow reductions in score following design improvement. The use of secondary thresholds also seems to be tailored to reduce the disadvantage scores of Colemanised blocks. In addition each factor has individual weighting whereas it may be that one factor is more important than another. In this study it seems that the number of dwellings per block and per entrance were more important than the design disadvantage score as a whole. In addition as an on/off switch is used it is assumed that 13 dwellings per block will have the same effect as 300. As has been mentioned earlier there was no consideration of social and economic factors within the scores. The criticisms that have been mentioned by Hillier also need to be taken into consideration. These mean that the scoring system may be invalid as there were a number of flaws identified in the research which was used to devise the system.

There are also a number of problems with abuse score; abuse cannot be taken account of if it is not within the entrance or a three metre radius outside the entrance. In addition if a block has a larger number of targets present then it is liable to have a higher score. This is not normally

controlled for by DICE; although they did say that it is possible to calculate the abuse score as a percentage of targets that are present which are vandalised and that they have employed this method in the past and may do so again in the future. The extent of damage is not accounted for and therefore one broken light is scored the same as twenty broken lights. There was also no control for when the cleaning and maintenance was carried out in relation to the survey period. In addition houses are likely to be less abused purely due to the nature of their built form and arrangement and the number of people using their entrances.

At times the basis of the Coleman's research seems tenuous. The whole approach is based upon the fact that people cannot live in flats as they do not have 'defensible space', however many people live in flats quite happily and it is the accepted form of urban living abroad. In addition it seems hard to believe that the creation of a streetscape with front gardens will automatically create a community which builds friendships and whose children will learn to behave in an acceptable manner. Having said that it appears that such design modifications have had some benefits, even if not on abuse scores.

Table Five

CRIME STATISTICS

MOZART ESTATE

	<u>major</u>	<u>beat</u>	<u>vehicle</u>	<u>burqlary</u>	<u>Total</u>
18/3/86- 17/8/86	28	*	*	23	

Metropolitan Police crime statistics from DC Atkinson

1/5/93- 30/9/93	69	90	37	43	239
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Metropolitan Police crime statistics produced by PC Chesworth, Harrow Road

* statistics not available

Table Six

ROGERS ESTATE

Figures calculated by manually looking through the cases to select Rogers Estate specifically

1/1/88- 1/1/89	2	4	-	6	12
1/1/93- 1/1/94	2	7	1	4	14

Metropolitan Police crime statistics produced by Daryl Horwood, Bethnal Green

Figures calculated by the computer, which may distort outcome. In respect of vehicle crimes the computer will show all the vehicle crimes in Globe Road unless another junction or number is given. The other crimes might vary slightly for the same reason.

1/1/89- 1/11/89	20	50	10	18	98
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Metropolitan Police crime statistics from Rogers Estate Dice Project Report

1/1/93- 1/11/93	26	25	56	26	133
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Metropolitan Police crime statistics produced by PC Sibley Crime Prevention Officer , Bethnal Green

On the Mozart Estate there was a gross increase of 41 Major crimes and 20 Burglaries between 1986 and 1993. Looking at % increases in these type of crimes for Britain as a whole 1986-1993 there was a 48% increase in burglary and thus the net increase in burglary over this period on the Mozart Estate has been 8.96 burglary crimes. With increases of 90% in serious violent crime and 100% in robbery the increase in Major crime on The Mozart over the time period does not seem to be over excessive.

As can be seen from the table six there was a gross increase of 2 crimes after modification on the Rogers Estate using the figures calculated manually. Allowing for the 2.8% increase in crimes that there was for the division as a whole, over the same time period, there has been a net increase of 1.13 crimes.

Using the computer generated figures there has been a gross increase of 35 crimes which, allowing for divisional increases, represents a 32.26 net increase of crimes.

Although there have been increases in crime on both the estates the increases have not been significant considering the rises in crime throughout the metropolitan area. However recently there have been decreases and neither estate exhibits the reduction in crime rates that Coleman predicts.

