

enhancement of or distraction from its liveability

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Abstract

This paper focuses on where young people gather in the urban public realm, and the effect that this may have on the perceived liveability of an area. Gatherings of young people have become very topical in the UK in recent years, especially because of the way that the public perceives this activity as intimidating and potentially aggressive. This has resulted in much concern by the public and interest by the press about the consequential antisocial nature of these gatherings, leading to government debate and legislation to control the antisocial behaviour of young children and adolescents in public space. The study is based on a questionnaire/survey distributed to residents in twenty housing estates and residential developments in London's city fringe district of Clerkenwell. The aim of the study was to capture the residents' perceptions about the liveability of their locality through an assessment of twenty-four different types of criteria relating to the built environment, including the condition of the urban fabric, the effects of traffic, and the prevalence of anti-social activities and behaviour. The dominant factor affecting the perceived liveability of an area was found to be the extent to which the public realm was blighted by the threatening nature of young people's gatherings.

This paper maps each location of these gatherings and investigates its spatial characteristics, by carrying out a configurational analysis of the type of space in which assembly occurs, the ownership and accessibility of the space where youths gather, its relation to the adjoining buildings and urban spaces, and the shape and characteristics of the visual fields that exist between the gathering point and its urban surroundings, including the potential that space offers for exhibitionist behaviour and surveillance. By building up a matrix of these spatial factors of the built environment and its urban setting it becomes apparent that the choice of young people's gathering locations depends on a dynamic relation of all these factors. Any intervention to lessen the negative impact of these gatherings on the liveability of the area will therefore need to tackle its spatial characteristics holistically, rather than by addressing one contributory factor in isolation from all the others.

Introduction: the fraternities of the street

It is just over 40 years ago since Peter Willmott's seminal study, 'Adolescent Boys of East London' (1966), was published. His research took place at a time when the behaviour of teenaged boys was widely perceived to be a major social problem, described by the popular press of the day as a 'generations war'. Reminiscent of the situation today, in the early 1960s violence, hooliganism and delinquency amongst teenaged boys seemed to be both increasing and increasingly out of control. Public perceptions that rebellious adolescents represented a threat to the established social order were heightened by concerns that the streets of many towns and cities in Britain appeared to be dominated by large, organised gangs of youths that engaged in antisocial, aggressive, destructive and criminal activities. This emerging theme from a succession of contemporary studies of youth culture worldwide (see, e.g., Whyte (1943), Mays (1954), Coleman (1961)) was captured by Willmott's memorable phrase 'the fraternities of the street' and by Whyte's equally striking 'street corner society'.

Willmott's study set out to describe in detail the lives of boys between the ages of 14-20 living in Bethnal Green, an urban working class district of East London. At the time of the study, Bethnal Green was experiencing a major physical and social transformation. Willmott remarked that, in addition to the change the 'comprehensive redevelopment' wrought upon the borough's skyline, a new variety was introduced into the public realm at ground level in the form of paved pedestrian precincts, sculptural children's play courts and vast swathes of green space designated for public recreation. The young men of the borough spent a considerable amount of their spare time 'hanging about' and 'larking around' in these public spaces, leading the ethnographer to remark that 'these groupings clearly play an important part in adolescence', and elsewhere to describe them as 'a crucial social unit in the lives of adolescent boys'. The main thrust of Willmott's study was to understand the process of growing up in an urban, working class community, especially the relationship between juvenile delinquency and social disengagement. The spatial characteristics of the locations where youths were observed 'hanging around' were not made explicit.

A great deal of research on youth groups and gangs has since been undertaken in all parts of the world, much of it of an explicitly territorial nature (Pilkington, 1994; Spergel, 1995; Venkatesh, 1997; Howell, 1998; Glazer, 2000; Hughes and Short, 2005; Winton, 2005; Ball and Curry, 2006). Particularly in the USA, but increasingly in other parts of the developed and developing world, youth gangs have been identified with gun and knife crime (Klein, 1996), alcohol and drug use (Fagan, 1990; Thornberry, 1998) and gang-related violence and killings (Block and Block, 1993). Sanchez-Jankowski's (1991) study of the relationship between street gangs and their local neighbourhoods has shown that a local territory or 'turf' provides a gang with four key features that enable the group to survive: a safe haven, a recruiting ground, a source for local information and a sense of identity. Yet despite the wealth of more recent research on the territorial behaviour of groups and gangs, still little or nothing is known about the favoured locations where activities like 'hanging about' or 'tagging' take place.

Concerns among the general public about the apparent rise in street violence within many towns and cities in the UK has led to a government drive to curb street gangs, and their associated gun and knife crime. This has been spearheaded by the Youth Justice Board, a government agency that advises the Home Secretary on how to discourage young people from engaging in crime. A recent report by the Youth Justice Board (2007) has warned of the dangers inherent in labelling all street groups as gangs, as this could glamorise group membership and draw young people whose activities were already perceived as antisocial into more serious criminal behaviour.

A common denominator in the recent studies of street groups and gangs is the feeling that, despite four decades of intensive research, the issue remains poorly understood and little progress has been made in terms of policy initiatives that successfully tackle street gang culture. This paper therefore adopts the novel approach of investigating the attributes of those favoured locations where groups of youths are known to 'hang out', in order to understand what contribution, if any, spatial configuration may make to street gang behaviour.

By contrast with the extensive sociological literature on youth groups and gangs, studies of space use and occupancy by adolescents are rare. One such appraisal, of an innovative low-rise, high density 'problem' housing estate in north London, (Hillier et; al., 1989), found that 76% of households with children had reported problems with children playing on the estate. Despite its grid like layout, the estate was strongly segregated from the surrounding area. Many spaces in the estate were found to be either empty or dominated by children. The observed presence of adults on the estate's walkways was abnormally low and the presence of children was abnormally high, at about four times the average for traditional north London residential streets. Concentrations of static children were observed in many spaces that were poorly used by moving adults, so that there was almost no informal supervision of children's play by adults going about their everyday business. Worryingly, a significant correlation was found between the proportion of residents who had experienced a mugging and the numbers of children observed using the open spaces in the immediate vicinity of where those residents lived.

