

Samuels, R. and Judd, B. (2002), Public Housing Estate Renewal- Interventions and the Epidemiology of Victimisation

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Introduction

In recent years State Housing Authorities have devoted increasing resources to address problems associated with high concentrations of multiple disadvantage on public housing estates via a range of housing interventions that come under the general umbrella of 'estate improvement' or 'community renewal' programs. Crime and harassment reduction feature prominently in the objectives of improvement programs. Key strategies include physical improvements and reconfiguration of estates (including reversal of 'Radburn' type layouts), de-concentration via asset sales to change the social and tenure mix, and social/community development initiatives. Frequently, the programs involve partnerships with other government agencies (including Police Services), local councils, non-government organisations and, most vitally, with the communities themselves.

There is, however, a lack of empirical evidence indicative of changes in the frequency and spatial distribution of crime and harassment as a consequence of the implementation of such programs. While a seemingly obvious source of evidence is official crime statistics, these are normally only aggregated down to postcode level at best, at which scale meaningful interpretation at local neighbourhood level becomes difficult. Reliance on recorded rates of crime is also far from sufficient since unreported crime, and harassment (not necessarily illegal), are not accounted for; nor fear of crime (which impacts on quality of life, and alters behaviour in time and space). There is also little evidence of the extent to which linking housing, police and other strategic interventions - via inter-agency, whole of government and community partnerships - is associated with crime and harassment or, collectively... victimization-reduction. The Ahuri-funded research outlined here attempts to address these gaps; with the proviso that policy effects are emergent (take affect over time); and crime/victimisation mapping techniques are still evolving (not faultless).

Mapping provides a spatially-focussed base for the interpretation of social indicators in their epidemiological context. Maps are setting-specific, temporally sensitive, visual-diagnostic tools...allowing situational experience to be interpreted in the light

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of the theory and practice of environmental design and community-empowerment criminology. The intent of our research is to identify changes in incidence and spatial distribution of recorded events in *and* around 9 housing estate districts (areas containing sizeable numbers of public housing), over a 5-year period, 'before' and 'after' intervention - via operational police data mapped spatially at the finest grain. To enrich this understanding, surveys with residents will map victimisation experiences and perceptions of fear; and also assess levels of neighbourhood cohesion, using a method developed by Buckner (1998) as supplemented by Vinson (1999). Ultimately, the goal is to relate epidemiological victimization patterns to housing and inter-agency strategies, spatial configurations (via crime prevention through environmental design *ie* CPTED analysis), and sense of community.

Background

The research discussed here has a long pedigree, stemming from the seminal work of the Chicago social ecologists (early 20th century), and evolving via urban anthropology, spatial geography, environmental psychology and environmental criminology in its multiple guises. The term: *environmental criminology* is employed in the current research generically *ie* representing a meta-discipline that is inclusive of both CPTED and situational prevention approaches. This is an eclectic strategy for the application of theory in practice, where sub-disciplinary boundaries are transcended and salient elements are drawn from any approach – a best practice approach (see also: White, 1998; Clarke, 2001). The essential theoretical and empirical understanding in environmental criminology relates crime to design within the context of predisposing socio-personal characteristics, interacting within socio-spatial opportunity situations, built-in to local environments.

Briefly then, and highly selectively by necessity (and inclusive of Australian contributions), this complex body of theory and practice has evolved via:

mapping inner city zones of transition in terms of crime, delinquency, and mental health (Park, Burgess & McKenzie, 1925; Shaw & McKay, 1929; Faris & Dunham, 1939...)²; spatial-cognitive imagery (Lynch, 1960; Downs & Stea, 1973; Appleyard, 1976...); communities and streets (Jacobs, 1961; Angel, 1968; Rudofsky, 1969; Appleyard, 1981; Calthorpe, 1993...); behaviour settings (Barker, 1968...); spatial activity overlays (McHarg, 1969/92); personal space (Hall, 1966; Sommer, 1969...); cognition and spatial behaviour (Lee, 1968; Canter, 1970; Altman, 1970; Proshansky, Ittleson & Rivlin, 1970; Neisser, 1971...); defensible space (Newman 1972/76; Wilson, 1978; Merry, 1981b; Cisneros, 1995; Taylor *et al*, 1996...); offender perceptions (Repetto, 1974; Carter & Hill, 1979; Merry, 1981a; Clarke & Cornish, 1985...); community, crime and design (Baldwin & Bottoms, 1976; Clarke and Mayhew, 1980; Taylor, Gottfredson, & Brower, 1981; Sarkissian, 1984; Cooper-Marcus & Sarkissian, 1986; Hope & Shaw, 1988; Davies & Herbert, 1993; Samuels, 1994a, 2001; Saville & Wright, 1998; Taylor, 1999; Carter, 2001; Brown & Perkins, 2001; Judd, Samuels *et al*, forthcoming); CPTED and situational criminology (Cloward & Ohlin, 1960; Jeffrey, 1971; Mayhew *et al*, 1976; Clarke, 1977, 1978, 1983, 1992/97, 2001; Cohen & Felson, 1979; Brantingham & Brantingham, 1980,

