

0 Abstract

This two part study, examines the role of the late nineteenth century monument in the urban fabric. Part I explores the symbolic role of the monument as expressed through space and time. Part II investigates the monument's new role as a cultural artefact for tourist consumption in the Late 20th century through observational studies and statistical analysis. It presents a study of how symbolism is expressed by the placement of sculptural monuments in two archetypal urban settings; a city of instrument and a city of symbol, is presented. Two groupings of monumental statues were studied; the Royal Exchange Square, in the City of London (instrumental) and Waterloo Place, in the City of Westminster (symbolic). Comparisons between convex isovists and properties of synchrony have been extremely useful in the syntactic description and spatial analysis of monuments in two differing urban morphologies. This study suggests that the synchronous nature of the monument constructs an 'optimal field' dependent on the quality of information content from the viewer's angle and proximity. It demonstrates that patterns of static space use between locals and tourists are related to the optimal synchrony field constructed around monuments in public squares.

1 Introduction

Monuments are a familiar element in most cities. They commemorate historic figures and events and lend distinction to a place. The term monument, in this paper, is limited to the category of a cultural object which proliferated in the late nineteenth century, such as a figurative statue, a memorial or a column.

Monuments are erected to impress a contemporary public, Miles suggest that monuments hold a relation to history and those in power; whereby the durability of that relation is expressed in stone or bronze. They are elevated to a realm of stability and continuity and sited in public spaces to make visible and define the values of the public realm. If this is the case what are these values but more importantly how are these values expressed through space? How do they use the potential of space to communicate symbolism? The monuments of the late nineteenth century (and early twentieth century) have become cultural artefacts which are now almost overlooked in the streets and urban spaces of most European and American cities, so what are their relevance now? What value do these century old historic objects hold for the current public? How might their presence enhance the urban experience?

3 Background

3.1 *The Role of the monument*

Monuments are produced within a framework of values, as elements in the construction of a national history. According to Miles, the Late 19th century was a time in which traditions were created for the redefinition of social relations and the central role of the state. During the period between 1870 to 1920, there was an expansion in the commissioning of public sculpture which conveyed messages of empire and patriarchy. Miles suggests that this period saw the management of the population through the recognition of bonds of familiarity and allegiance to the nation, the community and the past. He asserts that monuments have had a key role in colonialism, both in colonised land and in the 'home' state. The role of monument, he believes, 'legitimised oppression by subsuming it..' For example, the casualties of wars were transformed into sacrifice, commemorated in memorials of public remembrance. The message of the monument conveyed the message that war is not bloody and death does not hurt, but rather death and duty to one's country was the most noble and heroic gesture. In this respect, monuments have been useful in constructing a national identity in 'managing' the population; it subsumed social conflict within a myth of national identity.

It is to this background that Camillo Sitte wrote his book on urban design, *City Planning According to Artistic Principles*, in which he described the relationship between buildings, monuments and public spaces. He criticised the placing of statues in the middle of plazas, as was the common practice in the contemporary cities of his time. He suggested that monuments should be placed to where it can be seen as best for artistic contrast and that it should not be placed on the central axis in front of an important building. For aesthetic considerations, he suggests that monuments should be set aside from the central axis and that the centre of plazas be kept free. The richly articulated facades of such buildings are perhaps, 'the worst imaginable background for a monument.' He gives Donatello's equestrian statue of Gattamelatta outside the S. Antonio in Padua as 'a most instructive placement of a civic monument..' Figure 1. Sitte believed that the careful placing of a monument can contribute to the overall aesthetic enjoyment, the liveliness and success of an urban setting and hence, an artistic approach should be taken.

3.2 *The Social Logic of the Monument*

Krauss has suggested that the logic of sculpture is similar to the logic of the monument, and that they are erected in a place to communicate symbolically the meaning of that place. She emphasises that the pedestal is elemental to the monument as it mediates between the site and the representational sign. The monument serves as a mediator of history from the position of power it embodies; "the function of sculptures are for representation and for marking, sculptures are normally figurative and vertical." Krauss believes that the logic of the monument before the late nineteenth century was intact; that sculpture generates a dialogue with its surrounding.

