AN ENVIRONMENTAL DESIGN AND ENVIRONMENTAL PSYCHOLOGY APPROACH TO SECURITY - OR, INTERACTIONAL ENVIRONMENTAL CRIMINOLOGY

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INTRODUCTION

An analogy between human beings and safe-places seems an apt way to describe the holistic and interactional paradigm that underlies this paper. If we were to take a human being and line up all his/her organs and vessels in a line what we would have would <u>not</u> be a human being. Moreover, searching for a mind or soul would be fruitless. Quite clearly, the whole is greater than the sum of the parts. To be human, thus, assumes intricate relationships between the parts, and between the being and its environment. The analogous representation is the *macro-scale of situational contingency* - the Gestalt of the socio-spatial situation. Communities, individuals, victims, criminal offenders and security officers all have an intuitive sense of this whole...a sense of a place which influences the way in which they behave there.

At the same time, should one tiny tube in the human system block, or rupture, or one valve fail to open or shut, the entire macro-system can disintegrate. The importance of the *micro-scale* to the systems functioning is no less critical than the functioning of the macro-system. This is also true of the neighbourhood, or campus, housing estate or shopping mall. Micro-design features, or one pathologically-minded individual, can neutralise the best-laid, in-built, defensible design potentials, or dissipate a sense of community.

The first part of this paper, thus, addresses the interactional environmental criminology paradigm. It is the *interaction* of the physical and the social, the situational and the motivational, the individual and the communal, and the micro and macro environments which underlies the notion of environmental design and management as a holistic crime prevention strategy. The fundamental element making up this interactional approach is the relationship of *in-built potentials* - the latent situational contingencies built into the environment - and *people's behaviour in places* - user interpretations of those potentials, and subsequent time-place actions. Users can be individual residents, neighbours or whole communities, as well as criminals or guardians. Their interpretations are the sum of their expectations (attitudes, aptitudes, motivations, values...), experiences (day-to-day behaviours, activities, habits, routines...) and evaluations (fears, satisfactions, preferences, judgements...).

If environmental criminologists seeks solutions to problems they must, by definition, understand the real nature of the problem. If the problem concerns crimes against persons, and *recorded* rates of occurrence and place of incidence are relied upon when strategies are recommended, it might well be that the real problem is not apparent. This represents a reliance on macro-scale data. Reliance on recorded data is comfortable but inadequate. Unless the basic data utilised are scientifically valid, the solutions cannot be appropriate.

Only *micro-victimisation surveys* can begin to unearth the real extent of the problem. The second part of this paper addresses this issue.

The third part of the paper outlines a range of urban design and policy issues which influence the situational contingencies latent in the built environment. Inherent in these principles are the CPTED issues of surveillability, accessibility and territoriality as well as aspects of the routine behaviour and rational choice models.

Part 1:   Interactional Environmental Criminology

A PEOPLE-PLACE MODEL

Architectural and Urban Form *do not cause behaviour* (in a deterministic sense), but can increase or decrease the likelihood of behaviours occurring. It is not enough to examine design features alone. We must understand how people perceive or interpret the meanings embodied in such places.

Social ecological analyses of crime have consistently indicated higher rates of crime in inner city/low socio-economic status/high social disorganisation urban areas, which are taken to be indicators of ecological pressures on behaviour. However, such pressures do not produce the same effect on all individuals; *and* ecological analyses do not provide predictors of which individuals are most likely to become criminals, or where criminals live, or where precisely they commit their offences.

High crime rates in CBD areas, for instance, are not reflections of the social characteristics of the residents in those areas but of the differentials in opportunities for certain types of crimes in such areas. Furthermore, not all 'badly designed blocks of flats' suffer from environmental crime - although such a situation 'increases the odds against which people have to struggle to preserve civilised standards' (Coleman, 1985).

Ascertaining the viewpoint of individual criminals is vital to understanding the spatial patterning of urban crime. It is their motivations, decision-making trade-offs, evaluations of risks and rewards, familiarity with areas *ie* their individual socio-spatial perceptions which are meaningful, not socio-ecological statistics, or general epidemiological crime rates (frequencies of recorded crime occurrence by spatial distribution).

- The fundamental relationships in **an *interactional model* of situational contingencies** are outlined below:

i)   S*ituational opportunities* and *environmental cues are interpreted.*
Included are: defensible design features [in-built surveillability and accessibility/occupancy potentials], territorial markers [signs of personal, neighbourhood, community and civic appropriation of, or responsibility for, places] and target and victim identification by potential offenders. Here, environmental cues and stakeholder expectations, experiences and evaluations largely determine the 'ambience' of a place and 'suggest' what behaviours might be appropriate there *ie* appropriate for either legitimate or illegitimate activities.

These evaluations of situational contingencies or opportune circumstances are also reflections of both '*routine activity'* responses (where lifestyle and occupancy patterns diminish or multiply potentials for crime) and *'rational choice'* assessments (calculations by potential offenders of relative rewards, risks, and paths of least effort, and their perceptions of the presence/power of guardians & gatekeepers).

The idea of routine activity potentials is not new. Burgess (1925) identified environments which *afforded* expression of a person's wishes; and Gibson (1966) is associated with the general development of the idea that opportunities are afforded by a setting.

ii)   *Individual susceptibilities and proclivities intervene.*
Past psycho-social experiences, role-models, somatic and genetic tendencies, extroversion personality-typing, psychological stressor thresholds, 'get even' desires, thrill seeking, peer pressures, and gang membership...encourage individuals considering a delinquent, anti-social or criminal activity to take action (or not). Similarly, genetic inheritance, personality and experience (or nurture) can enhance or diminish the likelihood that individuals will display 'victimisation' traits or susceptibilities, thus influencing their chances of being targeted.

INTERACTION

Understanding crime prevention through environmental design and management, or situational crime prevention, or environmental criminology from this interactional (environmental psychology) perspective can help prevent criminal and delinquent behaviour by reducing in-built situational opportunities and perceived rewards, and increasing risks - from the offenders point of view, and strengthening a community's sense of responsibility for place. In other words, situational crime prevention needs to look at the criminal event itself -

examine the intersection of potential offenders (and their 'conceptual sets') with the opportunity to commit offences (Brantingham & Brantingham, 1990; Clarke, 1992) - which includes both latent environmental cues and the conceptual sets and behaviours of the local community.