² often mapped at huge scales, up to 8km², or an entire CBD, or census tract divisions - allowing, ultimately, only superficial interpretations of levels of relationship

1981/91³; Wilson & Kelling, 1982; Poyner & Webb, 1985, 1991; Clarke & Cornish, 1985; Wilson, 1987; Felson, 1987; Crowe 1991/94; McCamley, 1994, 1999; Oc & Teasdale, 1997...); spatial geography/offence prone urban environments/territorial social indicators (Berry & Horton, 1970; Smith, 1973; Baldwin, 1975; Herbert 1976, 1979⁴, 1982, 1997; Herbert & Johnson, 1976, 1979; Samuels, 1978; Herbert & Smith, 1979...); public housing & crime (Harloe, 1995; Stubbs, 1996; Matka, 1997; Hall, 1997; Hyatt & Holzman, 1999; DoH/NSW, 1999...); victimization surveys/mapping⁵ (Braithwaite & Biles, 1980; Painter *et al*, 1989, 1992; Samuels, 1995a & b...); GIS and crime mapping (Harries, 1976, 1999; Devery, 1992; Brantingham & Brantingham, 1994; O’Kane *et al*, 1994; Weisburd *et al*, 1994; Samuels, 1995a; Rich, 1995, 1999; Ratcliffe, 2000; Saywell & Bawden, 2000; Crime Mapping Lab/Police Foundation, 2000 a & b...).

Evolution

The complexity of these interactions defies classification; but, over the past 7 years, research by the principal investigators on public housing estates areas and university campuses (Samuels 1995a & b, Judd, Samuels *et al*, forthcoming) has employed and developed spatial mapping techniques, situational user experience and CPTED evaluations, leading to the current research project.

The environmental criminology approach to crime reduction is not infallible; and has also been critiqued as being incapable of halting the displacement of crime. With regard to displacement, the ‘hydraulic model’ (Clark and Cornish, 1983) suggests that restriction in one location can cause redistribution to another, in the form of deferment (to a different time), or employment of different means, or displacement onto a different target, or a spatial or territorial response – especially in response to target hardening and increased police patrolling. Crime may move to poorer areas where less resources are available to counter it – a social justice issue. Simultaneously however, there is a chance that a positive benefit (a halo effect) may result: a lessening of crime in adjacent areas which, by association, imply an atmosphere of weaker opportunities – again, triggering action by those with the most powerful compulsion to crime only (Brantingham & Brantingham, 1991). Or, there might be a progression to a less serious form of crime, or one with less serious consequences for vulnerable people. Where measures are comprehensively (regionally) applied, with whole-of government and inter-agency involvement, the likelihood of mechanistic negative-displacement is considerably diminished. In Barr and Pease’s (1990) terminology: there is both benign and malign deflection; and crime flux (the aggregate of crime movement over time and by offence types) – a major focus in the study reported here.

Within the realm of contemporary environmental criminology are two powerful paradigms that help explain and locate criminal events - rational choice theory (Clarke and Cornish, 1985) and routine activity theory (Cohen and Felson, 1979; Felson,

³ they reiterated the importance of again engaging in ‘the empirical study of crime...of [it’s] distribution in space...and what that implies for crime prevention’

⁴ Herbert’s 1977 study of delinquency in Cardiff (in the light of 16 independent variables derived from census data) showed high rates occurring in areas with ‘poor built environments’. He acknowledged that: ‘simplistic interpretations of links between bad housing and crime are misplaced, but correlations...with bad social environment are more persistent (Herbert, 1979: 121)

⁵ A recent British Crime Survey estimated that less than 25% of all crime is reported (Mirrlees-Black *et al*, 1998)

