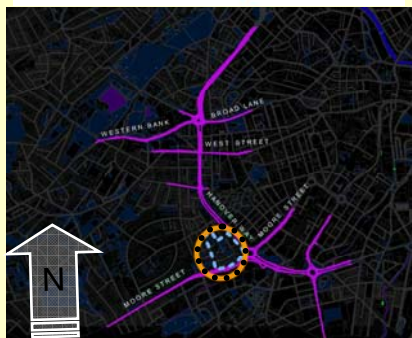




Housing Morphology in Sheffield

HANOVER BLOCK and EXETER DRIVE

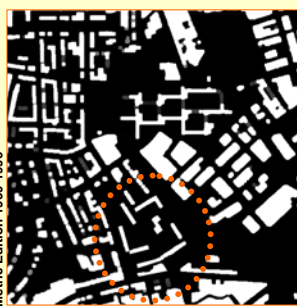
Amit Kumar Sarma and Shruti Shetty



Hanover Block and Exeter Drive in Sheffield are to the south of the city centre. The site occupies 39,500 sq.m of a corner block flanked on the east by Hanover Way, which is the south-western portion of the ring road surrounding the city core, and on the south by Moore Street, leading away from the city forming the A625. These highways provide easy vehicular access to the rest of the city. Hanover Way does not present a barrier to pedestrian movement and has an easily accessible underpass for pedestrians to use. The site has residential premises to the west and north complemented by a church to the north and community facilities to the west. Across Hanover Way to the east are large scale commercial and institutional enterprises; while to the south across Moore Street are large scale retail facilities like Peugeot showroom, The Granary and Waitrose. The site itself solely comprises residential facilities, and a public house to the South, one being recently demolished leaving its site as vacant land.



Historical Transition



Global Integration (Rn)

Housing site location in Sheffield

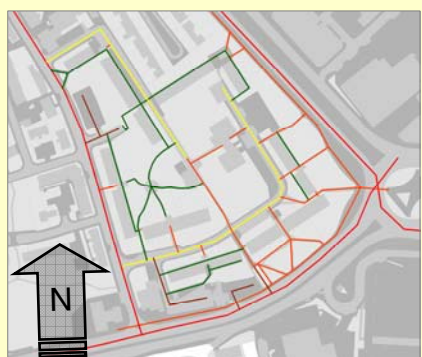


The first imperial edition map of the area (1948-1977), clearly shows the existence of Moore Street prior to the development of the ring road. However Cavendish Street and Thomas Street give us the first indication of the location of the ring road to come. Headford Street running through the north south axis has been retained in the present scheme and is now called Hanover Street. Hodgson Street cutting through the site has been more-or-less replaced by Exeter Drive. The street network apparent in the 1948 map has clearly been drastically altered; static space replacing movement. Streets, large slab and block structures replacing low-rise courtyard structures, inward looking front doors replacing street facing facades, and interaction by means of co-presence on the street has been replaced by an attempt to design an environment that brings all residents into a frontal relationship.

	TYPE1	TYPE2	TYPE3	TOTAL
Housing unit type	highrise purpose built	Slab block purpose built	Slab block purpose built	
Purpose built/converted	64	630	256	950
No. of households	64	10	8	
No. of plots	1	9	5	
No. of floors per plot	16	5	4	
Total site area				39,500 sq.m
Total area of building foot print				6268 sq.m
No. of car park spaces				107
No. of dwelling entrances	4	108	64	176
No. of non dwelling entrances				1



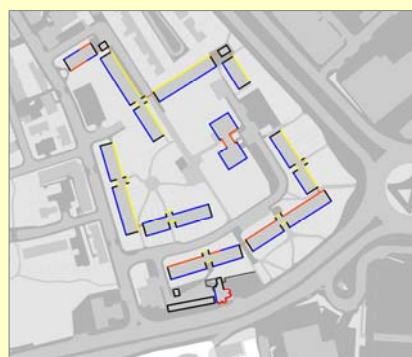
Integration (R3)



- Through road (all vehicles and pedestrians)
- Front through path (no vehicles)
- Driveways (all)
- Through Back Path (for Pedestrians only)
- Cul-de-Sac road (Pedestrians and vehicles)
- Cul-de-Sac road front path (Pedestrians only)
- Cul-de-Sac road rear path (Pedestrians only)



- Main Entrance
- Back Door
- Gate / Garage door
- Service Door
- Emergency door



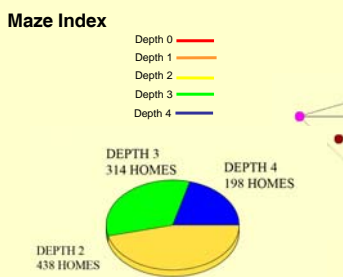
- Active frontage
- Door & windows
- Doors only
- Windows only
- Upper visibility
- Blank Wall
- High Opaque Fence
- High See through fence
- Low fence
- Very Low fence