Early work on juvenile gangs in Chicago, (Thrasher, 1963) identified links between activities, social patterns of the milieu, and layout of buildings, streets etc as 'conditioning factors' or the 'situations complex' within which humans interact. Thirty years later, these kinds of links can be expressed as the interaction of 'built-in opportunity potentials and user characteristics' (Samuels 1993) which generate the circumstances that hinder or encourage criminal, delinquent or deviant (nuisance/offensive) behaviour. Surveillability, accessibility, territoriality/appropriation, and community involvement and/or willingness to intervene, *in combination*, can help create a safe-place, and generate an image of an area as a safe-place in both the mind of the resident and the criminal.

Physical defensible space features (barriers, surveillance opportunities...) can help boost neighbourhood identification, but 'can't do it all' (Merry, 1981a&b) when it comes to ensuring safety and security. Merry showed how a 'series of subtle design features can undermine' an otherwise defensible design; and how ethnic heterogeneity, for instance, can result in a general anonymity that defuses a sense of community spirit that a design might otherwise enhance. In other words, spaces may be potentially defensible and secure in an architectural sense, but are not defended because the socio-cultural and community fabric is weak.

Though the evidence suggests that poor design facilitates crime, it does <u>not</u> prove that good design necessarily prevents crime (Yancey, 1971) - non-physical factors will intervene. Notwithstanding, environmental settings which offer the greatest possibilities for concealment do tend to have higher crime rates - Molumby (1976) found that locations at which crimes occurred often had poor lighting, large bushes and no buildings across a street; and Dietrick (1977) associated higher burglary rates with hiding places near doors or windows. These are clearly design issues.

In general, the role that urban and architectural design elements play is frequently a supportive role for other more influential situational conditions, such as social networks, home ownership and territorial responsibility (Taylor et al, 1984). Social characteristics of areas are stronger predictors of crime than physical characteristics - percentage of families receiving welfare, female heads of households receiving child support, low disposable incomes (Newman, 1976), and teenage/adult ratios (Wilson, 1978), in particular. A further

conclusion of Wilson's Home Office study, however, acknowledged that if child density were constant, *design* factors were seen to exert a differentiating influence on the incidence of vandalism. Coleman (1985) claims that child density should be reduced to 17% of the adult population or one child under 15 per 6 adults over 20, but 'social formulas' (not unlike physical determinism) are to be accepted with extreme prudence, since situational contingencies and cultural expectations can readily override such equations.

Despite the importance of community interaction, the complexity inherent in all interpersonal relationships foregoes any simple solution to crime prevention. Fried (1982), for instance, found that neighbourly relationships were a strong predictor of neighbourhood attachment, but this emerged as a preference for maintenance of interpersonal distance and respect for privacy, not for close interaction. From Campbell et al's (1976) large-scale study we know that neighbourhood satisfaction is affected by a sense that relationships with neighbours conform to one's preferences, but not what these preferences are, or how much interaction occurs.

It is axiomatic, however, that community cohesion can be augmented by physical design, by the provision of *in-built potentials* for community interaction. Examples are: multipurpose meeting facilities (where new residents to a neighbourhood or housing estate can be welcomed and meet other residents, *inter alia*), small, high quality and *integrated* outdoor spaces (people are more likely to use outdoor space that is both thermally comfortable and secure), community vegetable gardens, sport and leisure facilities, and child- and teenage-dedicated spaces (day-care centres, eg). It is equally axiomatic that potentials for both privacy and community must co-exist, and that residents should have access to both when they so desire.

Attention to details of areas at a micro-level, without recognition of the *whole* picture of areas which forms in people's minds (in a Gestalt sense, the whole being more than the sum of the parts) will severely limit the effectiveness of any design changes on crime and fear of crime (Carter & Hill, 1977). At the same time, however, crime is not uniform, and preventative approaches have to address the diversity of criminal behaviour, and understand the *specific* places where they occur, the specific times at which they occur, who might be committing the offences, and what socio-spatial elements are contributing (Brantingham & Brantingham, 1990). Understanding offender decision-making processes and motivations is thus crucial to the implementation of appropriate situational remedies - although it is probably community dynamics and informal social control which, in the end, will determine whether or not crime prevention strategies are effective or not.

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Crimes against property (burglary, vandalism, arson...) and crimes against persons (robbery, assault, rape...), are similar in the sense that offenders (disproportionately of the male gender) do not want to be caught, and will therefore seek to perpetrate such crimes where the chance of them being seen is minimal, and where the odds are generally in their favour - hence where their offensive strategy is deemed superior to whatever defensive mechanisms exist.

In any event, it is clear that the reality of a situation lies in the mutual relationships between its elements - physical, spatial, temporal, social, cultural and personal.

ENVIRONMENTAL QUALITY

Implementation of interactional environmental design and management principles may even help encourage *virtuous* behaviour by creating a sense of satisfaction and well-being as a result of the benign and aesthetic quality of the architectural and urban environment - in contradistinction to the fear and avoidance behaviours generated in dilapidated and low quality neighbourhoods. Appearance engenders pride in residents, is associated with feelings of satisfaction and attachment, and suggests to the potential offender that an area is under control. Fried (1982) found that *residential quality*, which is the most important element of residential satisfaction and attachment, was largely composed of housing quality and neighbourhood quality (particularly ease of access to nature and outdoor spaces).

There do seem to be some places to which individuals can become more easily attached *ie* form 'territorial cognitions' (Taylor et al, 1985) and enact proprietary behaviours, because of the quality of the locale *ie* their sense of satisfaction with a place or situation engenders a corresponding desire to maintain that state of affairs, which manifests as a heightened sense of control.

Moreover, as quality of the environment increases, fear of crime tends to decrease (people tend to associate such places with a caring community, or municipality), whereas a disruption of 'territorial control' processes engenders high fear levels (Taylor et al, 1981).