1987; Sampson & Wooldredge, 1987). Both embody the notions of decision-making, intent and interpretation; and counteract the deterministic notion *ie* intent is consciously adapted to opportunity and risk perceptions, and settings themselves are catalysts 'affording' opportunities (but do not determine behaviour). Where criminal behaviour is considered as predominantly rational and interpretative, it is acknowledged, by necessity, that situational contingencies do not deter all criminal-intention, all the time; and that design of the built environment might reduce opportunity and improve life quality but does not remove predisposing socio-economic, situational motivations. Routine activity theory sees criminal events in the light of lifestyle behaviour patterns, which are understood by the criminally-intent and acted on accordingly. Movement paths represent visible signs of potential victims traced symbolically in the urban landscape, for instance; while suburbs deserted for the city during the day are indicative of home-occupancy patterns and hence opportunity potential. From another perspective too, an individual's lifestyle patterns place them at varying degrees of risk, in the public realm - being out late, on a Saturday night, in the vicinity of a licensed premise, undoubtedly increases the likelihood of being assaulted, for instance (Roncek & Pravatiner, 1989; Homel and Tomsen, 1992). Intoxication reduces behaviour to the semi-rational.

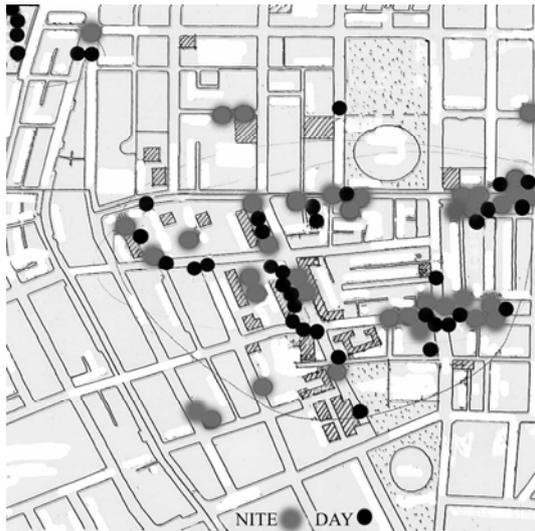
Environmental criminology, thus, can be essentially understood as the application of 'safer-by-design' principles (McCamley, 1994) in the built environment, in the full knowledge that architectural and urban form *do not cause behaviour*, but that opportunity is *built-in* to the environment, potentially increasing or decreasing the likelihood of certain behaviours occurring (Samuels, 1994b). A triad of criminogenic factors underpins the theory and practice of environmental-design: surveillability, accessibility and territoriality...seeing and being seen, control of access, and sense of place - the *inter*-dependent built-in variables. Once a *conscious* human being is added to the situation, its complexity becomes infinite; each interpretation multiplying exponentially through the system, feeding-back and -forth. Consequently, just as design is not deterministic, socio-spatial research does not attempt to unearth causality between design and behaviour: the complexity of interacting variables defies measurement. Criminological research, likewise, is not definitive; neither crime rates nor victimisation rates can be truly representative, and connections between philosophies and policies and the epidemiology of victimisation (incidence-distribution) in any given socio-spatial setting is similarly complex in the extreme. Concentrations of public housing, it is widely agreed, are areas of serious concern, impacting negatively on life quality in many ways, and especially problematic because they concentrate 'disadvantage'. Yet, even here, socio-economic vulnerability and spatial inequity do not produce the same effect on all individuals - personal susceptibilities and proclivities intervene - although such situations do 'increase the odds against which people have to struggle to preserve civilised standards' (Coleman, 1985).

Community involvement and community policing are more recent approaches (although the notion of the community as a natural deterrent has been prevalent for more than half a century), aimed at involving all stakeholders - as well as limiting the opportunities of the criminally-intent by attempting to design-out-crime. At the same time, it is unlikely that communities will respond to 'partnership initiatives' unless they experience some tangible physical upgrades in their day-to-day living and working environments too. The fundamental notion is one of natural policing; and the

