

Infrastructural Form, Interstitial Spaces and Informal Acts

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As we drive across a motorway intersection, through the elaborately signalled landscape that seems to anticipate every possible hazard, we glimpse triangles of waste ground screened off by steep embankments.

Concrete Island, J. G. Ballard

The void points to the absence of intentions. The void is the absence of architecture. The void is the domain of the unfulfilled promise and unlimited opportunity.

Colonizing the Void, Hans van Dijk

As an interstitial system, the informal system informalizes aspects of the formal system by inducing formal actors to be informal in their behaviour, to engage in informal activities, to use temporarily the formal space informally, or to transform the formal space into an informal space.

The Informal City, M. S. Laguerre

In J. G. Ballard's novel, *Concrete Island*¹, the protagonist, Robert Maitland, crashes his car and finds himself stranded on a constructed interstice bounded by motorway infrastructure. From this abandoned island Maitland is forced to confront both the conditions of this neglected void and his relationship to it. Set within the context of the construction of the Westway, a four kilometre motorway built in London between 1964 and 1970, Ballard's narrative provides a fictional performance to a context that could have existed in any modernising city during that time. To accommodate the bulk and route of the Westway

¹ Ballard, J. G. *Concrete Island* (Jonathan Cape 1974).



[Fig. 1] Westway roundabout under construction, London 1969.

Westway Development Trust, 2010.

homes were demolished and streets dissected – realising just enough space for the elevated concrete structure to pass. The Westway was designed as a transport infrastructure that would relieve congestion on the existing road system and through this process it created nine hectares of fragmented and unsightly open space. These resultant voids were ill considered in the planning stage and left crudely by contractors after construction². Within these interstitial spaces, particular activities emerged that contradicted the diverse intentions of the adjacent communities and the planning authorities. These formal and informal actions occupied the space, adapting and creating a dynamic that reveal potential for new urban processes and forms.

Infrastructure and Interstitial Space

Dictionary definitions of interstices refer to small, narrow intervening spaces. Although diverse in form, when interstitial spaces are initially captured by urban infrastructures they share common conditions of enclosure, emptiness and abandonment. At the Westway, these interstitial spaces are enclosed by infrastructural forms that exist in contrasting scale to the space below. When it opened, the motorway climbed from street level, above the adjacent buildings, facilitating two lanes of traffic in each direction along the longest uninterrupted concrete structure in England. Around the Westway form there has remained a diversity of spaces, including: the shaded understory beneath the structure, spaces captured by the roundabout and entry/exit roads, and other interstices caught between the motorway and infrastructural networks of canals and railway tracks. These interstitial spaces usually begin as empty, left-over or abandoned spaces that reveal few clues to the social or commercial value that may exist.

Infrastructure systems also take many forms. Traditionally, these included transportation networks, energy, water and communications infrastructures that claimed to provide a continuous and consistent service of public goods across urban space. Many of these infrastructures manifested themselves above ground dissecting existing communities and creating awkward interstitial urban spaces. There is considerable debate regarding this continuity of service provided by infrastructure

² The Westway Development Trust, 2010. *Ordering Chaos*. [online] Available at: <<http://www.westway.org/aboutus/history/OrderingChaos.aspx>> (2010).



systems³, in particular contradictions emanating from privatised and contemporary infrastructure, however the physical forms of the interstice remain as prevalent today as they did in the public infrastructure of the Westway, built decades ago.

Interstitial spaces found between, under and over large infrastructural forms have several consistent features: these infrastructural interstices are small, irregular and enclosed. These spaces are made as small as possible, balancing the need to minimize the area of land required for the infrastructure while maximising the efficiency of the system. They are also irregular in form because the interstitial spaces are defined by the geometries required to accommodate the infrastructural flows. These particular interstitial spaces are also enclosed on at least one side by a dominant infrastructure of transportation, power, water or communications networks that dissect the urban field. As a result, the interstitial space is disconnected from other spatial networks, creating unattractive isolated islands in the city.

The contrasting scale between infrastructure networks and human activity is revealed in the interstice. The form of the infrastructure reflects the optimism in the scale and speed of flows that the infrastructure will carry. The great width, length and curvature of London's Westway, set against the grain of the historic neighbourhoods and other infrastructure systems, created many small strips and islands of

[Fig. 2] Map of Westway*, London 2010.
Westway Development Trust, 2010.