The improvements that have been implemented on the two estates studied here do not appear to have been successful in Coleman's terms. However there have been a number of benefits that have been identified on the Mozart Estate. The significance of these benefits will be discussed in the conclusion.

Summary

Abuse scores have reduced since design modification but they still remain high.

There is no clear cut relationship between design

disadvantage and abuse score, there are clearer relationships between abuse score and number of dwellings per block, per entrance and per corridor.

This seems to cast doubt on the system of scoring.

On both estates there seem to be other factors that are influencing the incidence of abuse scores.

Crime rates have not increased in line with Coleman's predictions.

There have been some benefits of design modification.

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- 1 Table provided by DICE dated September 1988
- 2 Coleman, A & Gilliland, G (May 1989) Rogers Estate Design Disadvantage Report, DICE project, Kings college

CHAPTER SEVEN

Conclusions

Crime affects everyone and, with rising levels of fear of crime and actual crime, measures to reduce crime have to be taken seriously. The concerns of the public have been reflected recently in the flurry of political debate and legislation about crime prevention. Most important for planning are the Planning Policy Guidance Notes and Departmental Circulars. Circular 5/94 'Planning Out Crime' has been produced recently. The importance of 'defensible space' type design is recognised in combination with other factors.

A review of the literature revealed that most theories about the causes of crime and social malaise recognise a single contributory factor only. It is most likely that the answer is to be found with more than one contributory factor. The government guidance goes some way towards recognising this fact.

This study has attempted to evaluate the implementation of design, for the reduction of social malaise, by Professor Coleman and the DICE team. This evaluation was carried out on five levels; ethnographic descriptions, anecdotal comments, statistical indicators, design disadvantage and abuse scores and crime levels.

On the Mozart Estate the general feeling was that Phase Two had been successful. However an analysis of statistical indicators showed that it was not clear that there had been improvements as a result of design modification. The indicators show that there has been an increase in Right to Buy and decreases in those wanting to transfer off the estate, however the rate of turnover remains high and there has been a decrease in the numbers of residents that have lived on the estate for more than five years. In addition abuse scores remain high for the Phase Two blocks. On the

whole it seems that the number of dwellings per entrance, per block and per corridor, the number of storeys and the block size are more influential than the design disadvantage score. This raises questions about the validity of the scoring system . Although crime rates have not decreased there have been significant reductions in the fear of crime. The area around the Phase Two blocks does appear to feel much safer than other areas on the estate. It seems that the design modifications on the Mozart can be seen to be successful; but not in terms of looking at abuse scores.

On the Rogers Estate the general feeling is that the scheme has been a visual success but for those who are intimately involved with estate life there are still high degrees of dissatisfaction. The estate has large problems of vandalism and litter as well as gangs of youths, drug dealing and prostitution. Statistical indicators have produced mixed results with regard to the success of the project. There have not been large increases in Right to Buy purchases, there have been increases in the numbers of vacant properties, the annual turnover has also increased although the average period to relet has decreased. There have been decreasing numbers wanting a transfer and the estate is no longer considered difficult to let. The situation with regard to Social Services provision has remained the same but the estate is now regarded as average. The crime rate on the estate appears to have remained fairly stable. With regard to abuse scores these still remain high and the south block appears to behave differently than the north block. As stated earlier this may be because of its situation.

Both estates do not seem to have been successful in Coleman's terms; abuse scores remain high, although they have reduced, and crime rates have risen. Despite this fact Mozart Estate appears to have been a success and is regarded as such by residents, those involved with the estate and outsiders. An attempt has been made to evaluate the reasons for this by looking at the differences between

Mozart Estate and Rogers Estate.

Mozart Estate improvements have been completed for longer than those on Rogers and it is possible that the situation may have stabilised over time.

There are also important differences in the way that the estates are managed. The Mozart Estate has an estate office on site and the estate is cleaned everyday very thoroughly. The design changes on Mozart were implemented in conjunction with improvements in the style of management to increase efficiency. Rogers Estate Office is situated down the road and although it is not far this may create a problem. In addition the estate is only cleaned once a week. Management changes have not been implemented hand in hand with design changes.