integration rather than the separation of land-uses and activities is a *sine qua non*. Congruent night-animation of the public realm (and transit nodes) is a central requirement too. The anticipated consequence of the inclusion of local facilities, residential, commercial, recreational, educational and governmental domains in a *metropolitan fabric* is the ‘populating’ of these areas, resulting in heightened animation, day and night. In essence, ‘eyes on the street’ (Jacobs, 1961) enhance natural surveillance opportunities and reduce fear - due to the presence of sufficient potential witnesses (or possibly ‘capable guardians’), and where congruent situational contingencies attract like-minded people and a sense of civic responsibility prevails, intervention is more likely (or, at least, the police might be alerted). Jacobs observed that successful city neighbourhoods were close-textured, high-density assemblages of *mixed land uses*, where many people lived within walking distance of many destinations and there was a constant coming and going on foot along a dense network of streets. Where land-uses do not have continuous occupancy there is a gap in the socio-spatial fabric, and because surveillance is lower, these places - *ie* at the territorial ‘interstices’ - are likely to be assessed by marginal individuals as good places for crime; the antithesis of territorial ‘markers’, in the ‘human territorial functioning’ conception of Taylor (1988). Likewise, safe public places are said to be those with good flows of people (Angel, 1968) and intelligible (‘legible’) routes with long sightlines (Hillier and Hanson, 1984).

Temporal Factors

People naturally feel more afraid afterdark. Whether such apprehension is accurate or exaggerated (many crimes occur more frequently at night – Pyle, 1976; Samuels 2001), reasonable people modify their lifestyles and practice avoidance behaviour to accommodate their fears. Often people avoid going out at night at all – *eg* 16% of respondents in the recent housing estate research undertaken by the principal investigators (*op.cit*). That all-important sense of community appropriation is lost when a sufficient number of people recoil from using the built environment. Official statistics suggest that fear far outweighs actual levels of crime, but given the exclusion from these rates of *unreported crime and harassment*, this is only a partial representation. Victim surveys, which take such factors into account, indicate that fear is indeed warranted (Painter, *et al* 1989; *inter alia*). The ABS reported in 2000 that in Australia 83.3% of assaults, 68.3% of attempted burglaries, 67.4% of sexual assaults, and 50.2% of robberies went unreported. There is an important gender issue too; fewer women than men feel secure, in general (Pain, 1991), and especially at night - Borooah & Carcach (1997) report a six-fold increase in fear afterdark. This is generally true, even on university campuses (Klodawsky & Lundy, 1994; Samuels, 1995b). Recent research (Judd, Samuels, *et al, op. cit*) produced the victimisation and fear maps shown below. Spatial identifiers have been removed from the maps, in order to ensure no stigma flows to any area, by association. From the maps it can be seen that many areas which are perceived of as threatening (the darker areas on Map 2) are also avoided at night - neither the large park/oval (top right) nor the railway station (top left) features as a victimisation location afterdark. These are far and away the most feared places. The correlation between fear and avoidance is self-evident; again, a case of rational choice - this time from a community perspective.



Map 1: Victimization Experiences, *night and day*



Map 2: Fear and Victimization, *at night*

A further salient element of an ‘afterdark paradigm’ over-and-above and *a priori* to physical and social environmental design, is the planning philosophy that dispenses with the separation of land-uses (prevalent since the 1933 International Congress of Modern Architecture (CIAM) meeting of ‘modern internationalist’ architects; later enshrined in the Charter of Athens manifesto). There are abundant ‘*living street*’, ‘urban village’ (Gans, 1962) exemplars still prevalent in European old-city domains, derivatives of centuries-old urban forms, housing street-oriented cohesive communities with closely integrated public, commercial and residential land-uses, and urban squares overlooked on all sides. These are dense, active and contiguous urban settlements, significantly different from the low-density, neo-traditional sub-urban villages designed by ‘new urbanists’ (Calthorpe, 1993, *inter alia*), despite their development of ‘pedestrian pockets’ and bringing porches back to houses and so potentially people’s gaze back to the street. A prevailing sense of security and a self-evident abundance of social capital epitomises the experience of old city domains.⁶



Saturday morning in Troyes, France



Everyday in Siena, Italy

⁶ Future research will be aimed at empirically mapping recorded crime rates in a range of (French) old- & new-city domains. The unreported component remains beyond establishment

It is probably true to say that architects do not imagine the buildings they design, nor urban designers the settings they generate or approve, as changing their ‘personality’ at night. If, however, the focus of attention was naturally on designing for the most vulnerable time of day (night, *sic*) and the most vulnerable members of a population (women, children, the elderly, the disabled) as part of a comprehensive ‘universal design’ paradigm, a high degree of crime-and-fear-prevention potential could automatically be built-in, for the benefit of all users at all times.

