Terrace house definition: "A row of houses built in one block in a uniform style."

Public realm definition:

"Public Realm relates to all parts of the built environment where the public has free access. It encompasses: all streets, squares, and other rights of way, whether predominantly in residential, commercial or civic uses..."<sup>2</sup>

The aim of this dissertation is to ascertain how the terrace house sustains public realm. The terrace is a key feature of the built environment in many UK cities and it is of great importance that its role in supporting not only indoor activity but outdoor activity is fully understood. Through an analytical and comparative study of built examples ranging from an ostentatiously decorated Georgian terrace to a modernist 21<sup>st</sup> century row housing project, the study analyses key aspects of terrace design that impinge on the quality and vitality of the surrounding public realm. There are countless dynamics involved in the creation and stimulation of public realm, this dissertation seeks to study a very specific aspect and shed some light on the topic.

In most UK cities there is a concentration of terrace housing in city centres and areas in which public life is most pronounced. This leads me to ask the question: Is there a discernible difference between the public realm of a suburban street with detached housing and a street solely concentrated by terrace housing? The block condition set up by suburban housing lends itself to large gardens, promotion of the motor vehicle, lack of street scale, negligible community spirit and little passive security. The suburban condition gives neighbours and locals less chance to meet and socialise i.e. create a thriving public realm. With neighbours 'detached' from each other there is less opportunity for community activity and relationships to form<sup>3</sup>. The terraced street automatically sets up a condition that coerces neighbours to meet, creates the opportunity for community spirit to develop, and provides immediate passive security. "If there are many people on a street there is considerable mutual protection, and if it is lively, many people survey the street from their windows because it is meaningful and entertaining to keep up with events."<sup>4</sup>

Jane Jacobs in response to prevalent urban planning policies of the 1960's suggested the idea of 'eyes on the street'<sup>5</sup> where neighbours in low rise high density streets provide passive surveillance as people 'survey' the street. In 'The Death and Life of Great American Cities' she argued present urban planning was creating unsafe neighbourhoods and streets. There are parallels with current haphazard planning in Belfast and the rest of the UK, with planning policies such as the Belfast Regeneration Plans and Pathfinder Schemes having been highly criticised.<sup>6</sup>

<sup>&</sup>lt;sup>1</sup> SOANES, C & STEVENSON, A., (2005) Oxford Dictionary of English. 2nd edn. Oxford: Oxford University Press.

<sup>&</sup>lt;sup>2</sup> ENGLISH HERITAGE (2007) Suburbs and the Historic Environment. English Heritage Publication. Pg 6.

<sup>&</sup>lt;sup>3</sup> GEHL, J., (2003). Life Between Buildings - Using Public Space. 5th edn. Skive, Denmark: The Danish

Architectural Press. Page 170.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> JACOBS, J., (1961) The Death and Life of Great American Cities. 1st edn. New York: Random House Inc.

<sup>&</sup>lt;sup>6</sup> MOYE, C., (2007) The rise and fall of a British favourite, The Telegraph, 12 Apr 2007.

Both schemes have seen the demolition of hundreds of sound terrace houses, the removal of historic terraced streets and the depletion of living public realm.<sup>7</sup>

## The Relationship between Housing & Public Realm

"Public space is all around us, a vital part of everyday urban life: the streets we pass through on the way to school or work, the places where children play, or where we encounter nature and wildlife; the local parks in which we enjoy sports, walk the dog and sit at lunchtime; or simply somewhere quiet to get away for a moment from the bustle of a busy daily life..."<sup>8</sup>

The value of public realm is explicit; it forms the physical manifestation of community, it is the space that people inhabit outside of their homes, the space people use to socialise and where children play. The qualities of the public realm are integral to its use, whether it be a road between rows of terraces or a large landscaped park, they both have an important role to play in the lives of the inhabitants. Thus, is the case in each of the case studies; at Park Crescent the terraces face onto Regent's Park, at Borneo-Sporenburg terraces are separated by narrow footpaths and a road, and University Terrace faces onto a road with a green lawn adjacent. The conditions created are altogether different but each terrace offers a degree of scale to each street and provides visual interest to the passing public.