Mozart and Rogers are also very different in their locations, Mozart being situated in what is effectively a suburban style residential area and Rogers being in an inner city location. Rogers is located between two busy roads and within a high street location. It may be that Colemanisation is most appropriate to suburban locations.

The problems on Rogers Estate may also be a reflection of the breakdown of the community. The Estate is split between White British and Bengali residents and there is a certain amount of animosity between the two groups, especially involving older white residents. Mozart on the other hand is very multi-racial. On the Rogers Estate the removing of balcony access has prevented some residents from visiting their friends and neighbours and it is possible that this has destroyed the remaining kinship network.

The way the estates are policed is also different. Both estates have sector policing and this means that there is more involvement with the community. This has been interpreted differently by each police force, on Mozart they have taken a more pro-active role and have set up formal means of communication as well as establishing the

police office.

There are also differences in the way that Colemanisation has been implemented. On the Rogers Estate in the South Block there are a number of quasi houses that have been created whose entrances face inwards onto the estate and whose gardens back onto the main road. On Rogers Estate it feels as if Colemanisation has been implemented purely to reduce the disadvantage score with little prior thought as to the implications. This means that entrances have been created which access only two dwellings and which have large wasted spaces in the stairwells and a number of flights of stairs before the first dwelling is reached. Even in entrances which access larger numbers of dwellings there are large areas of wasted space which are used as congregating areas for youths. It is possible that a large number of the problems on the Rogers Estate may be solved by the introduction of entryphones and with time the situation may settle down.

What can be concluded is that design alone does not seem to be able to remedy the problems of problem estates. It seems that in combination, and despite of the pitfalls, design has been influential in creating improvements. It must be stressed however that in both cases the improvements were not reflected in the abuse scores and there was not a clear correlation between design disadvantage and abuse score. It remains to be seen whether the improvements will be sustained over long periods of time as the changes cannot be solely attributed to design. These findings reflect the fact that it is probably a multi-faceted treatment of the problem that is needed. The recent legislation and the Estate Action projects, in general, go some way to promoting this approach. Coleman herself is also beginning to realise the benefits of a mixed approach.

At the beginning of this study it was suggested that it was perhaps wrong to have implemented Colemanism in so many cases, in view of the criticisms of the basis of her work, without proper testing or evaluation. It has been

demonstrated from this study that there were a number of lessons that should have been learnt from the implementation of Phase Two on the Mozart and perhaps it would have been better to have taken account of these before beginning the DICE project. It would also have been helpful if the SNU reports had been made widely available. It is interesting that despite the findings of the SNU reports City of Westminster are proceeding with further phases using Coleman as a consultant. It is fair to say, however, that there have been benefits from Colemanisation, often significant, and it will be very interesting to see the Price Waterhouse evaluation of the DICE project. Design modifications may be an important part of future works but they will probably have to go hand in hand with other changes.

Summary

Phase Two on Mozart is considered to be a success.

However statistical indicators show mixed results and abuse scores remain high.

It is likely that the improvements have also been a result of management and policing changes.

Rogers Estate is considered to be a success visually but a failure in other respects.

Statistical indicators show mixed results and abuse scores remain high.

The differences between the experience on Rogers and Mozart are likely to be a reflection of differences in styles of management and policing and differences in the type of residents and locations of the estates.

This factor should be reflected in future work.

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Leaflet 1 Design Disadvantagement Fact Sheet

Leaflet 2 Good and Bad External Design and Layout (Houses)

Leaflet 3 Good and Bad Design and Layout (Blocks)

Leaflet 4 Methods of Estate Improvement

Leaflet 5 Financial Aspects of design Improvement

Leaflet 6 Not yet finished

Leaflet 7 Open Space

Leaflet 8 The Value of Individual Gardens

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APPENDICES

Appendix One

The block and house survey forms used by DICE and also used in this study.