In sum, social-communal-territorial involvement-participation-partnership notions, long emphasized as core strategies, have recently been *re-emphasised*: focusing on attachment, cohesion, civility, social capital and neighbouring (influencing sense of place and identity, social control, perceptions of fear, safety and trust, and avoidance behaviour...). A neo-ecological sense of responsibility (proprietary attitudes, police living in communities, socially sustainable places...) has surfaced. Other strategies emphasise mixed-land-use and the animation of the public domain afterdark (influencing risk-reward evaluations and social amenity via natural policing), threshold-avoidance (countering incivility, repairing the broken windows, removing the graffiti, providing socializing opportunities for youth...), and problem-oriented policing (intelligence-based target-focusing supplemented by pattern language crime mapping...). These contemporary values have taken root in a social democratic, co-operative, networking context, reflected by inter-agency partnerships with residents at various design stages (pre-design and post occupancy). Not only are these notions being discussed by theoreticians at the moment, but applied to varying degrees, by housing and police services in the three states of Australia under scrutiny in the research discussed here. A new sense of place management and local governance is emerging, where the aim is an empowered, self-regulating community.

In a nutshell, attitudes and behaviours are the essential elements in co-operative and consensual crime prevention/reduction and community reinforcement; and the design of the built environment is a vehicle to help this occur. Environmental criminology is socio-spatial in nature.

Public Housing and Crime

Public housing is a relatively recent innovation; British planning policy, for instance, became committed to public-sector housing between the wars and accelerated significantly after WWII, resulting in the movement of millions of people from inner city housing (then designated ‘slums’- as in the US) to large, high-density, high-rise ‘estates’ – frequently located on the peripheries of cities.⁷ Self-evidently, people took their behavioural traits and social values with them, while simultaneously losing their rich community cooperation and spirit (apparently invisible to the middle class planners who made these decisions). Inevitably these places became problem estates, concentrating the most disadvantaged people in the worst possible kind of housing, with minimal facilities and services, often far from the city and always in alienating, un-neighbourly situations. Intense social evaluation resulted (Newman’s seminal work for the New York City Housing Authority, *inter alia*); and these policies are no longer espoused. The aim now in developed democracies is to avoid high-rise buildings, integrate not separate, mix tenures (absorb and disperse the public sector in amongst

⁷ The first social housing in NSW was the Blaxcell estate in Granville, built in 1944 (for returning servicemen)

the private), explore alternative housing options such as rent assistance, co-operative/community ownership or even private sector investment, and reinforce community leadership roles - but reversing the process is neither easy nor rapid, and the need to house the socially disadvantaged has not diminished. There is much debate concerning the philosophy of reducing concentrations via asset sales: the right-to-buy legislation is blamed for the increasing unattractiveness of public sector housing stock given that only the best is bought, by those who can afford it, and the poorest, frequently multi-problem families remain concentrated in the poorest stock and areas (Harloe, 1995; Hall, 1997). The counter argument is that demolition of poor stock opens up the opportunity for private development to occur, which improves the tenor and quality of the whole neighbourhood (and the whole exercise can be revenue neutral as well).

Criminologists recognise that public housing areas are *not* necessarily criminogenic. Such conclusions would be reductionist and deterministic - some areas have high rates, others do not; some individuals are crime-prone, others are not. Frequently, a small number of residents are responsible for the majority of the crime; consequently, injunctions against specific individuals and repossession orders against persistent offenders on a London estate saw crime rates drop sharply (Osborn and Shaftoe, 1995). Bottoms *et al* (1988) showed how two estates with almost identical social class composition had very different offence and offender rates, and Baldwin and Bottoms (1976) had suggested earlier that 'housing class' *ie* tenure may be important in crime incidence generally, since renters appeared to be more crime-prone than owner-occupiers.

At the same time, the local environment cannot be discarded from the equation since it contains the cues to which individuals respond (Herbert, 1979). Coleman (1985) showed that where children are numerous high-density flats are badly abused; Poyner *et al* (1985) approached the issue from the situational point of view, where denial of positive opportunities as a result of housing design is said to have affected offence rates; and Poyner & Webb (1991) showed a significant difference between layout and recorded crime distribution (higher for houses on through roads, and facing open land - the latter confirmed by Samuels, 1995a). Recent evidence based on stakeholder perceptions and resident focus groups in public housing renewal areas (Randolph, Judd, *et al*, 2001) suggests that Radburn reversals are associated with positive changes in spatial patterns of crime.