Left: Park Crescent & Regent's Park adjacent.9

Right: Local family cycling, Borneo-Sporenburg.<sup>10</sup>

The conditions set up by a terraced street lend themselves to the build up of a successful public realm;

"The layouts of terraced properties present many positive qualities, including definition of public and private realm, densities that support the provision of services

<sup>&</sup>lt;sup>7</sup> MINTON, A., (2009) *Razing the Roots*, The Guardian, Wednesday 17 June 2009.

<sup>&</sup>lt;sup>8</sup> Lipton, S., (2004) *The Value of Public Space*, CABE Publication. Accessed at: *http://www.cabe.org.uk/files/the-value-of-public-space.pdf*. Accessed on: 18th Jan 2012.

<sup>&</sup>lt;sup>9</sup> Author's own photograph.

<sup>&</sup>lt;sup>10</sup> Author's own photograph.

within walking distance, connected street layouts and strong urban form and character."  $^{\prime\prime11}$ 

A terraced street is more than just the sum of parts, it forms the physical edge to the public realm and allows social occasions to occur. The linear nature of terraced streets provide locals and passers-by with direct walking routes and a clear definition of public and private. The close proximity of property entrances in terraces increases the likelihood of neighbours meeting regularly, forging relationships and creating a strong local spirit. From personal experience of living in a terraced street, the public realm is strong and produces many opportunities; children play on the street using opposing walls as goalposts, parents can watch over children playing from street front windows, and street parties are common in terraced streets i.e. locals close the street and the people take over the street for the day.



Typical terraced street party.<sup>12</sup>

There is a distinct mechanism between private and public space in terraced streets, in that the threshold of the home acts as a filter between public and private. There are many interesting threshold conditions visible between the private interior and public exterior. In many terraces in Amsterdam, locals see the street as an extension of the living room and vice versa. In central Amsterdam you will notice terraces with large windows facing onto main streets, often without curtains with passers-by given a glimpse into the resident's 'private realm'. Conversely in our culture this would not be the norm, with people generally feeling more comfortable with a greater degree of privacy. This is partly why Dutch architects have been able to push the boundaries of housing design, as their culture is much more relaxed about personal space and privacy in the home. The UK's overzealous attitudes have lead to gated, somewhat prison like, residences with absurdly small gardens, unsightly bin stores, and an array of devices employed in an attempt by the inhabitants to feel greater privacy, whether physical or psychological.

<sup>&</sup>lt;sup>11</sup> CABE, (2005) Creating Successful Neighbourhoods, CABE Publication. Page 15. Accessed at:

http://www.cabe.org.uk/files/creating-successful-neighbourhoods.pdf Accessed on: 18th Jan 2012.

<sup>&</sup>lt;sup>12</sup> Image accessed at: http://0.tqn.com/d/britishfood/1/0/2/F/-/-/street-party500.jpg.

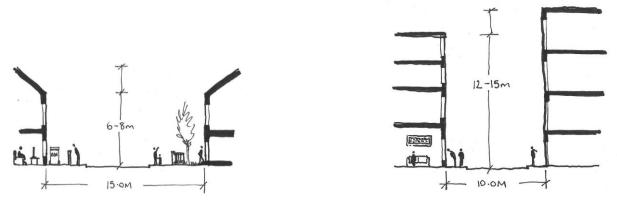


Fig.1: Indicative terraced street sketches. Left: Typical Belfast street section. Right: Typical Amsterdam street section.  $^{13}$ 