Another appraisal of a large public sector housing development in north London conducted at about the same time, (Hanson and Xu, 1992) also found that children were more in evidence in the estate than on the surrounding streets. They tended to 'hang out' in small, unconstituted open spaces that were directly connected to the main pedestrian 'street' that ran between the linear housing blocks. These blank walled spaces were not overlooked from the dwellings, but were relatively well integrated and close to where adults could be observed moving through the estate. Organised playgrounds on the estate were enclosed, highly segregated and had small visual fields, engendering such feelings of isolation and insecurity that they were hardly used at all. The spaces occupied mainly by children tended to suffer from antisocial behaviour, of which graffiti was the most widespread form with 63 recorded instances, followed by litter (20 instances) and criminal damage (14). Segregated spaces on the estate were empty for most of the time and were less vandalised than more integrated, unconstituted and unsupervised open spaces.

Hillier (1996) later drew these and other findings together to answer the question, 'can architecture cause social malaise'; either directly, by creating the circumstances in which crime or antisocial behaviour can thrive, or indirectly, by inducing stress or depression in the individuals who are forced to live in badly designed housing. The essence of Hillier's thesis was that an important effect of architecture is to create (or eliminate) patterns of human co-presence and mutual awareness that he called 'virtual communities'. By contrast with ordinary urban space, which is characterised by multiple spatial interfaces between inhabitants and strangers, men and women and adults and children, public space that is badly designed brings about a situation where these 'natural patterns of co-presence in space are not achieved. In such circumstances, space is at best empty, at worst abused and a source of fear'.

Asserting that one of the most critical of these interfaces is between adults and children, Hillier generalised the finding that in most architect-designed social housing estates children, especially teenage boys, tend to occupy more integrated, largely unconstituted spaces just off the integration core, that exhibit low adult movement rates and are one step away from the spaces that are used by adults for natural movement. He added, 'this means that children are, on average, a little less integrated than adults, but about as integrated as they could be without occupying the natural movement spaces most used by adults. They are, in effect, as integrated as they can be without being where adults are. This is what we sense when moving about the estate. We are very aware of children, but we are not among them'. Compared with traditional urban neighbourhoods where there are no spaces without adults and few without children, the architecture of social housing creates lacunas in the public realm that children are able to occupy unchallenged. Hillier added that these patterns of space use and occupancy have been correlated with patterns of petty crime and vandalism so that appears as if antisocial spaces seek out and take up the most integrated spaces after those that have been accounted for by natural movement. Hillier concluded that unlike adults, who use space instrumentally to go about their business, children are 'space explorers' whose main purpose is to discover and exploit the potential, including the potential for antisocial behaviour, that space affords.

Research Methodology

The data that underpin the current study of the morphological attributes of locations where teenagers 'hang out' were originally gathered in 2005, during EPSRC-funded research into the design and layout of inner city housing that was undertaken as a contribution to a much larger research consortium, VivaCity 2020. The results of this work have already been reported elsewhere, (Zako et al., 2006; Hanson and Zako, 2007; Hanson et al. 2007). The research was conducted in Clerkenwell, a mixed use 'urban village' close to the heart of the City, London's financial centre, that dates back well over a thousand years and has evolved in a piecemeal, organic and unplanned way. Twenty housing developments from Clerkenwell were included in the VivaCity database, because they were broadly representative of the various types of housing that were built in England between the 1820s and the present day, whilst at the same time varying in terms of their morphological characteristics, age and type of housing, tenure and the social diversity of their residents, see Figure 1 and Table 1 below.

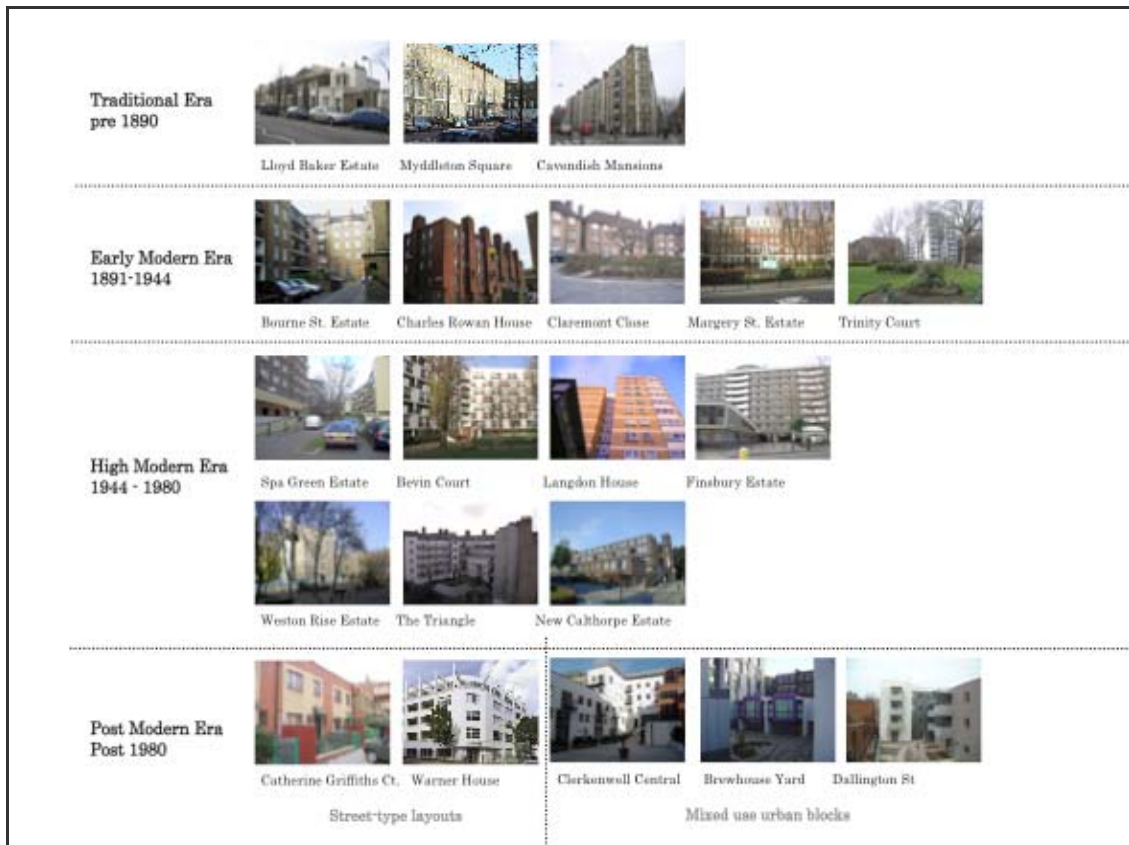


Figure 1

Photographs of the sample of twenty housing estates and developments in Clerkenwell

