Crime and Older People, ISBN 0 642 22739 X

A Practical Application of Defensible Space Theory

[Unedited. Paper as presented at Conference of 23-25 February 1993]

Stephen Axford
Manager, Urban Design
Department of Planning and Development
Victoria

The Dight Street Redevelopment Project was first proposed in the early 1980s, when problems with the buildings lead to proposals to demolish this early 1960s public housing development.

In its original form, the site comprised 376 units of mostly concrete panel construction in flats of two or three storeys. Approximately 25 per cent of the units were either "bed sitters" or one-bedroom units allocated to elderly persons. Half of these were located in a central location, with the remainder spread across the estate.

The initial plans to completely demolish the site were scrapped in 1983, after the first group of residents had been relocated. This lead to a plunge in morale on the estate and obvious complications in subsequent consultation.

One reason for the change in direction was technical information that suggested that only about one-quarter of the buildings were structurally incapable of repair, the remaining units in the order of 260, being suitable for structural repairs. The present development project grew

from this basis, and a design team was established to prepare a new master plan that could include the recycling of the structurally "sound" buildings.

Analysis

The new masterplan was developed within the department. To prepare the plan, a multi-skilled project team was established with the writer and architect Leo de Jong leading the design process. From the start, consultation was built into the process and in line with standard practice of the time, a project officer was engaged to work with the community and to assist in negotiations with the project team.

Our initial analysis of the sites opportunities and constraints suggested that structural problems, manifested by complaints about cracking and structural movement, and in certain cases unsafe staircases, were only one aspect of the problem. As previously noted, the structural problems were indeed serious caused by the unstable soil conditions and inappropriate construction, but were retrievable in the majority of buildings.

Instead, the community representatives reported a long list of behavioural problems that made life on the estate difficult. These included a high incidence of theft/break-ins, harassment of older residents by children and youth; a very high incidence of vandalism, particularly to the shared laundry blocks; and the dominance of the public open space by youth to the annoyance and deprivation of others.

Interviews with the local police confirmed these complaints, and highlighted difficulties they had in policing the estate. A particular problem was that the central "park" which had been formed by blocking off the through streets restricted the ability to patrol the estate. If a problem was occurring anywhere in the central area, they could only approach from one of the six "cul-de-sacs", allowing the offenders to disappear down any of the remaining five. As a result, the police had given up attempts at casual patrols, and would only respond to reports of serious problems. The physical layout of the site was clearly limiting the

opportunity for adequate policing, and the lack of through traffic also meant their was no "casual surveillance" of the central area.

The reports by the project officer suggested that the elderly people on the site, occupying 114 of the units and comprising around 15 per cent of the population, were particularly affected by behavioural problems on the site. They reported a high incidence of crime, harassment and fear of crime. The elderly residents were requesting window bars, security doors, security lights, high fences and so on, in response.

Because of the particular problems of the elderly, a survey was conducted of their views and attitudes under the supervision of a social psychologist, Dr. S.J. Markham (Markham 1984). With relation to security, this study found there was a strongly held perception of risk of violence against the elderly, which was not matched by reports of actual experience either to the respondent or to an acquaintance of the respondent. The level of fear appeared to be sufficient to affect the behaviour of these residents; for example, two-thirds of those who were mobile would not leave their unit at night unless accompanied by someone.

A major problem was the accessibility of all open space on the site. Public walkways were often hard up against windows to units and the courtyards faced by the blocks of flats, containing the shared laundry and storage units, were totally public, and accessible from six to eight points. As a result, there was no "control" over who moved through the courtyards, and children and youth often took "short cuts" across the courtyards. Much of the vandalism and harassment occurred as a result of this activity, often as an extension of "normal" play behaviour (eg swinging on clothes lines).

Major Issues

As a result of the analysis of the constraints and opportunities and consultation with residents, it became clear that the complaints about structural problems masked potentially more serious issues about how the estate operated. Many of the units were regarded as

"unlivable" because of harassment, whether general or targeted, and were regarded by the rental office as difficult to let.

This reinforced observations made during a study tour of public housing developments in the United Kingdom and Scotland, made by the author in 1984. Many developments demolished or altered for 'structural' problems were also regarded as difficult to let with high rates of vandalism and social problems. The most interesting response observed was the application of a mixture of defensible space technique (Newman 1974) where public and semi public space is divided and allocated to units as far as possible, with design involvement on the part of the tenants, enhancing the sense of ownership of the changed environment (Wilson 1978) (Hunter 1978). The projects visited during this study tour confirmed the projections made by Wilson (1978) and Hunter (1978), that the success of Defensible Space projects was highly related to the involvement of the end user.

The master plan established the following criteria to be resolved:

Major Issues:

- Vandalism throughout the estate
- Childrens' play tending towards harassment and annoyance of residents, particularly the elderly
- Poor security of units and laundry/storage arrangements
- Lack of privacy
- Physical.

Design Criteria:

- The lack of privacy for ground floor units.
- The lack of any hierarchy of public to private space on the estate - almost all open space was public.
- Poor sense of address no opportunity for casual surveillance.

- Poor integration with the neighbouring community.

Rationale

The rationale behind the changes was expressed within the master plan report as part of the planning application, and was intended to enable a more direct assessment of the **result than usually** the case.

In essence the assumptions were:

- That by breaking up the estate visually and physically into a series of "streets", a more "normal" set of social relations could be achieved.
- That by providing a clear division of private and public space, less opportunity for disruption of privacy and security would occur.
- That by involving the residents in the process a more relevant set of changes could be achieved together with a greater appreciation for the environment and sense of ownership by the residents.
- That by upgrading the public environment there would be a reduced likelihood of vandalism and graffiti.