The quality of public realm has a direct correlation to the activity and movement within an area, "In streets and city spaces of poor quality, only the bare minimum of activity takes place... People hurry home."<sup>14</sup> As Jan Gehl explains, in poor quality residential streets people hurry home, whereas in pleasant streets people are more likely to enjoy a walk, meet friends, socialise i.e. create activity. Terrace housing routinely create enjoyable streetscapes due the strong urban form the terraces creates. Additionally, if the residents take ownership and care about their street it will not only be a satisfying street to live or pass-by but a safe one. The following quote summarises the importance of the relationship between housing and the public realm, it states that;

"Living cities, therefore ones in which people can interact with one another, are always stimulating because they are rich in experiences, in contrast to lifeless Cities, which can scarcely avoid being poor in experiences and thus dull, no matter how many colours and variations of shape in building are introduced."<sup>15</sup>

To summarise, a living city with living streets is a lively city. A city can have unlimited public spaces and architectural devices but without a regular footfall of people they lack activity and human qualities. Wide, empty streets and large spaces feel vast and unwelcoming. Busy living streets typified by city centre terraced streets have a human scale, defined form, visual interest and the all important element, life. The relationship between housing and public realm is vital; without sufficient external space, places feel utilitarian and are unable to promote a sense of well being, both collective and individual. Without people there is no public realm.

Scale (Frontal)

The scale of a terrace is a key element of design when thinking about the relationship between the terrace and the public realm.

 $<sup>^{\</sup>rm 13}$  Author's own drawings. Drawings to same scale.

<sup>&</sup>lt;sup>14</sup> GEHL, J., (2003) Life Between Buildings - Using Public Space. 5th edn. Skive, Denmark: The Danish

Architectural Press. Page 13.

<sup>&</sup>lt;sup>15</sup> Ibid. Page 23.



Fig.9: Sketch terrace frontages. Left to right: Park Crescent, University Square, Borneo (Plot 18).<sup>16</sup>

The scale of the frontage of a terrace speaks to the public realm; if a frontage is thoughtfully scaled and detailed the terrace can engage with the passing public, provide shade and offer visual stimulus. John Nash's design for the terraces at Park Crescent was part of a grandiose scheme and accordingly the scale and proportions of the terrace are of a grand nature. In an attempt to communicate with the passing public, Nash carefully designed the detailing of the ground floor (public eye-level) with carefully scaled architectural ornamentation. Features such as the human scale columns with Ionic capitals and the cast iron spear-headed railings give the terrace a grand but civic feel.



Case study frontages. Left to right: Park Crescent, University Square, Borneo.<sup>17</sup>

The Victorian terrace at University Square is a much less grand affair than the Nash terrace, however it still exerts a prominent street presence. This is quite a feat considering the same street also contains two decorative Gothic Revivalist Sir Charles Lanyon buildings in close proximity; the Old Library and the Lanyon

<sup>&</sup>lt;sup>16</sup> Fig.9: All plans to same scale. Author's own drawings.

<sup>&</sup>lt;sup>17</sup> Author's own photographs.

building. The architect Thomas Jackson, much like Nash at Park Crescent, utilised human-scaled columns in his terrace design with columns framing each doorway giving each terrace its own special entrance. Architectural features such as quoins and shifting bay windows are also used sparingly across the terrace giving the frontage an engaging impression and successfully breaking the monotony of a street long terrace.

At Borneo-Sporenburg one of the most successful aspects of the scheme is the varying of the frontage in terms of composition, materiality and colour. The height of the terraces stays relatively constant throughout and the differing facade treatments allow each terrace unit to have its own personality to the street. The effect of scale at Borneo is rather interesting as the streets dividing each terrace are considerably narrow, with only room for one lane of street parking and one lane of traffic. This narrowing of the 'vehicular realm' affords locals a much greater feeling of ownership of the street. In addition, the intimate scale of the street with three storey terraces lining each side, the road feels like a safe place to be.

## Threshold

If a buildings door handle is known as its handshake, then a buildings threshold is the build up to that handshake. A terrace's threshold is an important part of its design and each of the three case studies has a distinctly different threshold.