From another perspective, Merry (1981a) interviewed young men (who lived on a multi-racial housing estate in Boston and committed robberies there) about their choice of victims and crime opportunities. In cognitive maps they indicated places good for robberies, which agreed closely with the distribution of actual crime incidents *ie* where visibility is poor, witnesses few and escape routes many - clearly, environmental design and place management issues. Similarly, Taylor (1988) reported: 'it appears that offenders against persons, as well as property offenders, view the mere presence of people outdoors as a risk factor'; and designates crime sites as those which lack a 'natural guardian', have easy escape routes, or dark alleys, for instance (Taylor, *et al*, 1996). The physical environment can influence the chances of a crime occurring.

Irrespective, simplistic design-behaviour equations do not apply. Osborn & Shaftoe (1995) cite the mere removal of overhead walkways in a London estate as not helpful in reducing burglaries; Stubbs & Storer (1996) assert that physical design or redesign strategies *alone* have little impact on actual crime rate; and Stubbs & Hardy (2000) found contradictory evidence from two adjacent public housing estates that had undergone similar Radburn reversals. A recent study of the NSW metropolitan area by the Bureau of Crime Statistics (Matka, 1997) contends that housing type (and design) and even concentration of public housing are not the issues behind crime rates; rather, the link being with disadvantage/socio-economic factors. Because the study reflects on data at postcode level - not a meaningful scale - defined relationships 'on the ground,' at street level, remain elusive. Indeed, the 'ecological fallacy' concept seems relevant here: statistics aggregated at meso-levels masking significant analytic differences. Samuels (1995a: see Map 3), using an early version of Mapinfo to map operational police data, at the finest scale available, in a housing district of mixed tenure illustrates how proportionately the highest offence rates for numerous offence types, over a 3-year period, are concentrated in the privately-owned, medium density domain (3-storey walk-ups). Presumably, more opportunity for property crime exists here (break and enter and car theft featuring prominently) - evidence of situational contingency; but assault, robbery and malicious damage to property are clustered here too - suggestive of territorial and design factors. Proximity to areas of public housing concentrations suggests, further, that issues relating to location of offence and residence of offender are likely to be implicated too. Interestingly too, at the station (right, centre), in the adjacent pedestrian tunnel which traverses the highway, and in the adjoining residential area many criminal and harassment events were experienced and noted in the victimisation mapping, none of which appear to have been reported or recorded on the police data-base. Taken together, crime and victim mapping can deepen comprehension.



Map 3: Compilation of operational offences and reports of victimisation experiences ⁽⁰⁾

Clearly, the issue is not one of the aesthetics of design, or size, density or form *per se* but, rather, a much more sophisticated notion, including: the percentage of public to private housing tenure per area, lack of a sense of ownership over space or of community empowerment, ambiguous public territory, low surveillability of the public realm, poor control over accessibility - both actual and symbolic, inadequate maintenance by public authorities, insufficient lighting, low presence of capable guardians on the streets, a sense of fear associated in people's minds with areas or streets (or 'pre-disposed' individuals), and of course endemic social exclusion, impoverishment and anomie. Brown *et al* (2001) statistically linked neighbourhood blocks of low social cohesion *and* high physical 'incivility' (litter, graffiti *etc*) with subsequent crime, for instance. All of the above affect social interaction, feelings of community cohesion and social attachment, and consequently provide fertile situations for offence-intent individuals or groups (Hirschfield & Bowers, 1997). Conversely, a positive association between 'attraction to neighbourhood' and 'safety variables' is also evident (Vinson 1999). Whatever elements intervene, inevitably the spatial nature of the built environment remains of central relevance - it is the setting, the base of situational and symbolic experience, influences attitudes and contains the cues for behavioural responses - and offers infinite opportunities for interpretation.

Although terminology such as 'inner city sinks' (Herbert, 1976, 1979), 'neighbourhood effect' (Johnston, 1971, 1976) and, even earlier, 'delinquency areas' (Shaw & McKay 1929) are no longer current (in so many words), ecological labeling, social exclusion, economic disadvantage, depleted social capital, situational opportunity, and even the proverbial 'delinquency-prone' community have replaced them, reflecting similar mutually interacting concerns in the public housing sector (the Brantinghams, 1991; Madanipour *et al*, 1998; Vinson, 1999; Carcach & Muscat, 2000, Clarke, 2001, Weatherburn & Lind, 2001; *inter alia*). The Standing Committee on Law and Justice (2000) [of the Legislative Council, NSW Parliament] states that 'many public housing areas...suffer crime problems to a degree unusual in other areas'.