Traditional Pre 1890	Early Modern 1891-1944	High Modern 1945-1980	Postmodern Post 1980
Lloyd Baker Estate 1819-1820	The Bourne Estate 1901-1903	Spa Green Estate, 1948-1950	Catherine Griffiths 1981
Myddleton Square 1824-1827	Charles Rowan House 1928	Bevin Court 1954	Warner House built as a factory 1930s refurbished as housing in 1995
Cavendish Mansions 1882	Claremont Close, 1920	Langdon House 1963	Clerkenwell Central 1998
	Margery Street Estate 1930-33	Finsbury Estate 1966-68	Brewhouse Yard 2001-2003
	Trinity Court 1934	Weston Rise 1964-69	Dallington Street 2001-2003
		The Triangle 1972	
		New Calthorpe Estate, 1978	
3	5	7	5

Table 1

The sample of twenty housing estates and developments in Clerkenwell by era

The original survey work, which took place in the spring of 2005, combined conventional analytical measures used by architects and town planners, such as building density, housing density, land use characteristics and road hierarchy with the more specialised tools of 'space syntax'. These modes of analysis were supplemented by detailed photographic surveys of the housing and open spaces within each residential development, to record the condition of the properties and any evidence of antisocial behaviour. An attitudinal postal survey was also distributed to all the residents in each housing development during the summer of 2006, to obtain their views about the 'liveability' of their home and its immediate local environment. This questionnaire was based on the British government's 'liveability agenda' that has been developed in recent years (ODPM, 2006) to capture the residential satisfaction of an area. It comprised 16 questions, broadly divided in 3 themes: upkeep, management or misuse of the private and public space and buildings, road traffic and transport-related issues and abandonment or non-residential use of domestic property. A further 8 questions were incorporated relating specifically to antisocial behaviour.

A total of 2834 surveys were distributed to all the households living on all of the selected housing developments in Clerkenwell, of which 279 were received back. Two of these were excluded from the analysis, resulting in an overall response rate of 9.77%. In response to the specific question, 'How do you rate your housing estate / development in terms of intimidating gatherings of young people?' a third (94) of the respondents rated this activity with a score of 4 or 5 on a five point Likert scale, where one indicated that there was 'no problem' with youths gathering and five that there was a 'major problem'. Intimidating gatherings of young people emerged as the single most significant 'liveability' issue for residents, the next most important being vandalism.

	Major Problem Rating			Locations identified	Groupings of Incidents		
	Four	Five	Total		Within	Nearby	Total
Bevin Court	2	6	8	7	3	1	4
Bourne St. Estate	5	7	12	17	7	3	10
Brewhouse Yard	1	1	2	0	0	0	0
Catherine Griffiths Court	0	0	0	0	0	0	0
Cavendish Mansions	1	0	1	2	0	2	2
Charles Rowan House	5	3	8	9	5	2	7
Claremont Close	0	0	0	0	0	0	0
Clerkenwell Central	0	0	0	0	0	0	0
Dallington Street	0	0	0	0	0	0	0
Finsbury Estate	7	5	12	10	6	1	7
Langdon House	2	0	2	4	0	4	4
Lloyd Baker Estate	4	0	4	8	3	2	5
Margery St. Estate	2	7	9	15	10	2	12
Myddleton Square	6	3	9	9	7	0	7
New Calthorpe Estate	2	3	5	10	7	0	7
Spa Green Estate	3	2	5	5	5	0	5
Triangle	4	2	6	24	18	0	18
Trinity Court	4	1	5	2	0	1	1
Warner House	0	1	1	0	0	0	0
Weston Rise Estate	2	3	5	10	5	3	8
Total	50	44	94	132	76	21	97

Table 2

Young People's gathering locations as rated and mapped, estate by estate.

Where the rating was either 4 or 5 (i.e. 'youths hanging about' were perceived to be a problem on the development) respondents were also asked to note the location of this activity on a map of the area provided for this purpose, as was also the case with all other problems that were 4 or 5 rated. In all, 132 reported instances of 'hanging about' were mapped, identifying 97 locations within (76) or near (21) to 16 out of the 20 residential developments in Clerkenwell, see Table 2 above. Problems with

teenaged groups were reported but not mapped in respect of 2 further residential developments, but as these were both Postmodern 'gated' communities the locations for 'hanging out' were, in all probability, off-site.

Once the locations where 'intimidating gatherings of young people' had been identified and plotted on a ground plan of each housing development, the built form and configurational characteristics of these locations were systematically explored visually and statistically, to search for consistencies in the data. In the account that follows, the gathering points for teenaged youths have been indicated on the accompanying plans by a solid circle. Where several different respondents reported gatherings in such close proximity to one another that they could be deemed to take place in the same location, these have been grouped by a dotted line to indicate the larger area in which the activity took place.

The locations where youths 'hang out'

The most troubled residential development in the Clerkenwell housing sample in terms of youths hanging about turned out to be the Triangle, an early 1970s five storey, Brutalist, walk-up, social housing estate. Eighteen locations were identified on the Triangle Estate, where youths were known regularly to hang out, see Figure 2. All but one, in the centre of the estate's playground, were at the entrances to the estate's stairwells and first floor walkways. The stairwells both faced out towards the surrounding streets and in towards the estate's central courtyard. On this estate, the locations where youths were hanging out were associated with other antisocial activities; namely, drug dealing and vandalism. Other characteristics of these spaces included that the adjacent buildings were scruffy and neglected buildings and susceptible to burglary. The playground where youngsters gathered was reported to suffer from litter, rubbish and drunken behaviour.