Hanson and Hillier believes that a society reproduces itself spatially in the material world as a social phenomenon. Space is symbolic and directly related to social life. "It provides the material preconditions for the patterns of movement: encounter and

avoidance.” Unlike architecture, monuments are interiorless objects but like buildings they too are a product of society. Therefore, it is worth-while to study monuments in relation to their site because the spatial arrangement of monuments represent one society’s values, out of many possible constructions of it. Actually what it represents is an idealised version of that society, to which the audience interprets the objects and their interpretation is not subjective or completely open. Hence, the experience and the placement of monuments are far from neutral and contrary to Sitte, monuments are never simply decorative. The social logic of the monument lies in how it uses, “the potential of urban space for....the communication throughout space of the symbolic importance of certain buildings or locations.” For instance, the location of the equestrian statue and the column in Padua, has been strategically positioned to extend the visibility of the square to the entering streets rather than for artistic contrast. Herein, lies the logic of the monument.

4 Part I

4.1 *Monuments and the Instrumental and Symbolic City.*

Hillier states that the essence of urban form is spatially structured and functionally driven. He believes that there are distinct differences between towns of business and towns of government, in how the potential of space is used to express human intentions and its relationships to social forms. A town of business such as the City of London is, what Hillier terms, instrumental; whereby the constitution of space is of everyday buildings. A town of government, such as the City of Westminster is symbolic; whereby space is concerned with social reproduction and dominated by important buildings. Monuments are functionally symbolic. However, just as the axial and convex properties are different in the two morphological types, how do monuments differ in their spatial expression of symbolism in these two settings? (instrumental and symbolic). Two groups of monuments were chosen for a comparative study, one in the City of London and the other in the City of Westminster. Many of the monuments in both groupings were erected between the late nineteenth century and the early twentieth century.

4.1.1 *City of London: Royal Exchange Square*

The site of the Royal Exchange was founded in 1568, a meeting place for merchants, who had been used to doing their business in the nave of St. Paul’s. Refer to Figure 2. The present building is the third Royal Exchange built in the Victorian era. Around about the same time, Queen Victoria Street was created. It was conceived of as a monumental route leading from the Houses of Parliament, the symbolic centre of government, in the City of Westminster via the Victoria Embankment to the City of London’s historic centre of business, the Royal Exchange.

4.1.2 *City of Westminster : Waterloo Place*

Waterloo Place runs perpendicular to The Mall leading to Buckingham Palace. Refer to Figure 2. Pedestrian approach from the south via a flight of stairs facing the northern corner of St. James’s Park. Pedestrian approach from the north through Regent Street from Piccadilly Circus. Vehicular access is restricted to incoming cars from Pall Mall East or Carlton street. In a way, Waterloo Place acts as a threshold space between West End and the Government/ Royal Precinct. The Duke of York Column,

the Towers of Parliament and Westminster Abbey are visible from the top of Regent Street in Piccadilly Circus.

5 Time as an Aspect of the Monument

The monument, in spatial terms can be analysed syntactically. Hillier states that, 'time is useful and necessary in the description of space.' There are two aspects of time in relation to space. The first, is its description; which is how a space (in this case an object) is fitted into a complex of space. The second, is its synchrony, which is the quantity of space invested in that description; or metric scale in space.

5.1 Description

The description of a monument can be best represented by its isovist. In Waterloo Place, the isovists of the three more prominent monuments are illustrated on Figure 3.1-3.3. These diagrams show geometric regularity and symmetry, unlike the examples in City of London. In the Royal Exchange Square, the isovist of each of the three monuments are illustrated in on Figure 3.4-3.6. The Duke of Wellington monument is on axis to the monumental route, Queen Victoria St. Refer to Figure 3.4. Similarly, the monument to Greathead is on axis to Cornhill and Poultry (to a lesser but significant degree.) Refer to Figure 3.5. But it is when the isovist of these two monuments are superimposed that it becomes interesting. Figure 3.6. The resulting isovist somewhat achieves a symmetrical balance on two of the longest axial lines in the street system (Queen Victoria St. and Poultry). This reinforces the part-facade isovists of the Royal Exchange and Mansion House as illustrated in Figure 3.7. It appears that these two monuments collectively obtains the symmetrical properties of a monument in a symbolic setting.