The new master plan also had to address the problem of retaining most of the existing buildings, inserting new development, and improving the overall performance of the estate.

Separate studies had shown that the thermal performance of the existing concrete flats was very poor. An early decision was taken to externally insulate these buildings permitting an opportunity to substantially alter their image.

The Master Plan In Action

The overall plan prepared in 1984 provided a framework for development to occur in several stages. The final stage was completed in 1991.

The masterplan adopted the following broad concepts:

- The streets were to be continued through with speed restriction methods applied.
- The alterations to the existing units, and the new units, were designed to "address" the streets.
- Each street was designed with a slightly different character - by use of street trees paving style, architectural styles, in an attempt to illicit a " street-by-street" association, rather than an "estate" address. A clear hierarchy of space was proposed, so that all units have a "buffer" of private or semi-private space between them and public space.
- The plan allowed for a variety of projects with separate architects in order to encourage a diversity of design.

A detailed schematic was developed for stage l, to provide an indicative concept for the entire site. Important features Included:

- Laundries were brought on to the stair landings of flats, closely associated with the units.
- Laundry/storage blocks in the courtyards were removed.
- Ground floor units received front and back yards.
- Central "semi-private" open space was provided in the courtyards for upper floor units.
- Separate "address" were formed facing the streets by constructing new entries and new stairwells.
- All entries had closing doors to give the maximum perception of "privacy".
- Across-courtyard routes were no longer possible.
- Upper level units received 'Plug on' balconies.

Discussion

This project attempted to apply Oscar Newman's Defensible Space concepts in combination with a user involvement program that went well beyond simple consultation.

The involvement process had 3 aspects:

l. Overall Planning - residents were involved through a representative organisation on to a steering committee.

2. Local Planning - residents from the one building or group of building, were directly consulted regarding decisions regarding planning for their precinct.

3. Individual units - residents were directly involved ranging from a choice of a wide range of options, including room layout, finishes, fittings special arrangements; through to direct, "hands on" input at the sketch design stage for new infill units.

This process had been used before in small pilot projects for the then Ministry of Housing, but had never before been applied at this scale.

The extensive nature of this process could be expected to add some time and cost to the project, and there was criticism at the time. The most common criticism was that in rental housing of this type, any benefit of user involvement would be lost over time as residents moved on.

We believed that this would not be the case. Similar projects in the UK, for example cooperative developments in Liverpool, had shown that strong involvement helped maintain and build a community spirit, and this seemed to survive over time (Wates 1982).

Thus the Dight Street process was designed to keep groups together as much as possible and to encourage community building. We reasoned that a local "culture" would develop (eg of caring for the development) that would be passed on as tenancies changed over time. Casual observation and reports from the community suggest that this has occurred to a large extent.

The defensible space techniques - creation of private gardens, defining of public, semi-public, and private space, and arrangement of casual surveillance; were subject to the usual criticism of this theory - mainly that problems would simply be displaced elsewhere.

For the residents of the former Dight Street Estate (it is now known by its individual street names) this probably would not matter, as long as the displacement was far enough away. However, as many of the problems tended to be either extensions of inappropriate play behaviour or opportunistic crimes, it seems probable that the greatly improved physical arrangements have indeed reduced a large part of the anti-social problems. A post occupancy evaluation was carried out by the Department after the completion of the first stage. Although this was probably too early to determine the success of the social aspects, it did confirm that the residents were generally happy with the new environment and that security problems were no longer a priority issue.

The development has now been completed for almost a year and casual reports suggest it is regarded as successful, especially as a relatively high density of housing has been retained, with a high standard of amenity, compared to a higher cost for lower yield if complete replacement with attached two-storey "row houses" had been attempted.

In conclusion, it would appear that combining defensible space ideas with end user involvement deigned around community building, is the favoured approach for public housing projects. It is surprising to read that this lesson demonstrated clearly in the UK in the early 1980s has not been applied in recent work by Professor Alice Coleman, where a centrally determined set of design improvements based on her published theory (Coleman 1987) have been applied to a number of projects.

Recent reports (*see* Brimacombe 1989) suggest that these projects are meeting mixed success in application, with little evidence of a direct improvement in security despite the

physical improvements. The need for an integrated approach as demonstrated in the Liverpool cooperatives of the early 1980s, and as carried out on the Dight Street project, is thus reinforced.

Further study of projects such as the Dight Street project is essential if we are to understand the complex inter-relationship between the physical environment, community development and crime. A follow-up study based on the Masterplan report and the Markham Survey would make very interesting reading.

References

Brimacombe, M. 1989, "Beyond design", *Housing*, September.

Coleman, A. 1987, *Utopia on Trial*, Oxford Press, London.

Hunter, J. 1978, "Defensible space in practice", *The Architects Journal*, 11 October, pp. 675-7.

Markham, Dr S.J. 1984, *The Dight St. Elderly Persons Survey*, Psilink, Melbourne.

Ministry of Housing 1984, *The Dight Street Estate - Master Plan: Planning Report*, Ministry of Housing, State Government of Victoria.

Newman, O. 1922, *Defensible Space*, MacMillan, New York.

Wates, N. 1982, "The Liverpool breakthrough", *The Architects Journal*, September.

Wilson, S. 1987, "Updating defensible space", *The Architects Journal*, 11 October, p. 674.