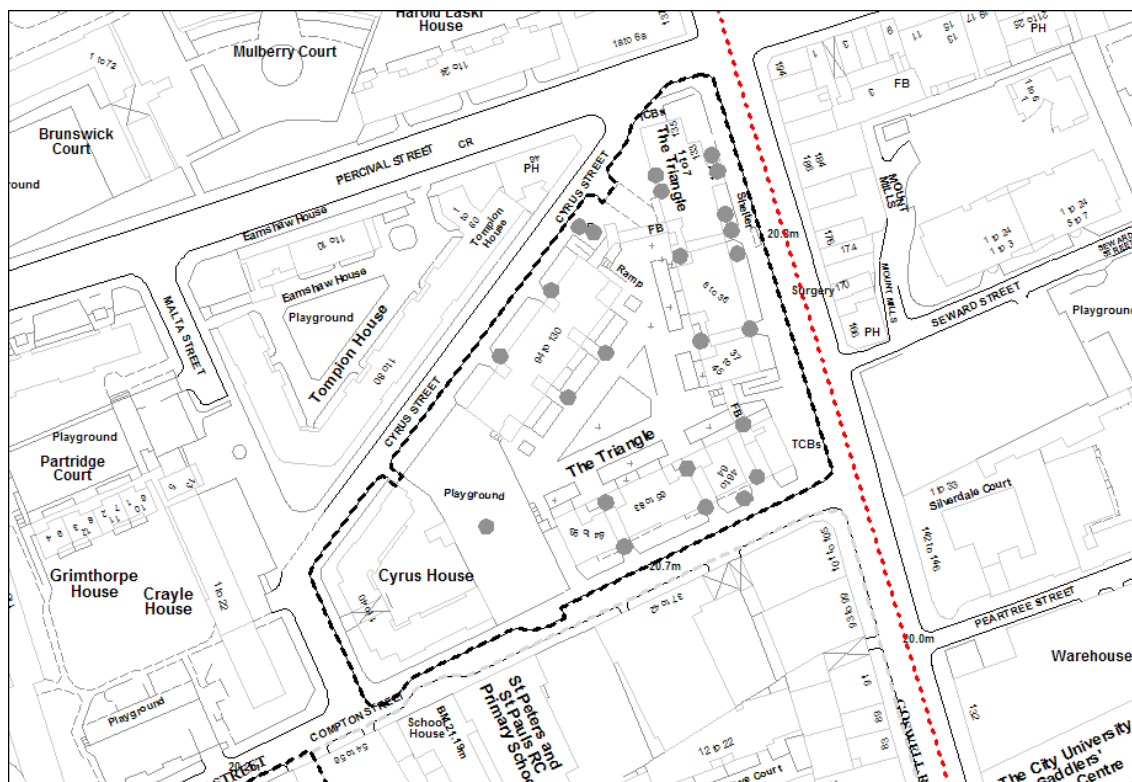


Figure 2

The Triangle Estate's young people's gathering points (identified as grey dots) and grouped into eighteen locations by dotted lines.

The estate with the second-highest reporting of intimidating teenaged groups was at Margery Street, a 1930s Queen Anne style medium rise, balcony access social housing estate. Ten locations within

the estate were reported as being regularly occupied by gatherings of young people. The first was at the interface between the main entrance to the estate and Margery Street, and another interface location was where a minor entry point gave onto an adjacent dead end street. Three more were at access points to the estate where it was possible to walk through from the surrounding streets into the entrances to the walk-up blocks. Another three were on pathways through the central courtyard, at points where the paths passed close to the surrounding housing blocks. The final two on-estate locations were in the centres of the communal open spaces. Two more gathering points were identified in nearby locations, at an adjacent street corner and in the centre of a local park. Drunken behaviour and drug dealing took place in most of the locations that were also close to buildings, and the open spaces where youths gathered were subject to vandalism and litter, whereas street orientated gathering points were associated with car vandalism.

The Bourne Estate, a turn-of-the-century state housing development of walk up, staircase access slab blocks had seven locations where youths gathered and three more were reported nearby. The retail and catering outlets along Leather Lane, an important cut-through off the Clerkenwell Road, were an important gathering point for the youths on this estate. Some drunken behaviour was also reported here. Youths also gathered at the three entrances on the back lane that separated the two parts of the Bourne Estate; this lane was reported to suffer from drunkenness and car vandalism. Youths were reported to hang out in one of the three hard landscaped, interior courtyards between the housing blocks and in two of the soft landscaped areas directly adjacent to key access points into the estate. The behaviour of the youths gathering in one of these, located in a semi-enclosed corner, was reported to be violent. The other, with a direct line of sight to the main entrance with Clerkenwell Road, was associated with prostitution, drug dealing and drunkenness. One of the nearby locations was further down Leather Lane, and the other two were in open spaces in the other part of the Bourne Estate.

Two more housing developments had seven reported locations where teenagers regularly gathered; New Calthorpe and Myddleton Square. New Calthorpe Estate was a small, late 1970s, high density, low-rise 'vernacular' social housing development. On this estate youths were reported to gather at both ends of the main pedestrian through route, adjacent to a local sheltered housing scheme. Three more gathering points occurred along the main vehicular access route; one of these was on the street outside the only vehicular entrance to the estate, another was on the road at the entrance to the estate's surface car park and the third was on a nearby pavement, adjacent to the visitors' parking spaces. Drug dealing and prostitution were reported to occur along the whole length of this route. Two more gathering points were in the interior landscaped courtyards; these spaces were also associated with drug dealing and prostitution.

Myddleton Square was included in the sample because it was one of the few remaining traditional nineteenth century London squares in Clerkenwell. Like most traditional street neighbourhoods, its tenure was mixed and it had a church at its centre, surrounded by a railed community garden. It provided a clear example of 'street corner society', as all four corners of one of its streets were reported as gathering places for young people. These four locations were highly strategic, as they were in a relatively quiet area that both offered long vistas through the locality to nearby major roads and controlled a pedestrian access point down to the adjacent canal. This intersection was blighted by litter and rubbish. Another strategic location was at the main way into the square from St John Street, and a further gathering place was immediately behind this one, at the entrance to the square's garden. These locations were reported to suffer from vandalism. The final location was in the middle of the garden square, at the back of the church.

The next estate in the rank order of developments affected by young people's gatherings was the Finsbury Estate, another classic late 1960s, Brutalist 'mixed development' social housing scheme that comprised one tower, one slab and a low-rise terrace. Six locations were reported where youths gathered inside the estate, and one nearby. Two of these were examples of 'street corner society'; the first being at an important local intersection at one end of Exmouth market, where drunkenness and vandalism were also reported, and the other further along the street at one of the more secluded entrances into the estate. Three more gathering points were at the main entrances to the tower and the slab blocks, and these were also associated with drunken behaviour and

vandalism. The final location, in the heart of the estate where a dog-leg perimeter road feeds into the local pedestrian network of the estate near commercial and light industrial premises, was also reported to suffer from drunken behaviour and vandalism. The nearby location where youths were reported to gather was on a corner opposite the estate by a local park. Drunken behaviour was reported from this location also, possibly because there were two pubs nearby.