FEAR AND CRIME

Fear (perceived risk) influences behaviour (limits options). People develop strategies to avoid places/times/modes of transport etc which are perceived of as threatening. Where people fear to go out/use an area this results in less people using it, which further enhances the

fearfulness of those who do go out (feelings of isolation) and crime opportunities (due to low surveillance potentials).

Merry (1981b) asked residents from four ethnic groups living in a housing project to indicate, on a map, areas of the project which were safe and which were dangerous. Respondents differed in their perceptions, and had different neighbourhood ranges, and, again, there was a clear incongruity between a sense of danger and the objective occurrence of crime. Areas in front of residents homes were described as the most safe (and 70% of interventions for any crime occurred in these areas) yet these were also the frequent locations of robberies.
It was also clear that residents found narrow dark walkways, low underpasses, and convoluted entrances to buildings to be dangerous, *and* robbers also considered these places to be ideal for crimes. Residents avoid these areas, and hence the actual rates there were not as elevated as might be expected, given their situational vulnerability.

INVOLVEMENT OF COMMUNITY *STAKEHOLDERS* IN DESIGN/PLANNING

Stakeholders are those people who have a special interest in an issue or area. Understanding their needs and preferences, and including them in neighbourhood decision-making at all levels enhances their involvement in day-to-day caring for, and investment in, their local areas. This is also called community empowerment, or territorial appropriation, or manageable space (Perlgut, 1982). Community involvement sends a message to potential offenders that a place is 'owned' (involving rational choice/risk-reward trade-offs).

An important issue concerning community involvement is *the stage* at which they become involved. If their role is reduced to 'comment', during a conventional 14-day public scrutiny period *ie* after the real decisions have been made, this is notional involvement. The community must be involved at the pre-design and pre-planning stages, when priorities and alternatives are being considered, and at every other stage of development and use, including post-occupancy management periods, and when projects are being evaluated.

For territorial functioning to be effective it should be based on *small group* dynamics *ie* at the level of the street*block,* not at neighbourhood level (Taylor, 1988). Taylor et al, 1984 also found an association between being younger, a woman, and of higher income, and stronger territorial functioning. Perhaps it is such individuals who should be approached to lead and organise community meetings.

It is also vital to appreciate that *interpersonal perception* plays an important role in people understanding each other (reaching consensus), whether the relationships are within the community, or between them and managers, planners, or police. Social theories of communication recognise that a person's behaviour is not based simply upon their private cognitive construction of their world, but is also a function of what *they believe other people believe.* What one person thinks about how another person evaluates an issue is crucial, and this includes what 'I think you think of my evaluation of an issue' *ie* perceived congruency - compared to what I actually think of the issue - which is also an indication of whether I will be understood or misunderstood (McLeod & Chaffee, 1972).

Similarly, perceptions by criminals of a community's resolve and commitment to a place will influence their behaviour, and the image that comes over can be vital in this regard (see Offender Perceptions, below).

BYSTANDER INTERVENTION

Latane and Darley (1969) showed how *ambiguity* in a community can generate bystander apathy via an interruption in the sequence of decisions which are essential for bystander intervention. Any situational variable which creates confusion, either about the correct interpretation of the events (how serious is it ? is it a family or lover's quarrel, or are the people strangers ? etc), or who is responsible for helping, affects the rate of intervention. Huston at al (1981) showed how people who had intervened directly in a criminal episode had witnessed considerably more crime and were more likely to have been personally victimised themselves.

Before a bystander will intervene, an event must first be seen or noticed, it must then be interpreted, responsibility to act must be assumed, what form of assistance to offer decided upon, and finally how to implement this decision must be deliberated upon. Both physical and social characteristics can derail this sequence.

Michelini et al (1975) studied self-esteem and safety needs (from Maslow's hierarchy of needs), and found that people high on self-esteem needs and low on safety needs helped significantly more frequently. Wilson (1976) also found that 'esteem-oriented' individuals helped more.

Hackler et al (1973) showed how increased interaction within a 'stable' community or neighbourhood was related to a willingness to intervene. They also question the assumption

that the presence of many persons increases the likelihood of aid being offered, and illustrate how the presence of others often seems to inhibit rather than encourage intervention *ie* there is a tendency for responsibility to be defused. However, this scenario holds for cases where strangers are involved, not friends or known individuals. The conclusion to be drawn is that *sense of community* and friendliness are keys prompting bystander intervention. Darley (1967) has suggested, similarly, that the cohesiveness of a group of acquaintances short-circuits the diffusion of responsibility found when strangers are implicated. Individuals who engage in collective anti-crime measures do so as a result of their general sense of commitment to, and participation in, community affairs (Skogan and Maxfield, 1981).

Phelan (1977) reported that ex-burglars perceived the vulnerability of an area in terms of its familiarity to them, and the fear of being seen and reported. The mere presence of people, albeit a deterrent in the eyes of potential offenders, does not mean that bystanders *will* intervene; however, Shotland & Goodstein (1984) present evidence that the mere presence of bystanders capable of surveillance may inhibit the commission of crime. There is a complex personal-social calculation that occurs in bystander intervention in crime control situations - considerations of familiarity with the victim, estimations of personal danger involved, fear of retribution or of harassment as a witness.

Ultimately, there will be a trade-off between the offender's fear of surveillance and bystander's fear of crime, perception of personal competence to handle the situation, and sense of responsibility to control crime.

OFFENDER PERCEPTIONS

Resident perceptions can indicate where disorder and threat are high in a residential context, and in such areas a redundancy (Rapoport, 1982) of territorial cues is required for territorial functioning to be effective - for example, both fencing and planting to keep intruders out (Brower et al, 1983). Understanding territorial judgments in a criminal's mind is of great importance to environmental criminologists and designers, and to police. How, for instance, do potential offenders 'weight' various defensible space features? What is the combination of factors that denotes a 'susceptible or immune' site? Do they read but override territorial demarcations? Do they assign importance to decoration - as a sign of occupancy and proprietary attitudes? From the resident's point of view, for instance, *decoration* was found to be the most important territorial safety marker (Taylor et al, 1976).