³ For further exploration of inconsistent infrastructure systems see: Graham, S. & Marvin, S. *Splintering Urbanism* (2001).

space under and adjacent to the macro-scaled motorway. The human-scaled activities that emerged in these spaces, in the shadow of the Westway, remain insignificant to the looming infrastructure overhead. This contrast in scale is exacerbated by the disconnection that the interstices and the adjacent neighbourhoods have in relation to the infrastructure. These infrastructures provide for a regional, national and global scale – frequently bypassing the spatial localities which the infrastructure passes through⁴.

The dramatic form, speed, noise and geometries of transportation infrastructure, that are required to accommodate these fast moving vehicles, intensifies this juxtaposition of scale. In the Concrete Island, Maitland initially climbs the embankment to confront the traffic from which he came. Standing on the edge of the Westway, his shouts are drowned out by the noise of the traffic while the momentum of its flow make it almost impossible for other drivers to stop: “The pressure of the following traffic, free at last from the tail-backs that always blocked the Westway interchange during rush-hour, forced them on relentlessly”⁵. The insignificance of the human scale, and even the scale of the motorway island, is set against the mass, geometry, velocity and noise of the modern motorway infrastructure.

The resultant spaces between the infrastructural forms become the residual or left-over spaces. Christine Boyer describes these as disfigured spaces – standing in contrast to the figured spaces of the networked infrastructure⁶. This reflects the view that Ballard describes: from the overgrown disfigured space of the Concrete Island, which has been left incomplete and abandoned, Maitland can see the figured space of a newly constructed shopping mall that draws the attention of the public away from the disfigured interstices below the Westway. In these spaces of the disfigured city, with conditions of contrasting scale, irregular form and isolation, many of these interstices remain empty of function and built-form. Fragmented and discontinuous spaces cause difficulties for conventional urban planning typologies, which require large consistent building footprints. Within the top-down aerial view of new developments the void white spaces of the plan provide a backdrop to the proposed form; these interstitial spaces between, around and under urban infrastructures remain as voids on the drawing and they appear empty in actuality.

4 Graham, S. & Marvin, S. *Splintering Urbanism* (2001).

5 Ballard, J. G. *Concrete Island* (1974), 17.

6 Boyer, M. C. *The Great Frame-up: Fantastic Appearances in Contemporary Spatial Politics*; in Liggett, H. & Perry, D. C. (eds) *Spatial Practices: Critical Explorations in Social/Spatial Theory* (1995).

These left-over spaces also appear to be undefined in use, ownership, management, and function. Often overgrown and projecting a sense of abandonment, these interstitial spaces betray their association with the highly managed and programmed infrastructure project⁷. In contrast to their appearance, these spaces have strict rules in relation to who can use these spaces and what activities can occur. In Ballard’s motorway island⁸, where the planned landscaping remains incomplete and partly demolished, buildings are obscured by the rough grass and abandoned vehicles. Maitland slowly discovers both formal and informal functions of the space. Within the interstice, below the timber barrier that Robert Maitland crashed through, formal plans for the island remain unfinished and informal inhabitation resists the rules of the infrastructural landscape.

Formal/Informal

These interstitial spaces around the infrastructural form frequently attract informal actions. The conditions of enclosure and emptiness allow certain activities to occur outside the view of formal authorities while the appearance of abandonment deters many other users from competing for use of the space. In both the fictional and documented spaces of the Westway there have been many uses that conflict with the plans of the local Councils and the aspirations of the community. These include, among other activities, homelessness, drinking, street art and traveller camping⁹. These activities can be described as informal as they cross a boundary of acceptability that is defined and frequently re-defined, by a formal authority.

Laguerre¹⁰ describes the informal as a social construct that can be expressed, either through the intentional behaviour of an individual or group, or through the defining of informality by society: “... one can decide to display an informal behaviour or one’s behaviour can be defined as informal by others”¹¹. Ballard’s narrative describes three individuals that occupy the Concrete Island. These three characters,

7 Wall, E. & Johnston, S. *Informality in Derelict Spaces of the Contemporary City*. In: ECLAS Conference 2009, *Landscape and Ruins: Planning and Design for the Regeneration of Derelict Places*. Genova, Italy 23–26 September 2009. University of Genova.

8 For further exploration of J.G. Ballard’s London location for his novel *Concrete Island*, see: Bosnall, M. 2008. *The Real Concrete Island*. [online] Available at: <<http://www.ballardian.com/the-real-concrete-island>> (2010).