Weston Rise, with five reported gathering points inside the estate and three nearby, was another late 1960's Brutalist social housing scheme comprising five linked, high rise slab blocks. This estate was later 'walled-up' in accordance with Oscar Newman's (1972) 'defensible space' design principles. Here, two of the popular gathering places for young people were inside the estate, in semi-private shared green spaces at the foot of the slab blocks; these areas were associated with vandalism. Two more were in the public green spaces, one close to the foot of a nearby slab and the other right at the open centre of the estate; these suffered from drug dealing and scruffy gardens. The final location was on the adjacent street, outside a residents' entrance and entry to the estate's underground car park. This location was blighted by rubbish. The three off-site reports were of a location where youths were observed to gather at a bus shelter on nearby, busy Pentonville Road, outside a local shop on the equally-busy King's Cross Road, and in a public open space close by at Vernon Square. All of these locations were associated with rubbish.

Charles Rowan House, which also had five on-site locations where youths were reported to assemble and two more off-site, was built in 1928, originally as police housing. It was a six-storey courtyard scheme with staircase access from the central courtyard. Three gathering points were in different parts of the courtyard; rubbish was also reported there. A further location was at the interface where the main entrance to the estate met the street and the final location was on another adjacent street. The two off site locations were on a nearby street corner and in the local park, at a location also reported by the residents of Margery Street.

Spa Green, an important icon of state Modernism designed by Tecton in the late 1940s, was associated with five locations where young people habitually assembled. Each had a different character. The first was on the main north-south pedestrian route through the heart of the estate, close to the main entrance to one of the slab blocks. Two more were in the central area, one of which had been designated for car parking and the other as a children's playground. The fourth was on a minor north-south path, also adjacent to a main building entrance. The final gathering place was at the south-east edge of the estate, close to a main road, St. John's Street. None of these locations was associated with other activities or behaviours.

The second of the traditional street systems in the sample, Lloyd Baker Street, was built between 1819 and 1820, in a 'linked' late Georgian villa style architecture. Three locations where young people gathered were reported from the area; at the western side in front of a local youth hostel. Drunkenness was also reported to occur here. The second was where a narrow pedestrian alleyway met a busy location on Wharton Street that provided a commanding view down to the Kings Cross Road. The third was at the end of another alleyway linking through to the Margery Estate. Crimes against the person also occurred here. The residents of this neighbourhood also reported two off side locations for disruptive youth gatherings. These were new locations on the south-east corner of the Margery Street Estate and on the northern edge of Charles Rowan House.

The three reported gathering points at the Bevin Estate, another Tecton state housing scheme from 1954, were in its associated park, at the main pedestrian gate to the park, and in the large, landscaped vehicle turning space in front of the main entrance to the tower block. All of these areas were also vandalised and additionally at the main entrance to the block, drunkenness, drug dealing and prostitution were reported to take place. One off-site location was mentioned by these residents, in the centre of nearby Percy Circus.

The residents of Langdon House, a bland 1960s social housing tower block on Leather Lane, did not report any instances of youths hanging about on the estate itself, but mentioned four nearby, all at new locations in or around the nearby Bourne Estate. Two of these were examples of 'street corner society'. Cavendish Mansions, an 1880s six storey block of mansion house flats, was similarly free of trouble on-

site, but its residents mentioned two locations nearby where youths gathered. One of these was a new location outside a pub on the northern edge of the Bourne Estate; the other was outside a local pub on the Clerkenwell Road. Finally, the residents of Trinity Court, a 1930s Art Deco private rented tower block, had no problems on-site either, but reported youths ‘hanging out’ at the ‘accessible’ entrance to the nearby Eastman Dental Hospital.

What else happens where young people gather

Estate	Young Group Location		YPG _ Alone	YPG PLUS 1	YPG PLUS 2	YPG PLUS 3	YPG PLUS 4	YPG PLUS 5	YPG PLUS 6	YPG PLUS 7	YPG PLUS 8
Bevin Court	Within	3	0	1	1	0	0	1	0	0	0
	Nearby	1	0	1	0	0	0	0	0	0	0
Bourne Estate	Within	7	0	1	2	1	1	0	0	1	1
	Nearby	3	0	2	0	0	1	0	0	0	0
Cavendish Mansions	Nearby	2	0	2	0	0	0	0	0	0	0
Charles Rowan House	Within	5	5	0	0	0	0	0	0	0	0
	Nearby	2	2	0	0	0	0	0	0	0	0
Finsbury Estate	Within	6	1	4	0	0	0	1	0	0	0
	Nearby	1	0	0	0	0	1	0	0	0	0
Langdon House	Nearby	4	3	1	0	0	0	0	0	0	0
Lloyd Baker Estate	Within	3	0	0	2	1	0	0	0	0	0
	Nearby	2	1	0	0	1	0	0	0	0	0
Margery St Estate	Within	10	0	0	4	5	1	0	0	0	0
	Nearby	2	0	0	0	2	0	0	0	0	0
Myddleton Square	Within	7	1	0	6	0	0	0	0	0	0
New Calthorpe Estate	Within	7	1	0	5	0	1	0	0	0	0
Spa Green Estate	Within	5	5	0	0	0	0	0	0	0	0
The Triangle	Within	18	0	0	13	0	2	2	0	1	0
Trinity Court	Nearby	1	1	0	0	0	0	0	0	0	0
Weston Rise Estate	Within	5	0	0	4	0	0	0	1	0	0
	Nearby	3	0	0	3	0	0	0	0	0	0
Total		97	20	12	40	10	7	4	1	2	1

Table 3

Number of additional problems that occur in the locations where youths hang out

In twenty out of the 97 mapped locations of young people’s gatherings (YPG) no other forms of liveability problems or anti-social behaviour were identified. Yet, for the rest, which accounts for almost

80% of such locations, these were marred by additional problems. The combination of problems ranged from an additional single problem in 12 locations, two additional problems in 40 locations (almost 40% of the total locations mapped) and a further 10 locations with three additional problems. The rest of the locations were marred by four (7 locations), five (4 locations) and a maximum of eight additional problems at one location, see Table 3