Carter & Hill (1977) were able to explain 75% of the variation in crime rates after interviews with convicted property criminals, with regard to their evaluations of areas where they committed the crime. The important issues were: familiarity with an area, the 'hardness' of the 'mark' (target) and the perceived socio-economic status of an area. In general, houses that looked unattended, and stores that had no alarms were considered as good targets/easy marks - *ie* having low degrees of occupancy.

There were, nonetheless, differences amongst the criminals themselves, due to their different races (and, of course, different crimes will reflect different socio-environmental factors). The 'hardness' of the mark was particularly important for the 'whites' - including the ease of getaway. Gabor et al (1987) found, similarly, that robbers considered whether there was a 'small street close by to park a car and to remove disguises afterwards'. Familiarity with an area was particularly important for the 'blacks', who felt very visible in affluent white areas, and thus tended to commit crimes close to their own residential areas.

Merry (1981b) interviewed young men who lived on a multi racial housing project in Boston and committed robberies there, about their attitudes towards crime, the design of the project, and their choice of victims and crime opportunities. They also drew a cognitive map of the area, in which they indicated the places they considered to be good for robberies, and these maps agreed closely with the distribution of actual crime incidents. 'They try to commit crimes where they will not be observed. Favourite places are narrow and enclosed pathways where visibility is poor and witnesses nonexistent' while 'open courtyards are considered poor robbery locations since there are so many eyes there'. The street is not considered a good place except where there is little traffic or windows are obstructed by fences. The availability of good escape routes is an important aspect of environmental design considered by the robbers, and once a victim has been selected he/she is trailed until a good location is reached *ie* one with multiple routes, twists and turns, tunnels etc, where pursuers can be eluded. In general, dark places and nighttime are preferred since victims have trouble identifying the perpetrators later.

It was clear that the robbers interviewed by Merry knew where those residents lived who would call the police, and they avoided those areas. They took into account not only the possibility that people could look out of strategically positioned windows, but also the likelihood of this happening. A plaza outside a building housing elderly people was considered a poor location because the old people were always looking out of their windows; other people were known to shout out when they saw something happening, and such places were avoided.

Taylor (1988) reported that 'it appears that offenders against persons, as well as property offenders, view the mere presence of people outdoors as a risk factor'. Rengert & Wasilchick (1986), in their interviews with suburban burglars, provided direct confirmation of offender's desires to avoid well-peopled blocks. Similarly, since muggings occur in more deserted areas with fewer natural guardians, it can be inferred that offenders are choosing sites that lack 'eyes' (Rhodes & Conly, 1981).

Although Phelan (1977) claimed that both symbolic and real barriers between public and private territory were hardly perceived at all by ex-burglars, it is <u>not</u> helpful to look at defensible features in isolation. We have already seen that whole area image (in a Gestalt sense) is different from the meaning embedded in individual site characteristics.

In general, it seems that potential criminals consider which areas are architecturally suitable to commit particular crimes (particularly surveillability, obtrusiveness, and access/egress possibilities), and also consider social factors which influence the likelihood that local users and/or residents will intervene (territorial personalisations, ethnic and socio-cultural characteristics).

Their attitudes and behaviours are clearly socio-spatial.

Part 2: Criminal Victimisation

In the case of crimes against persons, wherever they occur, offenders will have to make judgements about a victim's character, strengths and weaknesses, and the likelihood that others will come to their defence (over and above situational judgements). Here, it is the person's vulnerability (accessibility to self) rather than that of a building, a neighbourhood or a campus that is interpreted. The strengthening of potential victims by dealing with 'victimisation personality types', via assertiveness training, for instance, is also crucial for crime prevention, but cannot be discussed here.

FEAR OF SEXUAL HARASSMENT

Victims, not unlike criminals, act in rational ways. An understanding of fear of crime and criminal victimisation must include socio-situational experiences both *before and after* the victimisation experience. Fear can exist before an event transpires, and fear can also 'immobilise' victims after an harassment, which helps explain low rates of reporting.

Sexual harassment is *the* unspoken crime *par excellence.* No other crime goes unreported to the same degree; how then can solutions be found when the extent of the problem is hidden?

Fear of rape, on American university campuses, for instance, peaked during the late 1980's. Situational remedies adopted included 'blue-light telephones' located throughout campuses, from which threatened women could call security services (Princeton now has about 70, Harvard over 100, *inter alia*), whistles handed out to women students, and 'walls of shame' - lists of alleged date rapists pinned to bathroom walls or distributed on campus - also popularly referred to as castration lists! Social remedies included Take Back The Night marches and speeches, sexual harassment peer-counselling groups, and the distribution of pamphlets giving sample date-rape scenarios or entitled "Is Dating Dangerous?"

However, certain commentators are sceptical of the emphasis placed on rape on campus. Gilbert (1992), questioned the way rape was measured in the *Ms*. magazine study of date rape on campus (Warshaw, 1988). 73% of the 1 in 4 women who were categorised as rape victims in that study did not themselves define their experience as rape, and this, it is claimed, reveals more about sexual politics than about sexual behaviour. The fact that date and acquaintance rape is an area of notorious confusion for women is not, however, acknowledged, nor that women today are more willing to recognise the existence of this problem, or that they might indeed have been subjected to events that involved *a lack of consent* that they would now view as sexual harassment. Roiphe (1993) believes that this 'fascination with sexual harassment' and date rape is a 'feminist preoccupation' which sees women as victims, or as 'survivors' of victimisation, and that it is a self-fulfilling prophecy, reinforcing their vulnerability, 'officially' multiplying their fears, unnecessarily limiting their freedom. Moreover, she asserts, the campus rape-crisis culture denies natural female desires and infantilise them, perpetrating myths about female innocence. Women are afraid to walk around campuses at night; unnecessarily so, Roiphe claims, and quotes statistics of 2 reported rapes at Princeton between 1983 and 1992, hardly a convincing argument, given the inappropriateness of reported crime rates in regard to rape and sexual harassment (see below). Moreover, the figure seems absurdly low, given the 33 sexual assaults recorded (and leading to arrest) at Florida State University between 1985 and 1990 (Florida State University Police Dept records).