BLOCK SURVEY FORM

	Surveyor	Name _____	Date	____/____/____
IA	Authority	Name _____	Code	_____
EST	Estate	Name _____	Code	_____
CAT	Category/Ownership; D,C,P,O/ C,P,H	____/____	* if value breaches threshold	

	Block	Address		
BLK	Block/Service Tower	Serial number	_____	_____

	12	Stilts/Garages/Facilities (- - - -) S,G,F,No.	Map	_/_/_/_	_/_/_/_	_/_/_/_	_/_/_/_	_/_/_/_	_/_/_/_
NS	3	Number of Storeys (3)		___	___	___	___	___	___
FM	4	Flats or Maisonettes (F) M,B		___	___	___	___	___	___
WW	5	Walkways WW/WP/WU (0)	Map	_/_/_	_/_/_	_/_/_	_/_/_	_/_/_	_/_/_
PL	15	Play Areas (-) C,H,B	Map	___	___	___	___	___	___
IO	16	Spatial Organisation (A,B,O) C	Map	_/_/_	_/_/_	_/_/_	_/_/_	_/_/_	_/_/_
TH	16a	Fence Height (W) H,L,-	Map	___	___	___	___	___	___

	10	Entrance Position (F,S,B) I,M	Map	___	___	___	___	___	___
AP	11	Doorless Communal Entrances (0)	Map	___	___	___	___	___	___
IT	9	Entrance Type (CO,CG,IG) OO,CI,IO		___	___	___	___	___	___

	6a	Interconnecting Exits Block	Map	___	___	___	___	___	___
RB	7a	Interconnecting Stairs & Lifts Block	Map	___	___	___	___	___	___

	1	Dwellings per Block (12)		___	___	___	___	___	___
EB	2a	Dwellings per Entrance in Block; max. no.	Map	___	___	___	___	___	___
T	8a	Corridor Type (D,L,B) E,I		___	___	___	___	___	___
IC	8	Dwellings per Corridor (4)		___	___	___	___	___	___

	2	Dwellings per Entrance Total (6)		___	___	___	___	___	___
IT	6	Interconnecting Exits Total (1)		___	___	___	___	___	___
RT	7	Interconnecting Vertical Routes Total (1)		___	___	___	___	___	___
TE	13a	Site code: A-Z		___	___	___	___	___	___
S	13	Blocks per Site (1)		___	___	___	___	___	___
XP	14a	Access Points per Site	Map	___	___	___	___	___	___
AX	14b	Podium Access inside the estate	Map	___	___	___	___	___	___
XS	14	Access Sides per Site (1)	Map	___	___	___	___	___	___

SC	DESIGN DISADVANTAGEMENT SCORE	___	___	___	___	___	___
----	-------------------------------	-----	-----	-----	-----	-----	-----

	VGR	Litter/Graffiti; -1,2		_/_	_/_	_/_	_/_	_/_	_/_
	FS	Urine/Faeces; -1.		_/_	_/_	_/_	_/_	_/_	_/_
	S	Fences/Sheds; -1,X		_/_	_/_	_/_	_/_	_/_	_/_
	D	Windows/Doors; -1,X		_/_	_/_	_/_	_/_	_/_	_/_
	L	Stairs/Lifts; -1,X		_/_	_/_	_/_	_/_	_/_	_/_
	R	Electrics/Refuse; -1,X		_/_	_/_	_/_	_/_	_/_	_/_
	B	Garages/Building Fabric; -1,X		_/_	_/_	_/_	_/_	_/_	_/_
		Vandal Damage, Total Target Types		___	___	___	___	___	___
	IC	ABUSE SCORE		___	___	___	___	___	___