In terms of symbolic meaning, the War memorial is probably the most important monument of the three. It is interesting to note that like important buildings in the City of London, its symbolic axiality is applied on the most localised level. The isovist of the WWI Memorial and the full-facade isovists of the Royal Exchange and Mansion House are illustrated in Figure 3.8. & Figure 3.9, respectively.

One can attempt to summarise the properties that seem to be associated with the isovist in the different axialities of a symbolic town and an instrumental town;

- ; the symmetry of the isovist. (symbolic: individual isovists have geometric symmetry while, instrumental: the individual was asymmetrical, and collectively achieve 'just-about' symmetry.);
- ; the ending tips of the isovist. (symbolic: end bluntly, perpendicular to building facades; instrumental: end in chamfered tips at obtuse angles to building facades);
- ; the number of fingers in the isovist. (symbolic: had one finger tunnel isovist, while instrumental: have multi-finger isovist).

5.2 Synchrony

If the description of a space is its social identity then synchrony reinforces that description. Synchrony refers to the quantity of metric scale in space invested in a description; such that the higher the quantity, the more emphasis is given to that

description in the complex. Since movement is used to overcome space, by expanding scale metrically increases its single space-time frame. To understand a city, requires us to moving around in it; to see one part at a time to obtain a picture of the whole. A route taken down any street is made up experientially of a successive synchrony of different sub-complexes of spatial relations. A synchronised spatial relation is one in which a moving observer can see everything at once. When the quantity of continuous space within which the same relations prevail are synchronous; a synchronised effect strengthens as the convex space and the length of the axial space increases.

As illustrated in the isovists of the three major monuments in Waterloo Place in Figure 3.1-3.3, they each have long tunnel isovists; the view is freeze framed even as the observer moves. In metric terms, the space invested in the description of these monuments are synchronous; such that as one stands at the top of the Regent St, the spatial relation of all three monuments are maintained. The isovists of each of these isovists when superimposed are more or less contained within one another. The integrity of each monument (such that its 'order' is freeze framed) remains intact as move down (or up) the street. This is characteristic of the spatial complex like, the City of Westminster.

The City of London, however, is an asynchronous system; such that without movement, it cannot be understood. It's organic structure requires the passage of time, (as in movement) so that it can be read piece by piece. An important building, like the Royal Exchange in the City of London, appears to overcome the restrictions of its morphology and 'gain' symbolic axiality globally by the location of monuments. The presence of these symbolic objects (are freeze framed on the axial approach) increases the pedestrian's awareness, suggesting that there is something 'important' ahead without full view of the square or the building facade.

Like building facades, monuments are, in their very nature, synchronous; that is they can be understood all at once. However, the difference between the building facade and the monument is that the latter is usually much smaller in scale and hence it is possible to see it as a complete three-dimensional object. As a result of this, the position from which the monument is observed has differing degrees of synchrony. Once the observer is within a certain proximity to the sculpture, the form of the monument is dramatically shifted and distorted. The form of the monument can be understood all at once, provided one views it from the an optimal perspective and proximity. Hanson believes that sculpture entails a constructed virtual 'volume.' The 'volume' to which she refers to is more than the area occupied by the sculpture. "A sculpture has command over space which enfolds it, and its situation or site is in a vital sense a continuation and complement to the sculpted form." Perhaps the "optimal synchrony field" of the monument is a spatial measure of this virtual 'volume.'

Take the example of an equestrian statue, the view from behind does not make much sense to the viewer in terms of information content. Equestrian figures are good seen from the side and optimally from the three quarter position, whereby the face of the rider is also in view. Refer to Figure 4. Hence, there is an optimal synchrony field constructed around each monument and the nature of which is related to the

perspective (optimal information content) and proximity (maximum detail).

In addition, a monument creates a potential field from which the synchrony is optimal dependent on its context. The two equestrian monuments (Duke of Wellington in R.E. Square and Edward VII in Waterloo Place) have identical optimal synchrony fields but different descriptions; that is they are identical monument types embedded in two different syntactic contexts. Figure 5 shows the optimal synchrony fields of each monument. The darker the shading the higher the synchrony value in relation to form and proximity. Also taken into account, is that as monuments are part of an urban settings and not in open air galleries, it is not realistic to include the road as part of the field, since this is a study is on pedestrian activity. In the R.E. Square, the optimal synchrony fields are asymmetrical and overlap, while in Waterloo Place they are symmetrical and don't overlap. In effect it creates a series of optimal synchrony fields as one moves along the symbolic axis, reminiscent of convex spaces in a church but in this case the framed view of the Towers of Parliament is the altar.