The threshold condition at Park Crescent creates a successful transition between private and public realm. The colonnaded porch acts as a semi-public zone, providing both inhabitants and public passers-by with an area of shelter. With two steps up to the porch and a further step to the doorway, the internal floor level is set around 200-500mm above external ground level (varies across the terrace). The subtle stepping up sets the internal environment above the external and gives an added sense of privacy internally. From first-hand experience the terrace threshold works beautifully; the wide footpath reduces the negative impact of the busy road and the colonnaded porch gives a pleasant impression, which is also satisfying to take cover under in bad weather.

University Square terrace has a generous garden area which acts in a similar fashion to the porch and colonnade as a transition between public and private. University terrace is also situated on a busy road, where car parking is located either side of a single lane of traffic. The garden area is divided from the pedestrian footpath with a short wall and decorative iron railings, which give an impression of division but not unfriendly to passers-by. The terrace entrances are raised from the garden level by a single step, with the garden rising above street level by one to ten steps across the terrace from East to West. This step up from the public street, similar to Park Crescent, raises the terrace up from the road level giving inhabitants added privacy and helps to define the public, semi-public and private realms. In its current usage as University teaching accommodation, offices and a cinema, the terrace threshold effectively provides a flexible semi-public space where visitors can park their bikes, meet before a lecture or stand and enjoy the pleasant streetscape.

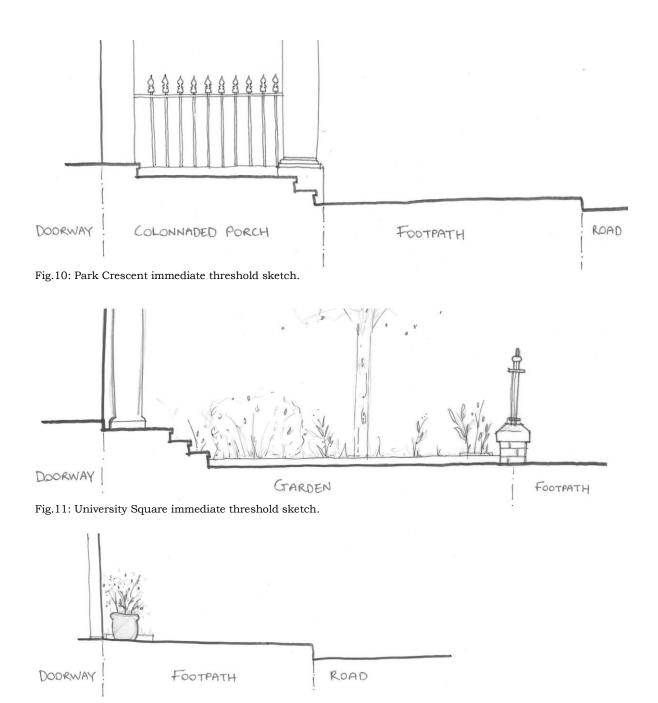


Fig.12: Borneo immediate threshold sketch.<sup>18</sup>

Perhaps the most straight-forward threshold of the three case studies is witnessed at Borneo-Sporenburg, although as the development is varied, there are several different threshold conditions. At the row of terraces the study concentrates on (see fig.4), the terrace entrances open up directly onto the street. This is the minimum possible division between public and private, indeed the internal entrance hall acts as the semi-private zone. At Plot 18 and the neighbouring terraces the passing public are given a glimpse into the lives of inhabitants as eye level windows line the street. Effectively the visible hallway and front room become the threshold. This type of threshold condition is utilised due to tight land restrictions but it also reflects traditional Dutch row housing design. From speaking to some locals at Borneo this type of threshold is more than acceptable as it is part of their culture,

<sup>&</sup>lt;sup>18</sup> Figures 10-12: All to same scale. Author's own drawings.

however some do admit that they would prefer more external space. In reality the threshold condition does not allow for much external space, although many locals have taken to adding planting and outdoor furniture to their immediate threshold. In my opinion this type of threshold will not be acceptable to all but appears to suit the build-up of a friendly and close-nit neighbourhood.