KEY TO BLOCK SURVEY FORM

Block Category/Ownership	D DICE; C Control; P Price Waterhouse; O Other / C Council; P Private; H Housing Trust or Association	
Stilts/Garages/Facilities	S Stilts; G Garages; F Facilities; No. of Storeys with S, G or F. (- - -) means dwellings occupy the ground Fl.	
Flats or Maisonettes	F Flats; M Maisonettes; B Both	
Play areas	- None; C Children's play area with equipment; H Hard-surfaced games court; B Both C and H	
Spatial Organisation	A Semi-private B Semi-public O Not confused	C Confused
Front Fence Height	W Waist; H High; L Low; - None	
Communal Entrance Position	F Flush on the pavement or street S Set back a short distance B Both F and S	I Inside the estate M Multiple positions including at least one I
Entrance Type	CO Communal entrances only CG Communal and individual entrances with front gardens IG Individual entrances only, with front gardens	OO No communal entrances in block CI Communal and individual entrances, no gardens IO Individual entrances only, no gardens
Dwellings per Block	Total No. on ground and upper floors	
Dwellings per Entrance	No. in the block or sub-block excluding separately entered ground-floor dwellings	
Corridor Type	D Duplex; L Landings; B Balconies (Four or fewer flats)	E External; I Internal (Five or more)
Dwellings per Corridor	Max. no. on one corridor	
Total Dwellings per Entrance	Number accessible in blocks or sub-blocks linked by walkways, excl. separately entered ground floor dwellings.	
Total Interconnected Exits	Number in blocks or sub-blocks linked by walkways	
Total Interconnected Vertical Routes	Number in blocks or sub-blocks linked by walkways	
Litter	- Absent; 1 Clean and Casual; 2 Dirty and Decayed	
Graffiti	- Absent; 1 Inside or outside the entrance; 2 Inside and outside	
Urine	- Absent; 1 Puddles, stains, or smells	
Faeces	- Absent; 1 Present	
Vandalism (Each Target Type)	- Undamaged; 1 Damaged; X Target not present	

KEY TO MAPPING CONVENTIONS

Stilts/Garages/Facilities	Draw lines outside the block; yellow for stilts; orange for garages; blue for facilities		
Overhead Walkways	Draw one line between block and/or service tower for each walkway		
Play areas	Mark locations with circles, and code with C and/or H		
Spatial Organisation	Mark the front of the block F and the back B		
Entrance Positions	Individual entrances:	Single-headed arrows	
	Communal Entrances:	Double-headed arrows	
Communal Entrances	Doorless:	Plain arrowtails	
	With doors:	Forked arrowtails	
	Entryphones:	A cross	
Gardens	Gates:	Red dot	New fences: A straight red line
	Apertures:	Red circle	Destroyed boundaries: A wavy red line
Interconnections	Part:	Draw partition lines between self-contained sub-blocks	
	Stairs and Lifts:	S, L and number.	
Dwellings per entrance	Number at foot of communal entrance arrowtail		
Access	Red arrows. Access to podium inside the estate; double arrow shaft.		

HOUSE SURVEY FORM

KEY TO HOUSE SURVEY FORM

Surveyor	Name _____	Date	____/____/____
Authority	Name _____	Code	_____
Estate	Name _____	Code	_____
Category/Ownership; D,C,P,O/ C,P,H	____/____	* if value breaches threshold	

House no. & street	_____	_____	_____	_____	_____	_____	_____	_____	_____
House Serial number	_____	_____	_____	_____	_____	_____	_____	_____	_____
Ground Floor Windows (F,B,O) C,H,R,S,-	_____	_____	_____	_____	_____	_____	_____	_____	_____
Front Door (F,S,G) D,P,Q,E	_____	_____	_____	_____	_____	_____	_____	_____	_____
Projecting Features (-) G,H,R,S,V,W	_____	_____	_____	_____	_____	_____	_____	_____	_____
Garden Depth (M) S,D,-	_____	_____	_____	_____	_____	_____	_____	_____	_____
Side Fences (2) 1, 0	_____	_____	_____	_____	_____	_____	_____	_____	_____
Front Fences (W) H,L,-	_____	_____	_____	_____	_____	_____	_____	_____	_____
Front Gate (G) A,S,O, -	_____	_____	_____	_____	_____	_____	_____	_____	_____
Road Frontage (R2,R1) R0,CO/1/2,A,P,T,G,Y,V	_____	_____	_____	_____	_____	_____	_____	_____	_____
Intervisibility (I) -	_____	_____	_____	_____	_____	_____	_____	_____	_____
Back Garden Access (F) A,G, -	_____	_____	_____	_____	_____	_____	_____	_____	_____
Rear Land Use (B,O) R,C,A,P,T,G,Y,V	_____	_____	_____	_____	_____	_____	_____	_____	_____
Corner or End House (C) E / Type (D,S,T)	____/____	____/____	____/____	____/____	____/____	____/____	____/____	____/____	____/____