It is important to remain as objective as possible when dealing with a subject as fraught as sexual relationships. Obviously, we must avoid labelling miscommunication and insensitivity as acquaintance rape; nor must we use words to describe events that women do not themselves use. At the same time, to deny that sexual harassment is a phenomenon that must be consciously avoided by women is naive. In reality, however unfortunately, some places

should be avoided, some times of day are less safe than others, some lifestyle activities increase vulnerability to victimisation, and one way or another women are going to have to carefully manage their relationships with men, both those known and those unknown to them, if they want to avoid situations in which control-over-self is relinquished.

REPORTING RATES

Different crimes have different reporting rates. Vehicle thefts, for example, are reported about 86% of the time (a requirement for lodging an insurance claim), while reporting rates of only 5-7 % are common for rape in many developed countries. In the USA, for instance, the Lott, Reilly & Howard study (1982) of students and staff on three Rhode Island University campuses indicated that only 7% of serious sexual assaults were reported to the police; and the *Ms.* magazine study (Warshaw, 1988) found that date and acquaintance rape victims were very reluctant to report these incidents (5% reported the event, 42% told no-one at all about it). Ms. Daley, of Suzanne Daley's Self-Defence for Women, Melbourne, Australia, has confirmed that only about *1 in 20* of the thousands of post-trauma sexual-assault women she has counselled over many years have reported the event to the police *(personal communication)*.

A range of reasons why victims *fail to report* have been suggested (Kidd & Chayet, 1984). Victims tend to view reporting as ineffective/futile (perceive the police/authorities as powerless) and inconvenient (time and money will be lost as a result of following through a report). A fear of recrimination/retaliation (where the offender is known - very relevant in situations of acquaintance rape) is of course very real; and added to this is a fear of indirect and further victimisation by the authorities themselves (depersonalisation and embarrassment at the hands of hostile defence attorneys/prosecutors, unsympathetic judges, incredulous police, or embarrassed and hesitant university administrations). Most importantly, a victimisation experience represents a situation where personal control was ceded/lost and a victim's understandable psychological reaction is to avoid feeling pain and anxiety or fearful and vulnerable again. In order to regain/preserve their self-esteem they would want to forget and rationalise the experience, not reinforce it by reporting it and thus re-live the situation again and again by explaining, describing, and recounting it, and/or having contact with any persons or organisations that might treat them as victims. It is also interesting that Burgess and Holstrom (1975) found that the majority of women in their rape study who had contacted the police had done so only because someone else made the decision for them.

Since often the victim's fear is not reduced by reporting crime to authorities, an alternative available to a victim is to report the incident to friends, other residents in a college of residence, and family. This 'in-community' reporting, in turn, generates a kind of secondary victimisation, a 'vicarious experience with crime' (Lavrakas, 1981), where the social networks of victims experience emotional reactions similar to those of the victim (Friedman et al, 1982).

It must also be remembered that where informal action (neighbourly intervention) is taken regarding acts of delinquency by local/known youths, and parents are contacted, the likelihood of such behaviour being reported to police is diminished, thus artificially reducing the rate of such offences in more neighbourly, cohesive and homogeneous neighbourhoods (Hackler et al, 1973).

CRIMINAL VICTIMISATION SURVEYS

Considering the low rates of reporting of personal harassment events (sexual harassment in particular) the reality of the situation on campuses, housing estates, neighbourhoods and inner city zones cannot be appreciated, and adequately responded to, unless attempts are made to unearth unreported offences. The appropriate technique, employed since the early 1980's, is the criminal victimisation survey, conducted at both national and local levels.

Extracts relevant to an understanding of interactional environmental design ,from national criminal victimisation studies in Australia and the UK, relating to <u>offences against the person</u>, are given below.

First Australian National Crime Victim Survey /1975 *(Braithwaite and Biles, 1980).*

Offences against the person were shown to occur predominantly *at night* - robbery with violence 83% of the time, assault 70% of the time, and rape/attempted rape 60% of the time.

Perpetrators of the sexual offences were categorised as a close friend 17% of the time, an acquaintance 40% of the time and a stranger 43% of the time. In other words, persons were *known to the victim 57% of the time*.

Crime in Australia: as measured by the Australian component of the International Crime Victims Survey 1989 *(Walker, 1991).*

Factored estimates suggested that over 1,000,000 sexual incidents would have occurred in Australia in 1988, of which only 7.6% would have been reported (confirming campus

reporting rates). Around half the sexual offenders would have been known to the victim, (similar to the 1975 survey), with one in eight being described as a 'close friend'.

The British Crime Surveys (BCS)

The BCS were national victimisation surveys conducted in 1982, 1984 and 1988. Findings indicated that fear of crime is more of an issue than the actual occurrence of crime. The BCS indicated that *young men* were more likely to be victimised, and that risk was associated with lifestyle, eg the number of evenings spent outside the home, particularly on weekends, and the frequenting of pubs, all increased the risk of street robbery. Where women follow similar lifestyle patterns, however, their risks are found to be similar to those of men (Gottfredson, 1984). With regard to rape and sexual assault, the BCS found that the heightened fear unearthed could not be explained by the actual risks, which were apparently negligible.

However, criticisms levelled at the BCS include arguments that high and low rates in different areas were aggregated, thus masking the real geographical spread; and that the concentration on women's fears, and on legally defined crimes, led to an exclusion of their everyday, commonplace experiences of racial/ethnic abuse and offensive behaviour directed at their sexuality in public places. Albeit not criminal, this phenomenological reality constitutes a form of victimisation which impacts significantly on their quality of life or their 'lived reality of social experience' (Painter, 1992). The issue of differential perceptions of crime is highly relevant. The differences between legally defined high crime areas (or crime hot spots) and those which residents perceive as crime prone can be substantial. Brantingham and Brantingham (1991/b) report on a study they undertook which identified differences between resident and business-owner explanations. Residents considered high crime areas to be those where nuisance behaviour occurred (noisy kids congregating eg), while business owners reserved that definition for areas where shoplifting occurred. We would expect the elderly, and women, to have different perceptions again, as would people from different cultures. Routine activities and expectations determine to a large extent the behaviours that are considered to be objectionable.