From a socio-cultural perspective, research suggests that effective crime reduction requires inter-agency and community partnerships and a whole-of-government approach. Yet, these complex processes are themselves not easily sustained. Problems begin to emerge again after a time where a key element is abandoned (Osborn and Shaftoe, 1995); and partnership fatigue (consultations between stakeholders with varying agendas, confronting challenging, often intransigent problems) is also a constant threat - corroborated during interviews with stakeholders as part of the research project described here.

Methodological Issues: The Epidemiology of Victimization

Methods of analysis in the research project discussed here will include the collection of recorded crime statistics for 10 (or 11) types of offences - against property and the person (possibly inclusive of domestic violence) - over a 5-year period, for 9 selected housing estate districts (in 3 States), and at 3 scales: street level, and Collectors District level in the areas immediately surrounding each estate (via operational Mapinfo data), possibly allowing inferences about displacement or halo patterns; and at regional and postcode level, as context data (via ABS and Crime Bureau statistics). A mapping survey of samples of residents (hopefully 50-100 in each estate area), aimed at understanding their spatial-temporal experiences of crime and harassment

and perceptions of fear, over the past three to five years, will complement the crime mapping. Neighbourhood cohesion ratings and perceptions of change in crime in the estate domain will also be recorded. An advance in research methodology will be employed relating to the resident mapping component, usually the time-consuming, staff intensive and inaccurate aspect. One researcher will now interview all respondents, armed with a laptop computer into which street maps are scanned. Respondents will indicate where and when they have had a particular victimization experience, and the researcher 'drops' a symbolic 'dot' on the map (reported and unreported events are also distinguished). Places or areas experienced as either threatening or safe are similarly recorded or outlined (in red or green, respectively). Each response is thus digitally and explicitly recorded, and is available for precise overlay compilations and robust 'hotspot' analysis.

The major problem in attempting to understand the effectiveness of estate improvement programs, whatever their nature, is methodological: how to measure the extent of decrease in crime, and/or harassment, and fear - in reality. Even GIS mapping of police operational data suffers from problems in consistency of reporting and severe under-reporting. Notwithstanding their utility in generating complementary profiles of crime in society, large victim surveys, for instance the ABS Crime and Safety Surveys (1999a & b), and the Crime Atlas (Carcach & Muscat, 2000), aggregated at State or regional level, are ultimately unhelpful when it comes to projecting possible ways to ameliorate conditions on the ground. These are the realities confronting all research into the frequency and spatial distribution of crime and offensive behaviour in society, and/or the relationship of this to policy and/or design.

Moreover, policy analysis is not straightforward. Personnel change, recording of and even comprehension of developmental sequences are not necessarily self-evident, and the consequences emergent from intervention strategies do not become apparent immediately, or even systematically. Many other situational factors intervene, too. These uncertainties and complexities can only be considered as background context data and assumed to be common to all domains under scrutiny, *while attention is placed on the factors that are known to have been changed*, within a specific environment, geographically bounded. Changes in criminal intensity, thus, can be associated with those changes, without having to prove causality. The range of possible policy changes have been classified into three: estates where significant physical interventions have occurred (including Radburn reversals, and/or de-concentration through asset sales); those with mainly social/community development programs; and those where nothing substantial has happened, the quasi-control groups.

Current Estate Renewal Policy

New South Wales has had estate renewal programs since 1994, initially as pilot programs in two areas of Sydney. These were later formalized by the Department of Housing into the Neighbourhood Improvement Program (1995-99) which has recently evolved into the Community Renewal Program. Community Renewal is intended to encompass a broad range of initiatives including physical improvements, improved management, reducing concentrations, tenant participation, employment & training programs, and crime prevention (NSW/DoH, undated). It also involves partnerships and service agreements with other government and non-government agencies,

including Police. Whole of government, place management initiatives focused on areas with social problems and high crime rates have also been initiated by the Premier's Department – including in some areas with high concentrations of public housing.

Queensland has a Community Renewal Program which is part of the broader, whole-of-government Crime Prevention Strategy of the Department of Premier and Cabinet, established in 1998. While managed by the Department of Housing, funding for community renewal is distinct from departmental funding for housing provision through the Commonwealth State Housing Agreement. The program also has a strong commitment to area based approaches and flexible funding to encourage integrated programs and a wide range of partnership arrangements with other government departments and local councils (Qld/DoH, 2001; Crime Prevention Queensland, 1999).