DESIGN DISADVANTAGEMENT SCORE	0-12	_____	_____	_____	_____	_____	_____	_____	_____
Litter: -1,2	_____	_____	_____	_____	_____	_____	_____	_____	_____
Graffiti: -1	_____	_____	_____	_____	_____	_____	_____	_____	_____
Urine: -1	_____	_____	_____	_____	_____	_____	_____	_____	_____
Faeces: -1	_____	_____	_____	_____	_____	_____	_____	_____	_____
Fences: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Gates: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Windows: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Doors: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Electrics: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Garages: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Building Fabric: -1,X	_____	_____	_____	_____	_____	_____	_____	_____	_____
Vandal Damage. Total Target Types	0-7	_____	_____	_____	_____	_____	_____	_____	_____

ABUSE SCORE	0-12	_____	_____	_____	_____	_____	_____	_____	_____
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KEY TO HOUSE SURVEY FORM

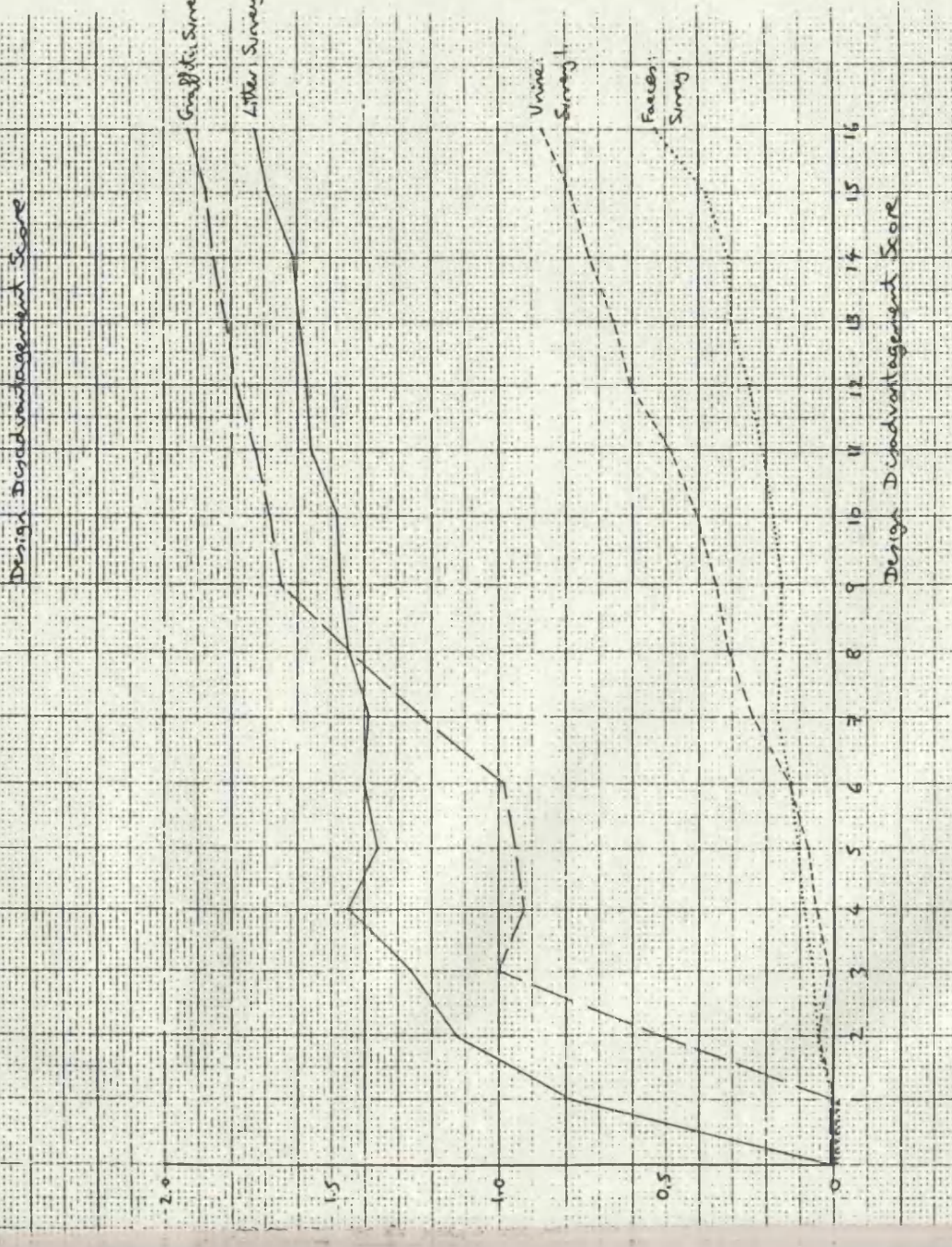
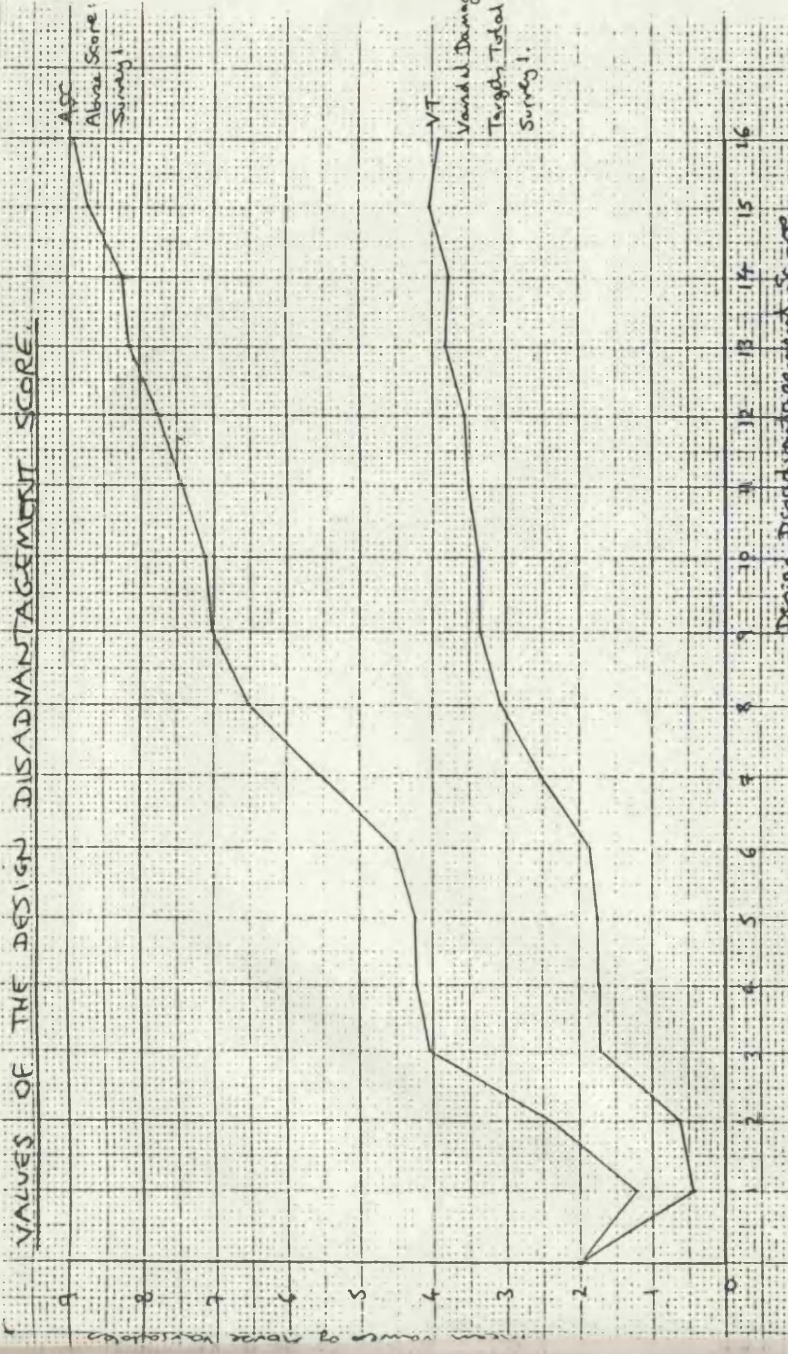