Furthermore, it is now generally accepted that women are involved in hidden and unreported violence which occurs in private places, and that large-scale victimisation surveys are not appropriate instruments with which to unearth the true extent of family/domestic violence (Stanko, 1988) and/or acquaintance harassment.

MICRO-SURVEYS

Micro-surveys were carried out in London in the latter half of the '80's, which concentrated on small areas in inner city boroughs (at the level of streets and estates, in Islington and Hammersmith/Fulham), and which led to a mapping of criminal victimisation by locality, time and gender (Painter, 1988; 1989a; 1989b). These local victim surveys showed that in the inner city areas surveyed and on peripheral council housing estates, *women were proportionately more likely than men to be the victims of crime* - which finding justifies their fear of crime as being realistic, and contradicts findings in national victim surveys. For instance, in Islington women were 40% more likely to be a victim of a street robbery than men, (equally likely in Hammersmith and Fulham), and twice as likely to be assaulted (and violently). Sexual assault in Islington was also shown to be *14 times higher* than the BCS averages, and was particularly prevalent amongst 16-24 years olds. Moreover, women experienced greater levels of threatening and abusive behaviour in public places (reported by 43% of respondents in Islington, eg).

Kate Painter succinctly sums up the issue: 'To put it bluntly, the women surveyed do not fear crime, they fear men'.

Given that women are the most vulnerable segment of society on a physical level, and that they generally represent over half the population in post-industrial societies anyway, their perceptions and interpretations of places, as individuals, must be canvassed and taken seriously if we are to begin to come to terms with fear of crime and victimisation in urban settings.

Part 3: Urban Planning Policy and Design

Urban settings take form largely as a consequence of planning policy decisions. It is from here that the in-built potentials or latent situational opportunities derive. Such policy decisions can be steered towards situational deterrence and environmental amelioration via the recognition of the salience of a small number of general principles. A range of such principles, relevant to an interactional criminological approach, is outlined below; however, this is not the place for a detailed examination of architectural and urban form. Interested readers can refer to Samuels (1994) and other authors quoted in this section.

It is important to note that there is frequently an overlap between design solutions for different problems, such as the importance of window location for surveillability as well as energy efficiency, or the relevance of the so-called urban village for both security and

ecological sustainability. Such overlaps represent a form of integrated design, which is a manifestation of an interactional design approach. Occasional mention will be made to these overlaps in the section below.

i) Mixed Zoning

The anticipated consequence of the inclusion of local facilities, residential, commercial, recreational, educational and urban domains in a *metropolitan fabric* is the 'populating' of these areas, resulting in a heightened 'animation' during the daytime hours and, particularly, at night. In principle, 'eyes on the street' (Jacobs, 1961) enhance natural surveillance opportunities and reduce fear - due to the presence of potential witnesses and, hopefully, people who feel strongly enough to actually intervene (or at least make the effort to alert the police). 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. The overall result was a complex system of interlocking circles of acquaintanceship, with accepted mores and practical guide-lines for behaviour (Coleman, 1985).

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 (Taylor, 1988).

The re-use of vacant land and buildings, and of ex-industrial inner city land, also called infill, is also an ecologically sustainable strategy - a form of recycling of materials and thereby a saving of the energy already 'embodied' in those materials *ie* utilised in their procurement, manufacture, transportation and during construction of the building.

The presence of potential witnesses on neighbourhood streets appears to deter crimes such as robbery (robbers choose commercial stores set back from the street, shielded from public view), and sparsely used streets adjacent to commercial districts have been found to be particularly crime ridden (Conklin, 1972; Fenney and Weir, 1974).

If the presence of bystanders decreases the probability of criminal victimisation, the more pedestrians on the streets, at more times, the safer the area is likely to be. It has been said that 'crime causes crime' (Conklin, 1971, Clotfelter, 1978, Shotland & Goodstein, 1984) *ie* where pedestrians are afraid, and stay off the streets, there are fewer citizens available for surveillance, which increases the risk of being victimised for those who do use the streets.

There are also arguments <u>against</u> mixed zoning. Where there are more people there are also potentially more strangers, and more potential offenders. Studies have shown that residents near small commercial centres expressed feelings of less control and thus more fear (McPherson et al, 1983); and access from non-residential land-uses to housing increased the burglarisation rate (Winchester and Jackson, 1982). And Rapoport (1982) suggests that mixed land-uses communicates an image of poor environmental quality *ie* where purely residential (and socially homogeneous) areas are seen as the ideal (the suburban dream).

This suggests that for the advantages of mixed zoning to become manifest, careful design is required. Most importantly, the different uses need to be *integrated,* not merely juxtapositioned, and their functions and time-space profiles considered as a whole. Most importantly, the siting of licensed premises, particularly pubs and clubs, is relevant since it is now clear that there is an association between street crime and violence and zones around such facilities (Homel and Tomsen, 1992).

Similarly, accessibility and surveillability considerations need to be built-in and co-ordinated, and community involvement and participation from *pre-design* stage onwards is an absolute requirement.

Ultimately, it is an issue of weaving an urban and suburban fabric that is *continuous*, both temporally and spatially, and which provides opportunities for both privacy and surveillability.

ii) Space Syntax

Hillier (1984) derived a technique to evaluate how the spatial configuration of buildings defines public space, and its use. Here design cues are the operational elements which impact on attitudes and consequent behaviour of users in the public realm. In order to encourage people to move freely and interact often, dead-end spaces and secluded streets with 'short sightlines' should be identified (and eliminated) via space syntax techniques such as convexity maps and 'axial' maps.