9 The Westway Development Trust, 2010. *Ordering Chaos*. [online] Available at: <<http://www.westway.org/aboutus/history/OrderingChaos.aspx>> (2010).

10 For further exploration of the informal city, see: Laguerre, M. *The Informal City*. (The University of California at Berkeley, 1994).

11 Laguerre, M. *The Informal City*. (The University of California at Berkeley, 1994), 6.



[Fig. 3]

Maitland, Proctor and Jane Sheppard, ascribe informality in different ways: Maitland, a young disillusioned architect, inadvertently finds himself stranded on the island. Initially confident of an immediate escape Maitland becomes injured and finds himself in an old air-raid shelter, attended to by a young woman, Jane Sheppard. As he recovers, Maitland simultaneously plots his departure from the island while simultaneously attempting to establish order and structure to this disfigured space. Jane Sheppard, who violently fluctuates between caring for Proctor and Maitland, is a young woman who regularly leaves the informality of the interstice to engage with the formal world outside. Ballard describes her sexual encounter with Maitland and alludes to her engagement with the city outside of the Concrete Island as that of prostitution, picking up drivers on the roads that isolate the island. The remaining character in the island is Proctor, a man of "... about fifty years old ... a mental defective of some kind ..."12, who has found refuge in this space as he is unable to exist in the formal system. Maitland and Jane Sheppard contend for influence over Proctor who, in turn, does everything that he can to impede Maitland's return to his life outside.

Within the infrastructural interstice there are several layers of authority: there are rules established by the authorities that own, design, manage and maintain the space; there are laws set out by the state and enforced by the police; and there are social norms formed by societal groups who may or may not use the space. Within this framework there are the actions of individuals and groups that activate these spaces; these actions comply with or oppose these strata of formal rules. Informality is therefore not necessarily illegal13 but is a grade of actions set against a diversity of formal authorities, expressed through social and legal norms.

The informal emerges from the bottom-up, individual and minority actions of those excluded from the formally defined processes of the city. The informal is not merely the spontaneous, unpredictable, unprogrammed or unplanned actions that animate the urban landscape but they are the appropriation of parts of the city for activities that are against the will of formal authorities. Informality allows unofficial trade, networks, recreation and dwellings to establish themselves in the interstices of the private and public realm, providing a haven for those unable to find their place in more restricted formal settings of the city.

12 Ballard, J. G. *Concrete Island* (1974), 86.

13 Sassen, S., 2005. *Fragmented Urban Topographies and Their Underlying Interconnections*. In: Brilllembourg, A., Feireiss, K. and Klumpner, H., (eds) *Informal City – Caracas Case*. (Munich 2005), 83–87.

The interstitial spaces along the Westway motorway were established and enclosed by the infrastructural form. Likewise, the informal only exists and is bound by its relationship to the formal. Laguerre brings together many perspectives on the relationship between the formal and the informal. These include: the informal as an alternative system that is separate from the formal system; the informal and the formal as opposite poles of the same system where they are seen as complimentary parts of a whole system; the informal as an enclave within the formal – where the informal is part of, produced by and dependent on the formal system; the informal as a marginal system on the fringes of society; the informal as a parasitic system, an argument often promoted by formal authorities perpetuating a concept of the informal taking from the formal; and finally, the informal as an interstitial system that acts between the formal structures and often holds them together. These relationships between the formal and the informal also reflect many of those between Boyer's figured and dis-figured space. The conditions of the informal and the disfigured are synonymous; their formal and figured counterparts retain the authority over them, defining the relationship that they have to them and the separation they have from them. Each of these relationships can be identified, to different degrees, within the production of these interstitial spaces along the Westway margins of modern infrastructure.

Process of Production

In 1966, on the land cleared to construct the new Westway motorway, local children took over the spaces and began to make for themselves "complex and wonderful structures".14 This unprogrammed engagement through play, on the land temporarily claimed by a community group called the London Free School, contradicted the formal plans by the Council. However, when Adam Richie, a local 26 year old freelance photographer, witnessed this temporary challenge to the space, he responded by asking for volunteers to make this a permanent space for use by local children. Bringing together local volunteers and hiring an architect, Richie formed a group whose aim was to formalise these innovative children's actions into a permanent playground beneath the future motorway structure. Within a short space of time the Play-space Group became a significant voice in the planning and designation of the interstitial voids that would appear beneath and around the