Ground Floor Windows	B	Walk-in bay or bow	C	Clouded, beaded, frosted, darkened or stained glass
	O	Oriel	H	Too High
	F	Flush in facade	S	Too Small
Front Door	F	Flush in facade	R	Recessed part of facade
	S	Slightly recessed	-	No window in ground floor front room
	G	Glazed porch	D	Deeply recessed
			P	Projecting porch (front door)
Projecting Features	-	None	Q	Projecting porch (side door)
			E	End or side of house
			H	(Neighbour's) House facade or Neighbour's Hou.
			G	Garage
			S	Shed, store, or meter compartment
Garden Depth	M	Medium, 3-5 m	R	Refuse facility
			W	Wall or fence above eye level
			V	Vegetation screen
			S	Shallow, under 3m
			D	Deep, over 5m
Side Fences	2	Both sides	1	One side only
			-	No side fences
Front Fences	W	Waist-high	H	Too high
			L	Too low
			-	No fence or wall
Front Gate	G	Gate present	A	Aperture
			S	Shared gate
			O	Shared aperture
			-	No front garden
Road Frontage	R2/1	Through road with pavements both sides, or if only on one side on the same side as the house.	RO	Road without pavements
			C2/1/0	Cul-de-sac with or without pavements
			A	Alley
			P	Path
			T	Track (unsurfaced)
			G	Green
			Y	Courtyard