The convexity map shows an area broken up into convex and concave segments. A convex segment is one in which a person standing at any point on the perimeter of a segment can see another person at any other point on its perimeter. A concave map has blind spots in it.
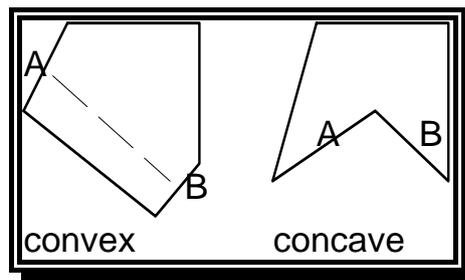
An axial map shows the lines of sight <u>between</u> convex spaces. The *more* a line is crossed by other lines, the higher its **segregation** value; the *less* it is crossed the higher its **integration** value *ie* the greater the number of segments that have to be crossed the less direct is the route between the spaces connected to it. Such a space is said to be less intelligible, and segregated layouts tend to be sparsely populated. The 15% of axial lines with the lowest values indicate the' integrating core' *ie* those areas used most intensely.

The safest public spaces are said to be those with good flows of people, and intelligible (integrated) routes with long sightlines. Coleman (1985) agreed that if the route system is unintelligible, a few places are likely to drain off all the street life, leaving other places deserted.

A researcher at the Bartlett School of Architecture and Planning, University College, London, used the technique by overlaying geographical crime rate maps with integration value maps, and showed that the likelihood of a more segregated dwelling being burgled was highly significant (quoted in Mills & Armstrong, 1993).

iii) Site and housing design

A multitude of factors are relevant to this aspect of urban design and policy. Briefly, issues of interest are: hard (vandal-proofing and target hardening, eg) vs. soft (community decorating and maintenance, eg) architecture; street design (cul de sacs, eg); urban parks (lighting and narrow sites); landscaping (inadvertent screening of risky areas); woonerfs or traffic/pedestrian mixer courts; lighting at public transit nodes; wayfinding and legibility; symbolism of fencing around, and labelling, of places; entrances to dwellings and groups of dwellings; issues of neighbourhood malaise indicators and impacts; and, of course, defensibility notions concerning the functional hierarchy of spaces (from private to public).

Overlook from dwelling to dwelling via the location/placement of windows is a design intervention of major importance. It is interesting here to note that a bay window can offer surveillance in three directions, while the inverse of a bay, the splayed window, limits

opportunities for people to look in, and thus enhances privacy (Amcord Urban 1992). The Amcord guideline also has hints about attaining privacy in medium density clustered housing while still retaining outlook, such as the screening of upper floors with high canopy trees, or with pergolas; and the use of level changes to achieve the same end. The intricate relationship between surveillability (seeing out) and privacy (seeing in) is a major urban and architectural design issue yet to be satisfactorily resolved.

Poyner (1991) considers the site and dwelling characteristics which impact on crime in low density housing tracts. Aspects such as sightlines at the entrance to areas and overlook of houses on curved streets are discussed, as are access to the rear and sides of houses, placement of parked cars on hardstandings in front of dwellings, and issues concerning communal parking courts away from dwellings. Stollard (1991) considers the issues from the point of view of housing estates of higher density; Cooper-Marcus and Sarkissien (1986) published an extensive site guideline for medium density family housing; Coleman (1985) examined high density public housing estates in the UK; and Newman (1972, 1976) evaluated similar facilities in the USA. The literature on these issues is extensive, and cannot be reviewed here.

iv) Minimum (rather than maximum) residential density controls

Classic urban planning policies restrict residential densities, according to pre-conceived notions that high densities are bad. Early developments in the field of environmental psychology (Hall, 1959; Sommer, 1969, Altman, 1975) however, have increased our understanding of the way people react to density according to personal space evaluations and cultural factors, and how prescriptive density rules can be inappropriate; and Newman (1972) showed that density, *per se*, seemed to be irrelevant to crime rates. Decker et al (1979) even recorded that higher population density was associated with lower juvenile delinquency theft/burglary rates.

Rather that the traditional concern with maximum densities it is *minimum* densities that are required to make the social fabric continuous; and to make public transportation both viable economically, and to ensure sufficient passenger presence on trains and at stations, at all times, and particularly at night - which is a natural security measure. Clotfelter (1978) found a higher probability of victimisation on the New York subway system when ridership was low (midnight to 6am).

v) Discouragement of suburban sprawl

Because of contemporary changes in habitual behaviour patterns *viz.* the increased frequency of both adults in a household going to work, houses in suburban areas are often left empty during the day, and cars are also parked at suburban railway stations for long periods of time when suburbanites commute to the urban areas to work. This 'routine activity' thus generates easy targets for potential offenders due to low surveillance and low animation. Connection to the 'information highway' and decentralisation of employment and community facilities could increase the number of people working from home or in their neighbourhoods - which would alter these routine behaviours, as well as being part of an ecological sustainable solution.

vi)   Urban villages and village-forum concepts

Neighbourhood vigilance and sense of community, caring, and readiness to intervene is likely to be heightened where urban villages are formed - in contrast to the urban fortress mentality , where target hardening and vandal-proofing attempts to restrict and control use. These village-type residential tracts are centered and contained. An essential element of such urban designs is, thus, the forum [from Roman times] or the village green [from medieval England], a place where local inhabitants can meet to talk, interact, jointly survey children at play, hold village and school fairs, weekend markets, etc.

For open space to be well-used and thus naturally safe, users should be visible from all sides of the space. Such an 'urban forest' or urban park can also play an environmentally benign role, for example, by absorbing urban runoff that would normally pollute urban waterways, and, simultaneously, can enhance the amenity value of an urban village by providing a secure open space. It's a question of scale, surveillability and social control. A large tract of open space is no-man's land, or, rather, no- women's land, and must be avoided at all costs.

The ideal urban village would be a domain of well lit mixed land uses and medium density housing, easily supervised car parking, with an emphasis on pedestrianisation, public realms and community services,and limited accessibility for both vehicle and foot traffic, but with links to other parts of the metropolis via safe light rail systems powered by renewable energy sources. The involvement and participation of the local community would be paramount, during both pre-design and post-occupancy phases.

Indeed, a multi-agency management approach is crucial to the whole idea of the urban village. The collaboration of civic, social service, housing, planning and police departments with community and tenant management bodies can be aided if in-built facilities are available

ie places where interaction can readily and regularly occur, and if the urban culture and local government policy encourages interaction and the decentralisation of decision-making powers.