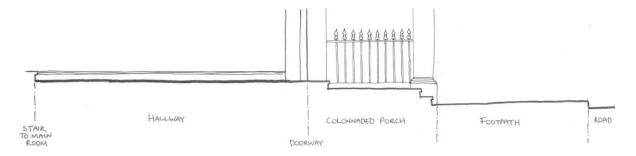


Fig.13: Park Crescent full threshold sketch.

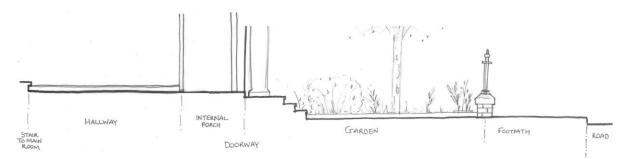


Fig.14: University Square full threshold sketch.

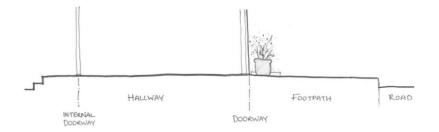


Fig.15: Borneo full threshold sketch.<sup>19</sup>

The above indicative threshold sketches show the differing conditions and distances between each of the terrace's thresholds. It is interesting to compare and contrast the Park Crescent and University Square thresholds, and despite different architectural devices having been used to divide public and private zones, the overall distances and effect created are not too dissimilar. The sketch of the threshold condition at Borneo in figure 15 shows how the hallway effectively acts as a threshold buffer and the private realm is only experienced after passing through the next doorway at the end of the hallway.

<sup>&</sup>lt;sup>19</sup> Figure 13-15: Shows transition from public, semi-public, semi-private to private, from right to left. Schematic drawings to same scale. Author's own drawings.

## Services

When originally installed many of the services located at Park Crescent would have been external; above the ground and part of the public realm. Indeed as the terrace was built in the early 19th century even the sewers were likely located on the street<sup>20</sup>. It is important to note the history of the terrace as today all of the services are located beneath the ground to minimise the impact on the public realm; including sewerage, power and telephone lines. The major impact of services in the case study terraces is the location of man-holes and other services ground covers.



Services man-hole covers embedded in pedestrian pavement at Park Crescent.<sup>21</sup>



Services man-hole cover embedded in road at Borneo-Sporenburg.22

At Park Crescent and University Square there are numerous service panels which break up the public footpaths, with telephone, television and other services corrupting any paving patterns. Possible reasons for such numerous panels are the age of the terraces and the various requirements when installing modern services in the historic terraces. This contrasts with the modern terraced streets at Borneo-Sporenburg, where all service panels and covers are located on the road as opposed to public footpaths. The breakup of paving patterns and the careless installation of services scars the public realm, as seen in the photographic comparison of Borneo and Park Crescent above. This may seem negligible at first glance but as the quality of the public realm is directly related to its vitality, any potential impact on the quality of the paving will have a significant impact.

<sup>&</sup>lt;sup>20</sup> LEMANN, M., (2010) Waste Management. 1st edn. Bern: Peter Lang AG Publishers.

<sup>&</sup>lt;sup>21</sup> Author's own photographs.

<sup>&</sup>lt;sup>22</sup> Author's own photographs.

## Public Interaction & Sense of Community

The degree of interaction between members of the public and the feeling of a sense of community depend entirely on the location and usage of the terrace. At Park Crescent there is little interaction and sense of community apparent, with the buildings predominantly being used as offices and access to the living accommodation being located at the rear of the terrace. The terraces location in London city centre provides high levels of public usage and footfall through the elegant terraced street. Although a popular walking route, there is no perceptible community spirit due the displacement of the living accommodation to the upper floors and the lack of street front entrances. Admittedly these conditions reflect the changes made to the terrace after damage suffered in World War II, as the terrace was rebuilt to suit modern office requirements, not housing.