Estate	Young Group Location		Young Group ALONE	With Other problems													Totals	
				Scruffy Gardens	Litter & Rubbish	Vandalism	Dog Excrement	Heavy Traffic	Poor Air Quality	Intrusive Industry	Drunken Behavior	Drug Dealing	Prostitution	Muggings/Crime Against Person	Car Vandalism & theft	Crime Against Property		
Bevin Court	Within	3	0	0	0	3	0	0	0	0	0	1	1	1	0	0	0	4
	Nearby	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Bourne Estate	Within	7	0	0	0	0	0	0	2	1	7	2	2	0	4	0	0	6
	Nearby	3	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	2
Cavendish Mansions	Nearby	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1
Charles Rowan House	Within	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Nearby	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Finsbury Estate	Within	6	1	0	0	5	0	0	0	0	5	1	0	0	0	0	0	3
	Nearby	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
Langdon House	Nearby	4	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Lloyd Baker Estate	Within	3	0	0	0	0	0	1	0	0	2	0	0	1	1	1	1	5
	Nearby	2	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	3
Margery St Estate	Within	10	0	0	3	3	0	0	0	0	7	8	0	1	1	2	7	
	Nearby	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	3	
Myddleton Square	Within	7	1	0	4	0	0	0	0	0	4	0	0	0	2	0	3	
New Calthorpe Estate	Within	7	1	0	0	1	0	0	0	0	0	5	5	0	0	0	3	
Spa Green Estate	Within	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
The Triangle	Within	18	0	0	4	17	0	0	0	0	6	17	0	0	0	0	4	
Trinity Court	Nearby	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Weston Rise Estate	Within	5	0	2	2	4	0	0	0	0	0	4	0	0	0	0	4	
	Nearby	3	0	3	3	0	0	0	0	0	0	0	0	0	0	0	2	
Total		97	20	5	16	35	1	1	2	1	38	38	8	5	12	6		
Percent				5.2%	16.5%	36.1%	1.0%	1.0%	2.1%	1.0%	39.2%	39.2%	8.2%	5.2%	12.4%	6.2%		

Table 4

The range of other problems that occur in the locations where youths hang out

In the Triangle, the most troubled residential development in our sample in terms of youths hanging about, out of the 18 locations where youths were known regularly to hang out, 17 were also identified as

sites where drug dealing activities and vandalism took place. In the Margery Street Estate, the second most-troubled estate in that respect, out of the 10 identified YPG locations, six also had both drug-dealing problems and drunken behaviour, a further two had just drug-dealing problems and one more was marred by drunken behaviour. In the third most-troubled estate, the Bourne Estate, all seven of its mapped YPG locations were also identified as locations tainted by drunken behaviour. Out of the six YPG locations within the Finsbury Estate, vandalism and drunken behaviour occurred at five of them.

In the New Calthorpe Estate, out of seven mapped YPG locations, five were also hotspots for drug-dealing activities and prostitution. Within Myddleton Square's seven YPG locations, four were marred by both drunken behaviour and litter and rubbish dumping. Weston Rise, with its five YPG locations inside the estate, manifested four locations where drug dealing and vandalism also occurred.

A picture was therefore painted of a dynamic relationship between various antisocial problems that jointly attributed to negative perceptions of the liveability of an area. Yet, on the whole, the more prevalent problems associated with YPG were the activities of drug dealing and drunken behaviour, each appearing in 38 of the locations mapped, followed by 35 cases of vandalism.

The configurational attributes of young people's gathering points

Once the locations of 'intimidating gatherings of young people' and the combinations of problems and anti-social activities that co-existed were highlighted, the next step was to subject these locations to a careful scrutiny to analyse the characteristics of the spaces in which they occurred and the characteristics of the built forms in which they were embedded.

More than half of these intimidating gatherings of young people (51 locations out of the 97) occurred on paths (29) and roadsides (22), a further 25 locations were specifically adjacent to building entrances, and only 17 locations were in common green and leisure areas. Three of the YPG locations were in parts of the housing estates that had restricted access, and one location was within a car parking area. A total of 56 YPG hotspots were located in the public realm, and so were characterised by complete open public access, 26 more were in the public realm of housing estates / residential developments and 15 were situated within areas of housing estates / residential developments that permitted no public access at all. In this respect, intimidating YPGs occurred throughout the public realm, irrespective of space ownership, but they were more concentrated in the fully accessible parts of that realm, see Figure 3.

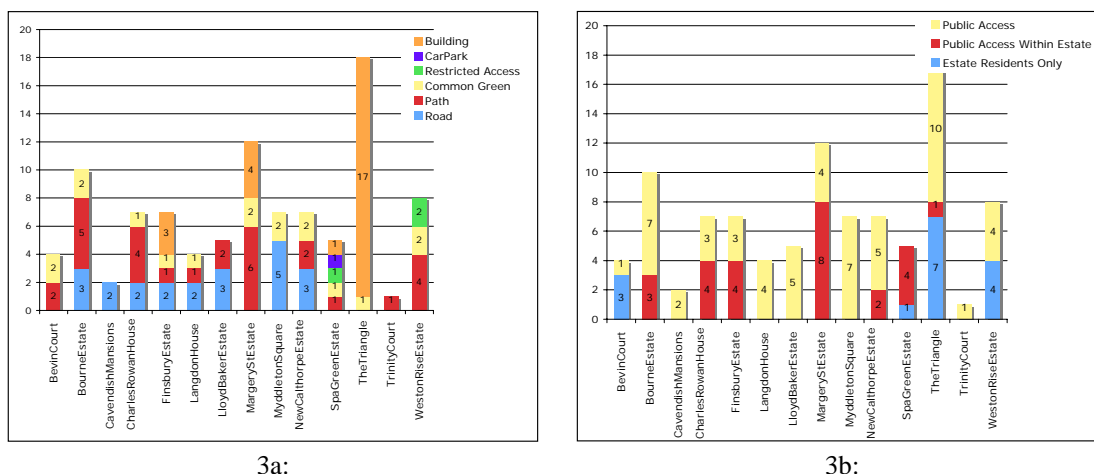


Figure 3

Distribution of YPG location within the urban realm according to; a) types of spaces, b) space ownership.

To examine the relationship between YPG locations and the adjacent buildings, an analysis of the nature of the boundary between the public realm and nearby buildings was conducted. Both the

primary boundaries - the building facades - and the secondary boundaries - walls and fences - were surveyed and classified. Primary boundaries were classified into six categories (active frontages, frontages with doors and windows, frontages with doors only, frontages with windows only, upper floor visibility. and blank walls), and the secondary boundaries into four categories (high opaque fences, high see through fences, low fences and very low fences). Variations in the composition of these boundaries defined the constitutedness (accessibility, permeability) and visibility conditions of the interface between the inside and outside, and therefore of the relationship between private and public domains, and also residents in the area and users of the public space.