			V	Vehicle Park
Intervisibility	I	House facades intervisible	-	Facades not intervisible
Back Garden Access	F	From front	G	Back gate
			A	Back aperture
Rear Land Use	B	Back-to-back gardens	-	No rear garden
	O	Other enclosed land use	R, C, A, P, T, G, Y, V	as for road frontage
Corner or End House/ Type	C	Corner	E	End house
	D	Mid-row: Detached		
	S	Semi-detached		
	T	Terraced		
Litter	-	Absent	1	Clean and Casual
			2	Dirty and Decayed
Graffiti	-	Absent	1	Inside <u>or</u> outside the entrance
			2	Inside <u>and</u> outside
Urine	-	Absent	1	Puddles, stains or smells
Faeces	-	Absent	1	Present
Vandalism (Each Target Type)	-	Undamaged	1	Damaged
	X	Target not present		

KEY TO MAPPING CONVENTIONS

Road Frontage	Mark the front of the terrace F and the back B			
Gardens	Gates:	Red dot	New fences:	Straight red line
	Apertures:	Red circle	Destroyed boundaries:	Wavy red line

Appendix Two

Graphs provided by DICE which show the expected abuse score for given disadvantagement scores.



Sample size: 1242 blocks overall.
 Survey dates: typically 1987
 NB: Small sample sizes of blocks with scores of 0, 1, 2 and 3.