- Road
- Path
- Vertical access
- Car park
- Common green/leisure
- Private garden/yard
- Restricted access
- Building
- Other



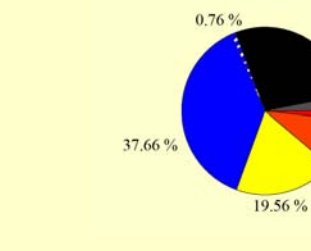
- Car park
- Catering facilities
- Commercial / Public offices
- Community Facilities
- Education
- Emergency Services/Law
- Hotels
- Industry/Manufacture
- Leisure/Entertainment
- Medical facilities
- Open public Space
- Residential Premises
- Retail Premises
- Services
- Storage
- Transport/Communication
- Under construction
- Undeveloped Land
- Vacant Premises



The site comprises of a tower block and a series of slab block housing of 4-5 storeys.

The tower block is located at the heart of the site, and is typical of its genre, with four households per floor arranged around a central vertical core. There are two diametrically opposite exits/entries. One faces Hanover Street, and is directly accessible from Exeter Drive and the parking lot. The other faces Hanover Street and is connected by means of a pedestrian link.

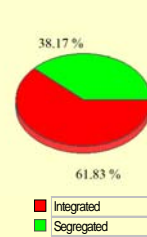
The second type of block is what is typically known as slab housing. The blocks are extended and access to each apartment is by means of a central stair-core leading onto open corridors. These corridors in this case are alternatively arranged with corridors facing the inside on the ground floor and facing the outside on the first floor. The blocks are of either four or five stories. An interesting feature of both types of slab block is that the corridors provide only access to doors, while the windows are at the rear of the apartment.



Variable	Value
No. of internal axial lines	79
No. of convex spaces	52
Ratio of axial lines/convex spaces	0.658
Maze index	2.744
No-neighbours score	1.96
Constitutedness rate	38.17%
Neighbourliness score	6.266



Spatial analysis - axial integration



Spatial analysis - convex integration

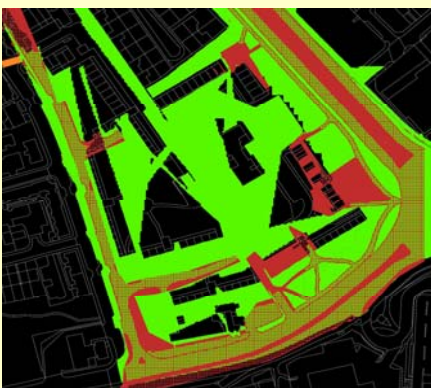
The estate appears to be focussed on the inside, permitting permeability from the outside as well as easy egress from the buildings to the outside.

However, there are issues of security and there is no resident caretaker or CCTV to prevent intruders. Tenants in the Exeter Drive flats, Broomhall often report of Open Drug dealing and of discarded needles often left lying around. Tenants complain of random knocking on residents' doors looking for dealers.

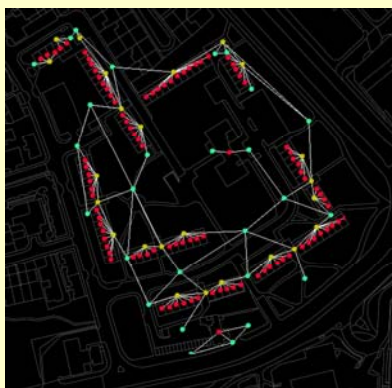
The estate is examined in terms of syntactic values such as integration, visibility, accessibility, constitutedness and surveillance to try and determine the nature and spatial characteristics of the resident-resident and resident-visitor interface.



Resident- Visitor interface Step depth from the road and built unit



- Visible from road, Not accessible within step 2
- Visible from road



Y Map showing Indirect constitution

- Main Entrance
- Back Door
- Direct constitution
- Indirect Constitution

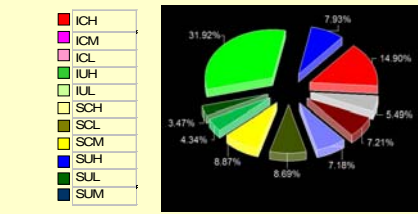


Y Map showing Converse decomposition

- Indirect Constitution



Spatial Categorisation by Integration, Constitution and Surveillance



I - Integration C - Constitution S - Surveillance
H - High L - Low M - Medium

References: Hillier, B and Hanson, J., 1984, The Social Logic of Space, New York: Cambridge University Press, Edina Digimap Services- www.edina.ac.uk