By considering the characteristics of its two nearest primary boundaries, each YPG location was analysed in terms of its constitutedness and whether it was overlooked. Two-thirds of the reported YPG locations (65 counts) were constituted by building entrances, and 85% (70 counts) of the spaces were overlooked. A further element of metric distance was then added, whereby only primary boundaries that were within 15 metres or less were considered. This reduced the number of locations that were constituted to 57 (59%), in spite of the tendency for YPG locations to occur near estate entrances and stairwells into blocks. This re-calculation also reduced the number of locations that were overlooked to 70 (72%).

In combining both conditions of constitutedness and overlooking within the 15-metre restriction, 46 locations (47%) turned out to be both constituted and overlooked, 35 locations (36%) were either constituted or overlooked, and the final 16 locations (16%) were neither constituted nor overlooked. Contrary to the commonsense expectation that teenagers might be attracted to blank-walled spaces, in this study (81, 84%) of YPGs were found to be taking place in spaces that were either constituted or overlooked, as per Table 5. It would seem that, when choosing the locations for their habitual gatherings, young people did not shy away from the residents' gaze but chose highly visible locations that may even have represented the outward expression of a territorial claim to space.

	Counts		Percents	
	No distance restriction	Within 15 meters distance	No distance restriction	Within 15 meters distance
Constituted	65	57	67%	59%
NOT Constituted	32	40	33%	41%
Overlooked	82	70	85%	72%
NOT Overlooked	15	27	15%	28%
Constituted & Overlooked	57	46	59%	47%
NOT Constituted Overlooked	25	24	26%	25%
Constituted NOT Overlooked	8	11	8%	11%
NOT Constituted NOT Overlooked	7	16	7%	16%

Table 5

Analysis of YPG location in respect to the conditions of constitutedness and overlooking.

Turning to the significance of YPG locations within the urban realm in which they were embedded, the approach here was to create isovists (visibility graphs) from each of the YPG points with respect to building (primary) boundaries and high opaque fences that would block the view. These

graphs, then, represented the extent to which the surrounding urban realm was visible and accessible from every YPG location. A number of geometrical properties for the graphs were calculated including: area, compactness, perimeter, and occlusivity amongst others (Batty, 2001, Turner and Penn 1999).

A frequency distribution analysis of the areas of the graphs and their compactness, revealed a preference for the YPG locations to be situated within smaller areas, combined with a strong tendency for these to be less compact/more linear (where the compactness of a circle = 1, and that of a straight line = 0). A simple regression analysis indicated that the larger the area selected for a YPG spot, the less compact (more linear) it was. This suggested that, in their choice of location, young people tended to gather in spots that were well defined by boundaries (small area), but that this tendency was counterbalanced by linearity, indicating preferred locations that involved both a static “hanging-out” space combined with movement and dispersal possibilities, Figure 4.

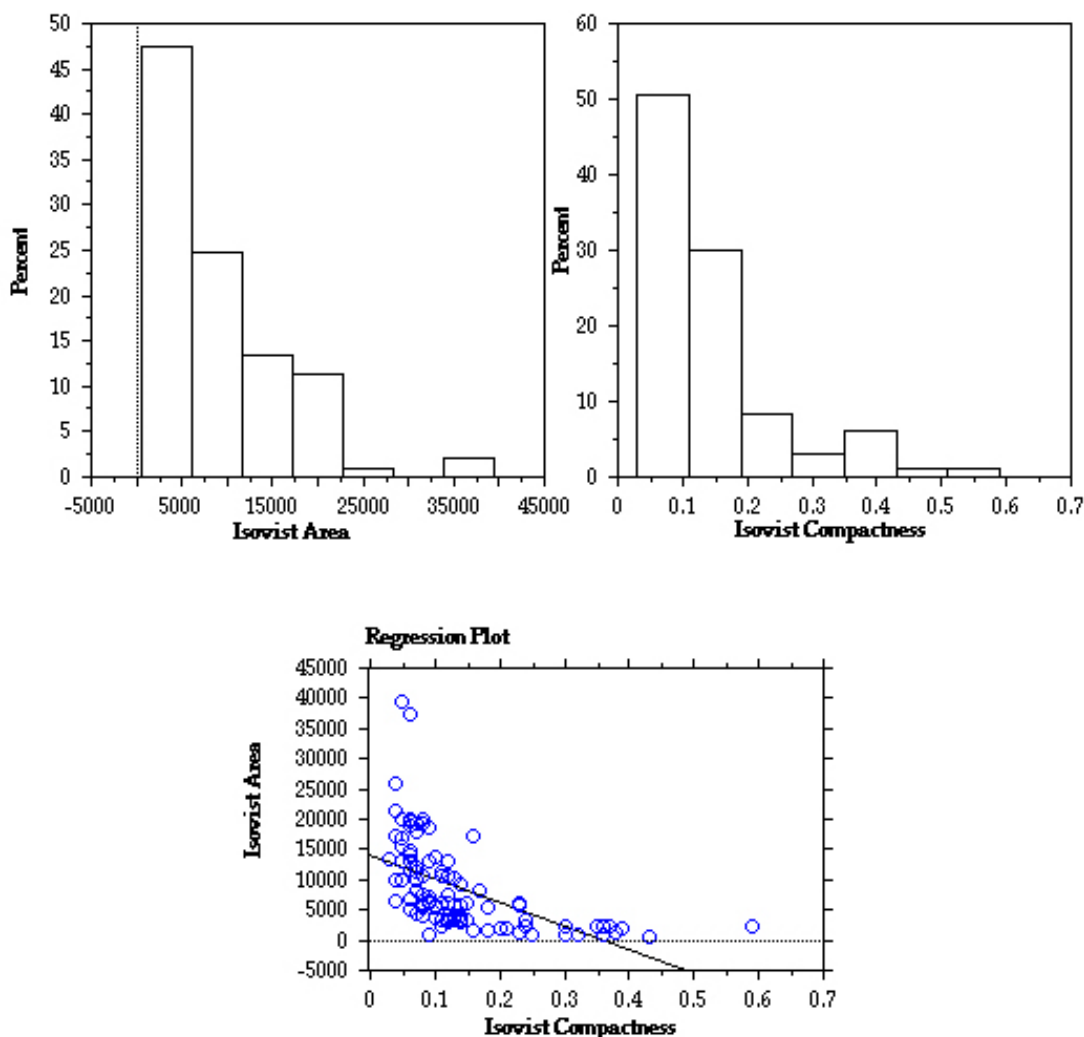


Figure 4
Analytical diagrams of the Isovist Areas and Compactness.