The conditions at Park Crescent are in direct contrast to Borneo-Sporenburg as one can witness much communal activity all year round, due to its principal usage as housing and its high population density. The high density and street front entrances allow neighbours to meet regularly and help to build community spirit. I visited all three case studies in late December on cold, damp days and the level of community activity, at Borneo in particular, was surprisingly high. There were numerous locals out jogging, walking dogs and conversing in the street.



Street activity. Left to right: Park Crescent, University Square, Borneo-Sporenburg.<sup>23</sup>

As part of Queens University's Law faculty, the terrace at University Square sees much student interaction and consequently the build up of a student community spirit. The terrace is in constant use during day and night every day of the week thanks to its multi-function as lecture rooms, offices and a cinema. This ensures regular footfall, plentiful interaction and also gives the terrace a unique community spirit. The type of community created is conceivably different to a living community due to the fact it only truly exists during university term-time, as the terrace lacks any living accommodation. Despite this, the terrace in its current functions still has a vitally important role in the upkeep of a vibrant local public realm.

<sup>&</sup>lt;sup>23</sup> Author's own photographs.

*"Like some vast umbilical cord of unbroken brick, terraced houses extend from north to south, east to west, connecting rich and poor, past and present"*<sup>24</sup>

The above quote from an article on the rise and fall of the popularity of terrace housing also conceivably summarises the significance of terraces and their importance in supporting the public realm. Terraces are universal, they offer a longitudinal connection between places and allow a unique form of public realm to be established in unison. At Borneo the terraces bring together the rich in their individual architect designed terraces and the poor in the equally well designed social terrace housing. The equality in the size of the terraces brings a relaxed attitude and attempts to equalise the perceived gap in housing conditions between the rich and poor. At Borneo around 30% of the terraces are social housing. This mix is important in creating a respectful and inclusive community and in turn, creating positive public realm.

The quality of a terrace and its associated streetscape wholly relate to the ability to support public realm. Successful characteristics arise from architects decisions to make 'grand social gestures'. At Park Crescent, John Nash not only brought the grand terrace to the masses but provided a grand social landscape incorporating Regent's Park into the terrace realm. Two hundred years later, this gesture is still successful and in fact saves the terrace and public realm from modern infrastructural insertions.<sup>25</sup> At Borneo-Sporenburg the master plan strived to create a 'wide ranging social arena' and through many social gestures this has given rise to the successful support of a dynamic public realm. Bold moves such as locating 2500 dwellings in such a high density, with narrow frontage terracing (each with their own front door), limiting green space and putting people before vehicles. It is these decisions that have lead to the successful creation of a modern high density community, with less importance placed on the number and area of green spaces but rather on the quality of a small number and excellence in streetscape.

"The public realm... is derived as much from the spaces between the buildings as from the architectural quality of the buildings themselves. There is often a carefully composed relationship between the private and public realms, forming an essential part of local distinctiveness and placemaking."<sup>26</sup>

As the quote above explains, the ability to support public realm is wholly dependent upon the spaces between the buildings and the threshold between public and private realms. This has been confirmed in this study, as the most successful terraces are Park Crescent and Borneo-Sporenburg. At University Square, the terrace was placed into an existing cityscape. This is in direct contrast to Park Crescent and Borneo which were developed from scratch and were both new additions to their respective cityscapes, allowing them full reign to fuse public and private, internal and external spaces, into a cohesive whole. The result in both cases is a highly successful terrace scheme; both of which local planners and government policy makers could and should take note of.

<sup>&</sup>lt;sup>24</sup> MOYE, C., (2007) The rise and fall of a British favourite, The Telegraph, 12 Apr 2007.

<sup>&</sup>lt;sup>25</sup> Insertion of six lane artery road to centre of London - Marylebone Road.

<sup>&</sup>lt;sup>26</sup> ENGLISH HERITAGE, (2007) *Suburbs and the Historic Environment*. English Heritage Publication. Pg 6. Accessed at: http://www.english-heritage.org.uk/content/publications/docs/suburbshe20070802122533.pdf.