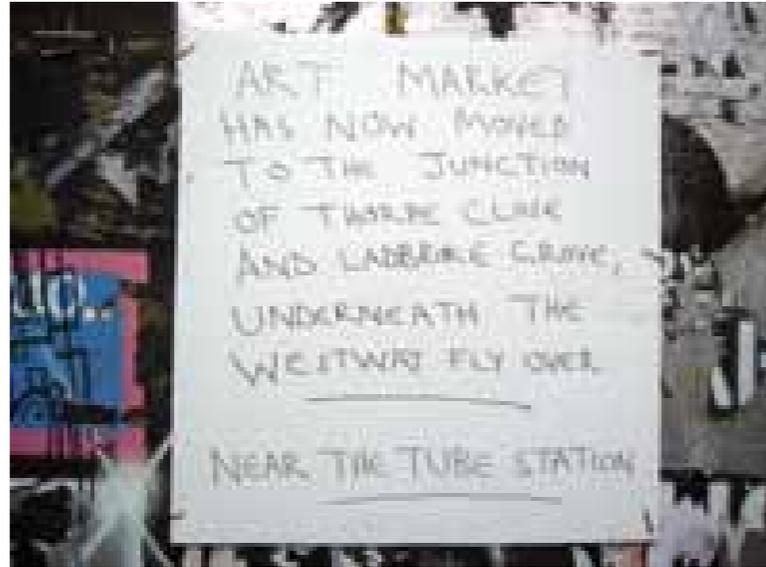
14 The Westway Development Trust, 2010. *Campaign for the Trust*. [online] Available at: <<http://westway.org/aboutus/history/chapter2.aspx>> (2010).



[Fig. 4]

[Fig. 3–4] BaySixty6 Skate Park under the Westway, London 2010. Ed Wall, 2010.

[Fig. 5] Temporary events, markets and exhibitions under the Westway, London 2010.
Ed Wall, 2010.



Westway structure. Over many years, the attention that these children had brought to these spaces initiated a power struggle between the local Council and many different community groups who recognised the potential for these interstices. While this contestation occurred many informal, and often illegal, activities subtly emerged within these spaces, adding to a continuous process of change in the perceived void spaces of the Westway.

In the Informal City, Laguerre describes the structural origins of informality – the point where the emergence of the informal and the formal can be identified. This describes a process of change between the formal and the informal. In London’s Westway, the superimposition of the formal infrastructure, dividing established communities, initiated the emergence of the informal in this area of the city. The informality adapted to the superimposition, with the North Kensington Amenity Trust even publishing a poster asking “What’s happening under the motorway?” The space provided for homeless people, illegal tipping and traveller encampments – activities that had previously occurred in other areas of London. This emergence of informality under the Westway has been the result of diverse social, economic and spatial conditions exaggerated by the inflexibility of the formal infrastructure imposed on the city. Describing the informal city, Saskia Sassen states:

“These two forms reveal how power and the lack of power inscribe themselves in the urban landscape”¹⁵. The occupation of these interstices is initiated by those who need the space because they, or their actions, are excluded from the formal structures of the city. The informal activities are attracted because of the conditions of the space and the need of the actors to find presence¹⁶. These actors represent the marginalised and disenfranchised¹⁷ who colonise these essential spaces that are undesirable to other users. This is reflected in Ballard’s character, Proctor, who it is suggested has had uncomfortable experiences with the police and who found refuge on the motorway interstice away from ill-fitting social and legal norms. Ballard does not describe how Proctor came to live on the Concrete Island however the conditions of isolation and abandonment provide sanctuary from the outside. When the inhabitation of the interstice attracts the attention of other users dynamic relationships are initiated between the formal authorities and the informal. In many instances, informal users add to the established informality, both competing for space and providing solidarity that can organise against the formal; or, the formal authorities recognise or define the actions to be informal and thus propose the removal or formalisation of these activities¹⁸.

The process of the informal is one of temporality. In the Westway this temporality exists in the interstitial spaces created by the infrastructure, in the informal activities that occupy the interstitial spaces and in the formal organisational structures that sets out change to these spaces. The activities that once occupied the spaces created by the Westway construction have changed. The processes of children’s play, recorded by Adam Ritchie, are no longer visible in their original form however the Westway Development Trust has over several decades developed diverse play, arts, sports and educational facilities for the benefit of the local community. Other uses have become formalised into the space, such as the BaySixty6 skate park, which provides for the often restricted act of skating, or the Under the Westway street art display that temporarily inhabits the understory of the motorway infrastructure.