Finally, YPG location was attributed to the axial line on which it was situated, set within a 3 km radius axial map centred on Clerkenwell. A number of attributes for the defined axial lines were then extracted, including their length, connectivity and their global and local integration values.

Again a frequency distribution analysis (7 bands) of these lines in terms of their lengths and number of connections] revealed that YPG locations were more likely to be situated on shorter axial lines with fewer connections. In terms of the line length, 66% of the locations were within the

band of shortest lines, and half of the YPG locations were situated in lines with less than 5 connections. Within the 3-km analysed axial map, the lines of the YPG locations were banded according to their values within the entire map, revealing that they were sited on lines that tended to be (within the whole system) more integrated globally, but less integrated locally, Figure 5.

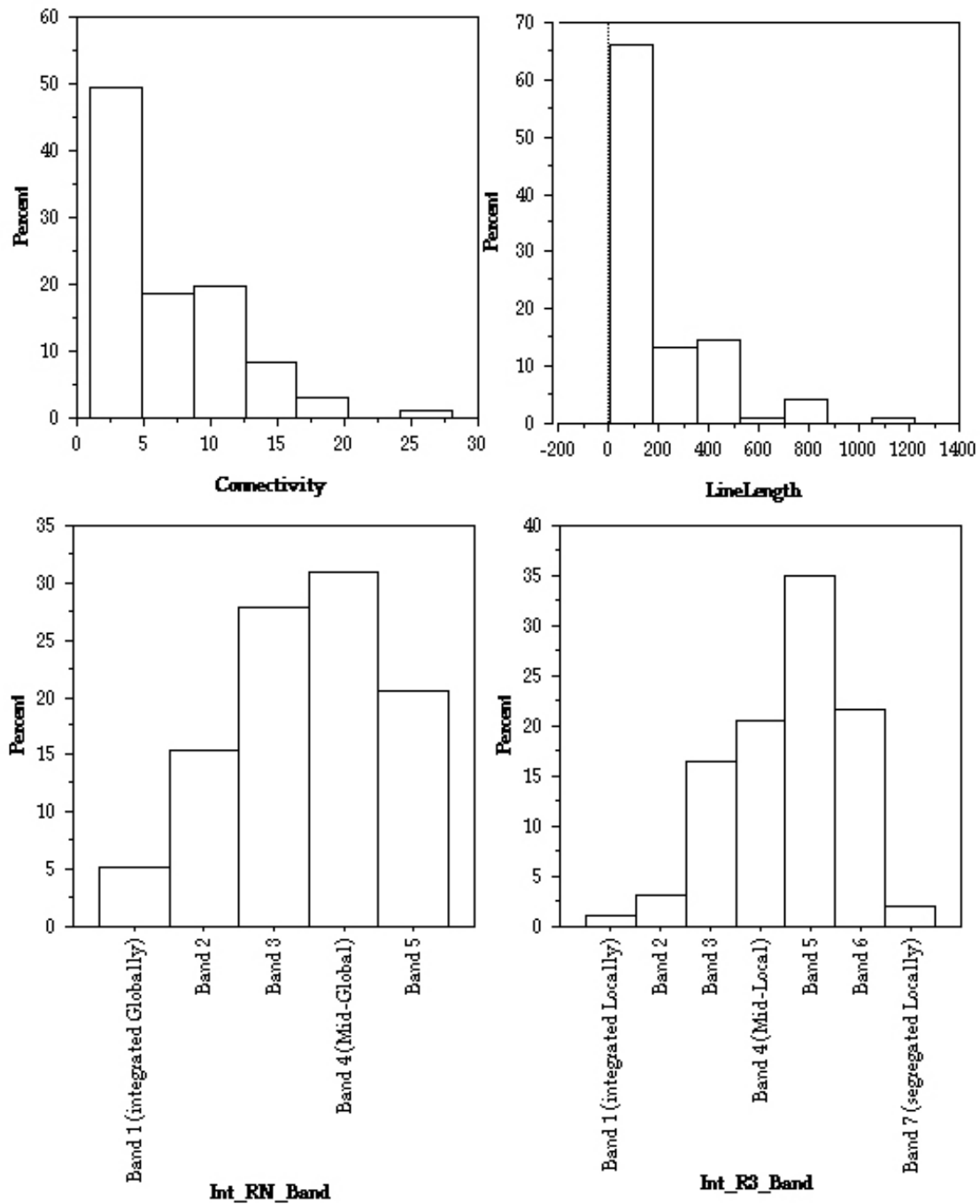


Figure 5

Configurational and syntactic analysis of the lines on which the YPG locations are situated.

Discussion

The analysis carried out looked into the dynamics of the young people's gatherings firstly by highlighting the other forms of liveability problems and anti-social activities that coexist with these gatherings and then by scrutinizing the spatial characteristics of the locations in which these occur.

Most of the young people's gathering locations were marred by one or more of other liveability problems and specifically other forms of anti-social behaviour, namely, vandalism, drunken behaviour and drug dealing. At the one end, vandalism could be considered as an expression of tagging, marking the turf or self-proclamation. At the other end, drunken behaviour and drug dealing add a dimension of violent activities and law-breaking. These activities coincide with heightened degrees of delinquency, specifically amongst teenaged boys. The literature on the topic supports these associations between young people's gatherings and such forms of anti-social behaviour, and even speculates on the escalating criminal nature of such gatherings and the activities that might be associated with them.

The spatial analysis of the young people's gathering locations yielded much more diverse results and some shed light on the selection dynamics of these locations. Firstly, these locations occurred throughout the public realm, and were neither confined to designated common green open spaces nor to dark alleyways. The analysis has shown that a higher percentage of these gatherings took place on paths, roadsides and street corners and other spaces that are fully accessible to all within the public realm.

The analysis took into account not only the type and nature of the locations and spaces in which the young people gathered in but also the relationship of such locations with the surrounding buildings. This shed light on an important aspect and characteristic of the choice of YPG locations, namely that they tended to select locations that are most likely to be accessible from or at least overseen by immediate neighbouring buildings. So, in essence the young people were not hiding or shying away from the public.

The third stage of the analysis considered the young people's point of view from their gathering locations, taking in account their visibility fields and their accessibility within the public realm. The results indicated a preference for smaller and more compact areas (as defined by the surrounding building), but ones that offer more potential for dispersal and movement into the wider public domain. The analysis suggests that YPG locations were chosen strategically within the urban realm taking into consideration the local conditions within a global overview of the area, embracing notions of both territoriality and of movement.

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