An argument against the village type design has been put forward by Hillier (1988). He believes that the ideal of the social value of small self-identifying communities is misplaced, and generates a disjointed urban landscape, where localised enclosures and 'privatized public space' fragment the social space. He cites research indicating that proportionately more burglaries occur in segregated places, and advocates outward facing layouts integrated with other places. It is probable that Hillier's argument is more valid in small neighbourhood type developments, and less valid for urban villages which are on a scale several times greater than suburban tracts, and are much more likely to exhibit an interconnected network of public places. Nonetheless, the ideal of maintaining visual links and clear sightlines between such areas is of critical importance.

vii) *vs.* the Aladdin paradigm

The Aladdin paradigm is a term which has been coined to describe that planning policy where *urban renewal replaces old neighbourhoods for new,* but simultaneously destroys individual familiarity, local community networks and contacts, eyes on the street, etc. Merry (1981b) found that people who did intervene to help people being victimised had all lived on the project (surveyed) for the full ten years of its existence, and many of their important social relationships were with other project residents. In other words, they were committed to the project, had formed social networks, and interacted on a daily basis within the project. They also intervened in spaces they used regularly. All of these aspects are destroyed when neighbourhoods are razed and new urban renewal projects erected, with neither history nor heritage.

Hackler at al (1973) mention that in neighbourhoods where there is a great deal of social mobility, where slums have been destroyed to bring in high rise apartments, and where unfamiliar environments replace familiar ones, fewer social situations develop where mutual friends are present or where neighbours know and care for each other.

viii) Allocation policies for urban areas and public sector housing:

A mix of unit *size* in blocks of flats, or of house *size* per area, creates a mix of *family size* - some with few children some with more children. This mix can still allow for perceived socio-economic homogeneity but allow for a more balanced teen/adult ratio.

Where allocation policies can distribute elderly residents throughout a community - which is socially desirable in its own right - they become natural 'neighbourhood watchers', because they tend to 'sit and watch' as a natural part of their daily behavioural routine. Issues relating to disabled access thus become more relevant *ie* an integrated approach must be taken.

Surveillability potentials, in this case, are more likely to be translated into actual routine behaviour if windows are ergonomically designed for the elderly (sill heights relative to a seated position); while child safety issues will also have to be addressed (sill heights and openability). These are micro-design issues having macro consequences.

An unresolved urban policy issue revolves around the provision of life-cycle clusters *ie* attempting to group families in the same stage of life (similar ages, lifestyles, activities...) and thereby attain a certain measure of homogeneity and community through shared interests, but with the ever-present concern that inward-looking and parochial 'ghettos' could be created. The underlying idea is that communities with common interests will tend to engage in common management of streets, public spaces and neighbourhood facilities. Contrasted with this philosophy is the idea of creating a variety of dwelling sizes, so that a variety of household types is attracted to a neighbourhood, which brings a more heterogeneous mix of residents and thus a more varied and more attractive neighbourhood life. Moreover, such an arrangement would mean that as resident's life-cycles change, in order to find a suitable dwelling they do not have to move out of a neighbourhood, which they know and in which are known, and where both their own of sense of security is likely to be increased as a result of this familiarity, and their tendency to take an active interest, or be involved with the area is enhanced. This also means they will intervene more readily to assist a victim, and/or be quicker to call the police or a housing manager if something seems unusual.

An issue often overlooked is that of current demographic changes in post-industrial societies, where there is a clear trend towards an increase in the number of households but a decrease in the size of those households. The reasons for this change are the increasing rates of divorce, single parent households, childless couples, non-related adult households, and elderly citizens (particularly women) who often end up living alone. Housing provisions should thus match these changes, but lags far behind in reality.

ix) Displacement of Crime

Displacement of crime can take place in time, or space, or to a different crime, but not all criminals will continue to hunt for targets. Contemporary environmental criminologists believe that different levels of opportunities are likely to trigger persons with different levels of criminal motivation, with weaker opportunities only triggering action by those with the most powerful compulsion to crime (Brantingham & Brantingham, 1991/b; Gottfredson & Hirschi, 1990).

In general, CPTED has been found to have an impact on burglary/theft, street offences, nuisance behaviour and vandalism; *and* there might well be some beneficial *diffusion* too (Clarke, 1992) - a halo effect. It seems self-evident that if preventative/defensible and benign/proactive environmental design and management were implemented *on a wide enough scale,* the issue of displacement could become neutralised.

This is a powerful argument for involvement at Local Authority level. Decisions as to where roads and pedestrian paths should be placed, housing, shopping centres, convenience stores and public facilities located, and the nature of public open space, coupled with resolutions concerning the vigour of maintenance programs, and policies influencing the degree to which communities are brought into the design/planning procedures...could have a multiplier effect by reducing opportunities for crime at municipal level. If the State government departments of housing and planning were also committed to a situational opportunity approach, even regional consequences could, therefore, be anticipated.

CONCLUSION:

A Defensible Territory is an environment in which in-built environmental and situational cues (urban design characteristics, access control, natural observation/surveillability, animated spaces, territorial markers etc) and the latent sense of community (via participation, appropriation and involvement) are translated into a sense of responsibility and security on the part of the users/residents/occupants.

The potential criminal or delinquent perceives such a space as controlled by its residents, leaving him an intruder easily recognised and increasing the likelihood that he could be apprehended.

Understanding the interaction between environmental design and the psychology of community management *can* result in deterrence and prevention.

In order to understand this interaction, it must also be appreciated that the epidemiological patterns of reported rates of crime against the person, and sexual assault in particular, are phenomenologically invalid. Only micro-victimisation surveys can begin to suggest the reality on the ground, the real user experience. Expertise in environmental criminology is necessary but not sufficient in itself; user experience is the other necessary input.

An interactional, multi-dimensional and inter-agency approach to environmental criminology, however complex and intricate to understand and manage - which takes into consideration the physical and psychical potentials, probabilities and possibilities inherent in person-place transactions -is suggested here as the appropriate model to pursue and develop.

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