6 Part II

6.1 *Monuments in Today's City.*

Monuments were erected to impress a contemporary public, and as Miles has suggested that individual monuments may not retain their currency as particular figures fade in the public's memory, so what role do the statues and memorials which proliferated in the late nineteenth century have in today's contemporary city? According to Miles, monuments have been a part of the process of selecting safe aspects of history for public consumption. Tourism organisations and local authorities select monuments which provide a pleasing story to give tourists and visitors. Sites such as the Royal Exchange Square and Waterloo Place have become places of heritage-based tourism. Both sites are part of the Silver Jubilee Heritage Walk, 'provided' by the citizens as a tribute to the Queen Elizabeth on the occasion of her Silver Jubilee in 1977.

6.2 *Monuments as consumables.*

Ros Diamond examined the impact of the video recorder in the public consumption of art museums. She believes that as in a museum, viewer's visual awareness is altered by the need to make a conscious decision about what to film. The need is driven by the viewer's desire to capture the authentic and the culturally iconic aura of the exhibits, which have acquired their 'artistic legitimacy' when placed in a museum's curatorial context. But what of the statues that are in their original contexts, the open air galleries of the city streets? Just as viewers don't walk in the streets with their camcorders recording every step they make, to what degree do public monuments have on, to use sociologists Urry's term, the 'tourist's gaze,' as they scan the streets of an unfamiliar city for potential photo or video recording opportunities? Is this interest related to how well known the depicted historic figure or event by the public?

The monument as a consumable maybe the case for tourists, but what are they to the people who live in the city? Do Londoners notice their monument filled streets and squares and if so, do they pause to look? What kind of interactions do monuments generate? Are people even aware of the presence of monuments? Do they make a

difference to the instrumental experience of the urban dweller? How do they contribute to the diversive experience of a visitor exploring the city? Hillier believes that a monument does not set out to generate encounter. But perhaps it may have the potential to generate static activity, and a possibility of engagement?

7 Methodology

Movement traces and static snapshots techniques were employed to acquire a general understanding of movement patterns and space use in two areas. It was determined, after repeated visitation to each site, that the observations will be taken on a weekend for Waterloo Place and on a weekday for the Royal Exchange Square. Subjects looking at monuments were timed and a record of whether they took photographs were made.

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Fifty subjects were traced in each setting. Refer to Figure 6. Subjects were distinguished between male and female. The majority of subjects followed were tourists in Waterloo Place and Londoners made up the majority in the Royal Exchange Square. Two static snapshots were taken each hour between 10am to 4pm. Subjects were distinguished between male and female, Londoner or tourist. The majority of the static subjects in Waterloo Place were tourists, while there is a mixture both Londoners and tourist in the Royal Exchange Square.

It was found that static observation data becomes even more interesting when it is superimposed on the 'optimal synchrony field' of each of the monuments. Refer to Figure 7. For example, in the Royal Exchange Square, there is a strong co-presence between Londoners and tourists yet they do not interact. This is reflected in their space use as defined by the synchrony potentials of the constructed virtual fields around each monument. It appears that the static activities of Londoners are kept to the low synchrony zones of the optimal fields while the static activities of the tourists are concentrated on the high synchrony zones. In Waterloo Place, the static activity also corresponds with the optimal synchrony field. However, it appears to have a problem with space availability, in the case of the Crimea War Memorial.(Foot path area rather than road.)

7.1 Time observations

Observations were also made on the length of time spent by a viewer in looking at monuments. A period of four hours (two hours during a weekday and two during a weekend) were taken at each site. It was recorded whether the viewer glanced or stopped, the category of the viewer (tourist, Londoner) and how long they spent looking at the monument, and whether or not they took a photograph. Refer to Figure 8.

The graph on the left shows the category of the viewer, the number of them and whether they glanced (looking without stopping) or they stopped. It shows that monuments do engage tourists' attention, and that there are some monuments with higher attraction value. The graph on the right shows the length of time spent looking at the monuments. The question of potential engagement is then why do viewers take longer to 'see' some monuments than others? Is it related to the height of the monument,

the shape of the monument's isovist, how well-known it is (i.e. fame), or the amount of text? Figure 9 gives a summary of each of the monuments and their characteristics which may relate to the amount of time people spend looking at them.