South Australia has an integrated Human Services Department which includes the South Australian Housing Trust, Health, Youth, Family and Community Services. This is intended to encourage program integration and whole-of-government approaches. Estate improvement programs were implemented as early as 1986, but since 1991 the South Australian Housing Trust has adopted a policy of overall stock reduction and de-concentration of the estates through redevelopment strategies in partnership with the private sector and local government. A revenue neutral approach is taken where the cost of improving the area is offset by income from land sales and redevelopment. This approach is accompanied with community consultation, employment and training programs, and increasingly with community development initiatives. The Department of Human Services also has its own Urban Regeneration unit which focuses on service integration through whole of government approaches.

Specific Policies: Housing and Police Services

Nine days of fieldwork preceded the writing of this paper, interviewing principal stakeholders in the management of the nine housing estate domains designated as the study areas: the state housing authorities and the police services. Community partnerships appear to be the overarching aim and intent, from the perspective of both agencies. They meet monthly, and have a memorandum of understanding – sharing relevant information. In different locations this policy *is being implemented* to a greater or lesser degree, but the direction seems to be set. Meetings with community groups of all nature - tenants, health, women, youth, indigenous and multi-cultural groups, amongst others, with collaboration from agencies such as local councils, juvenile justice, transport authorities etc - are regularly occurring. In some instances, housing liaison staff work literally in and amongst the community, in others, police live in the community and have a 'beat shop' there too, or undertake 'personal liaison' roles. It would appear that the partnership and empowerment approach is bearing fruit. In some cases, literally, like in the allotment gardens of Bidwill (or Waterloo). Agencies mentioned higher levels of community satisfaction, albeit starting from a very low base. Later analysis will reflect on evidence for these perceptions.

Importantly, there is almost always some physical upgrade, ranging from fencing, through internal service revamps to major retrofits of whole precincts, where huge tracts of public open space are removed, or linking roads and paths closed off. Properties are also being sold off, diminishing concentrations of disadvantaged populations. This strategy has accelerated in recent years particularly in areas where Torrens title sell-offs are not restricted by the 'superlot' problem (dense and intense

concentrations of social housing). Interestingly, it was mentioned several times that without physical development, community initiatives struggle to take root; confirming the thesis that the environment is of central importance. It is the one element which *is* manipulable, that can be changed by intervention. As a case in point, Bidwill, western Sydney, is discussed briefly. Here, a Neighbourhood Improvement Strategy Plan has been in place since 1995, and is reconfiguring the suburb. Radburn reversals have been undertaken. Fencing obscuring connections between housing, the street and central common areas is being replaced with a transparent, graffiti-proof variety. Large tracts of unassigned, non-territorial open-land at the rear of houses, criss-crossed with paths, is being appropriated by the adjacent properties, which now have larger back yards, with private access only. Simultaneously, multi-agency partnerships, community empowering and problem-oriented strategies are in place.



Bidwill: before



and...after Radburn reversal

Amongst stakeholders interviewed there is a palpable sense of achievement and enthusiasm with regard to these new approaches, and their dedication to the life-quality of people other than themselves is quite extraordinary. Considerable funding is being directed at trying to resolve known problems via these strategies. This is not to say that they are solved. The bland-outer-suburban ennui is still all-pervasive in these homogenized, low density, sprawling dormitory suburbs; despite the new fences and carports and verandas and meetings with community groups. Endemically, the situation appears no better; no less people requiring housing assistance, or less ill, or more mentally stable; no less poverty, or less unemployment, no less frustration or anger in their eyes. Social disadvantage is as widely pervasive as ever.

A feasible route to amelioration has been set out now, though; and our research seeks the evidence. Wide-ranging national and international research (see, *eg*: The Joseph Rowntree Foundation's Neighbourhood Regeneration research, 1995...) is now reinforcing the comprehension that neighbourhood management strategies which allow for dialogue between local communities, service providers and policy-makers, and follow an incremental approach - building on existing practice and relationships at local level - are likely to bring about more sustainable change. Such an integral socio-cultural-situational approach, in combination with environmental design insights, appears to be a way of applying a community-place paradigm based on the notion of aware, engaged and empowered individuals taking responsibility for quality public and private realms. Only by living responsibly together can individuation flower.

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