- 15 Sassen, S., 2005. Fragmented Urban Topographies and Their Underlying Interconnections. In: Brillembourg, A., Feireiss, K. and Klumpner, H., (eds.) *Informal City – Caracas Case*. (Munich 2005), 83–87.
- 16 Sassen, S., 2005. Fragmented Urban Topographies and Their Underlying Interconnections. In: Brillembourg, A., Feireiss, K. and Klumpner, H., (eds.) *Informal City – Caracas Case*. (Munich 2005), 83–87.
- 17 Griffin, C. *Nomads Under the Westway: Irish Travellers, Gypsies and other traders in West London*. (University of Hertfordshire Press, 2008).
- 18 Neil Smith describes the informal as “... a transitional form of urbanism, en-route to formalization”. Smith N. 2005. *Towards an Informal City*. In: Brillembourg, A., Feireiss, K. and Klumpner, H., (eds.) *Informal City – Caracas Case*. (Munich 2005), 42.



[Fig. 6] Riding stables under the Westway, London 2010.

Photo: Paul Pearson.

The formal structures that have defined the acceptability of these activities have also changed. The London Free School, which had taken over part of the Westway construction site, was short-lived however its actions inspired Adam Ritchie to form the Playspace Group. Working between the local communities, the developers, the Greater London Council and local Councils, the Playspace Group fought relentlessly for the interstitial spaces around the Westway to be developed for the community. Over several years the group battled with these formal authorities that govern the city, resulting in their marginalisation when, in 1971, the North Kensington Amenity Trust was formed. This evolution and formalisation of organisations that manage these spaces continues through the authority of the Westway Development Trust. The

interstitial spaces that have accommodated both formal and informal actions have also continued to be transformed. Where informal actions innovatively adapted to these spaces many formal structures have now taken their place; some structures have been removed to accommodate new development and others have been accepted within the formal limits of acceptability. The blurred boundaries between the spaces, the activities that occupy them and the authorities that define informality are exacerbated by the diversity of spaces, actions and authorities that exist within them.

Laguerre describes the informal system as interstitial because of its “interdependence with the formal system, on its interaction with the formal system, on actors who belong to the formal system, and on an outcome that may facilitate or hinder any action undertaken in the formal system”¹⁹. The observations of the Westway have focused on the formal infrastructure and the changing formal/informal processes in the interstices below. Although the construction of the Westway created the interstitial spaces there is no other relationship between the infrastructure and the interstitial spaces; the latter does not service the former, the informal activities have no relation to the transportation use of the Westway and there is no clear interdependence between the two. However, when considered within the wider urban context, the spaces and activities below and between the Westway infrastructure have a direct relationship with the neighbourhoods disconnected by the roadway construction. The interstitial spaces stand between communities that were divided by the Westway construction. The spaces, and the formal/informal activities that occupy them, physically link one area of the city to the other and they provide a transitional zone for reconnection. These diverse spaces that have established both formal and informal uses, which include a sports centre, social club, temporary art space and riding stables, continue to reconcile the imposition of the Westway infrastructure and the divided communities that exist alongside.

Conclusion

The dynamic between the formal and the informal reveals a potential for new urban processes. Informality provides an opportunity for those excluded from formal processes to find presence in the city. As the informal adapts to the interstitial spaces of the city new forms emerge.

¹⁹ Laguerre, M. *The Informal City*. (The University of California at Berkeley, 1994), 119–120.



[Fig. 7]



[Fig. 8]

These forms and activities innovate within the hidden spaces of the infrastructural shadow, testing their existence and adapting to the awkward space. The evolution of these activities and spaces is facilitated by local actions; in London's Westway the community involvement over many decades has created a dynamic series of spaces with a distinctive local character. Rather than processes of conventional planning that create homogenous urban space the formal/informal dynamic represents the influence of local characteristics and conditions.

While theoretical concepts present an evolving argument for new relationships between formal structures and informal acts new expressions of socio-spatial innovation by the informal reveal new typologies for urban space. Whether these processes reconcile or celebrate the differences between the infrastructure and the city – exploring the dynamic between the formal and the informal provides a new perspective on interstitial spaces created by modern urban infrastructure.

He lay calmly in the doorway of his pavilion, realizing that he was truly alone on the island. He would stay there until he could escape by his own efforts ... In some ways that task he had set himself was meaningless. Already he felt no real need to leave the island, and this alone confirmed that he had established his dominion over it.

Concrete Island, J. G. Ballard

[Fig. 7–8] Children making structures under the Westway, London 1970s.

Westway Development Trust, 2010.