8 Statistical Analysis

The analysis of the data involves comparing the sample results of the experiment with a hypothetical random population result. The Chi-square Test for Goodness of Fit was chosen because it is ideal for comparing the frequencies of observations falling into two or more mutually exclusive categories; it is a test of the goodness of fit of the shape of the observed frequency distribution to the shape of an expected frequency distribution. The chi-square test can be used to examine the extent to which one variable is related to or independent to another. Data of each monument was compiled to arrive at variables for statistical analysis. In addition, a survey was conducted on the how well known the subject of each of the monuments (historical figures and events). One hundred people participated in the survey. Four variables (height, no. of isovist finger, fame, and text quantity) were chosen to test against time spent at looking at a monument.

8.1 Parameters:

Null hypothesis (Ho) = no association between variables

Alternative hypothesis (Hi) = some association between variables

Rejecting the Ho at 5% level means that there is evidence of a relationship between variables.

Height (Time : Reject Ho at 5% { $\chi^2 = 10.25$, Degrees of freedom (v) = 2}

no. of fingers in Isovist (Time : Reject Ho at 5% { $\chi^2 = 24.59$, Degrees of freedom (v) = 2}

Fame(Time : Accept Ho at 5% { $\chi^2 = 1.57$, Degrees of freedom (v) = 2}

qty of Text(Time : Reject Ho at 5% { $\chi^2 = 14.63$, Degrees of freedom (v) = 2}

The results of the statistical analysis shows There is association between height, no. of fingers in an isovist and quantity of text with the length of time spent looking at monuments. There is no association between how well-known (the figure or event depicted) in the monument is, with length of time.

9 CONCLUSION

The spatial arrangement of the late 19th century monument, powerfully reflects the intentions of the producers for the audience of that time. The symbolic function of the monument and how this is communicated through space in two different morphologies, can be understood by considering the effects on the monument's isovist in different kinds of axiality.

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- Miles, M. *Art Space and the City*, Routledge, London, 1997, Chapter 3, pp. 58
- 2 Ibid., Chapter 3.
- 3 Sitte, C. *Planning According to Artistic Principles*, Phaidon Press, London, 1889, Chapter 1.
- 4 Ibid., Chapter 2.
- 5 Krauss, R. *Sculpture in the Expanded Field*, from *The Anti-Aesthetic*, essays on post-modern culture, ed. Hal Foster, Bay Press, Seattle/Washington, 1983.
- 6 Krauss believes that the abstraction of sculpture which occurred in the early twentieth century departed from this logic, whereby the pedestal was removed from sculpture.
- 7 Hillier and Hanson, *The Social Logic of Space*, CUP, Cambridge, 1984.
- 8 Hillier, *Space is the Machine*, Cambridge University Press, London, 1996, p. 238.
- 9 Hillier, 1996. Chapter 6.
- 10 Hillier, 1996. p.232.
- 11 This was confirmed by a survey conducted in this study. 100% of the sample population has 'heard' of the historic event.
- 12 B. Hillier has suggested that the isovist's end tips contain valuable information used in wayfinding supplementing the information contained by the angle in which the axial line strikes a building facade.
- 13 Hillier, 1996, p.233.
- 14 Hillier, 1996, Chapter 6.
- 15 J. Hanson, notes on lecture yet to be given titled "Sculptural Space: from the totemic landscape to sculpture in an expanded field." Handed out in March, 1998.
- 16 Miles, (1997) p. 58.
- 17 Diamond, R. 'Consuming the Museum,' in *Architectural Design: Consuming Architecture*, No. 131, John Wiley, West Sussex, 1998.
- 18 cit. Miles, (1997) p. 76.
- 19 Hillier, 1996, p.238.
- 20 Waterloo Place is not very busy on a weekday and similarly with the Royal Exchange Square on a weekend. It is not common practice to compare data from weekdays to weekends. However, due to the nature of the study, that is how does the monument contribute to the urban experience, this may not appear to be a problem. Also for time efficiency, it was better to collect data on the days where there are more subjects.
- 21 The Londoners were usually office workers from nearby.