Re-scripting the *streets in the sky*: shifts in the typology of a listed building in Park Hill, Sheffield.

Abstract

Inspired by Le Corbusier's ideas for vertical living, the concept of "Streets in the Sky" was created in the UK in the 1950's to describe large-scale circulation at a level above the ground in high-rise buildings. The term was originally coined by the Smithsons, in their 1952 entry for the Golden Lane competition, but the first built manifestation in British social housing was in the design of Park Hill, Sheffield, in the late 1950's.

Park Hill was designed to encourage social interaction between residents and even allowed vehicles to move on the elevated decks. The new "Streets in the Sky" were the nearest social housing ever got to imitate ground level street conditions. In 1998 English Heritage assessed the building as being of international importance, and included as a listed entry. The importance of the elevated decks is evident throughout the listing report, and the historical significance of the "Streets in the sky" clearly stands out.

A visit to one of the recently redeveloped flanks of Park Hill, however, reveals otherwise: the "Streets in the Sky" have been significantly altered. This paper will discuss the shift that I have observed in Park Hill's redevelopment. What started as a listing based on a historical concept, shifted during the reconstruction in ways that have changed the typology of the building. Interactions between developers, altering user needs and limitations from existing materials have impacted on the historical associations of the new development and have re-scripted the narrative of the "Streets".

A vision of the future on the streets in the sky

Park Hill emerged on the edge of Sheffield city centre, as part of a slum clearance programme, replacing several streets of Victorian back-to-back terraces. Back-to-back terraced houses were organised around a courtyard, a building typology with openings only on one side of the house, and without

any running water facility, apart from a communal water pipe and WC in the courtyard. The living conditions in this type of dwellings that existed in abundance across Victorian Britain, were squalid, something the 1930's Housing Act and the slum clearance programme set out to replace (Anon. 1930). Park Hill emerged as a result of this act and due to the fact that Sheffield happened to have one of the most ambitious clearance programs in the UK. Under the supervision of Sheffield city architect J.L. Womersley, two very young and aspiring architects designed Park Hill. Ivor Smith and Jack Lynn were straight out of the AA and aged only 27 at that time. In their design, they attempted to recreate the busy conditions of the existing streets, coupled with the vision and dynamism of Corbusier's ideas of the future cities. Smith and Lynn were not the first ones to invent the notion of elevated streets. Peter and Alison Smithson had proposed the 'streets in the air' in their 1952 entry for the Golden Lane (Murphy 2016). Beyond the UK, the idea went back even further: Le Corbusier and Hilberseimer had designed similar structures in the 1920's. Park Hill became the first built example of such a typology in the UK in 1960.

Le Corbusier's ideas of the Ville Contemporaine and the Ville Radieuse, where continuous blocks are running to large lengths, were an influence to the young architects, as Ivor Smith recalls (Smith 2014:203). Similarly, Ludwig Karl Hilberseimer's vertical city, first published in his Groszstadt architecture in 1927 and his later Berlin proposal, were based on the assumption that public circulation would take place underground, car circulation on the ground and pedestrian circulation was restricted to every sixth floor level of his stacked apartments (Fabricius 2013). During the time of Park Hill's design, the only well known built manifestation of such a typology was the Unité d'Habitation, which however, featured only enclosed elevated circulation. Smith and Lynn took the term 'street' far more seriously and literally: they created an actual external open-air street, accessible by a small vehicle. Neither of the previous attempts had featured such an ambitious elevated vehicle access. It had previously only existed in theoretical form in the designs for the Ville Contemporaine and the Ville Radieuse.

An optimistic vision of the future

One thing that stands out during the era in which Park Hill was designed is the positive outlook for the future. As Ivor Smith later recalled, architects of his generation "qualified at a privileged time [...] when there was a sense of optimism and deep social concern to make a better world" (Smith 2014:201). This sense of optimism is prevalent in the uniqueness and innovativeness of the block standing out on the edge of Sheffield. As Rayner Banham pointed out in the December 1961 issue of the Architect's Journal, the huge monolithic design of the building standing next to other earlier attempts at slum clearance, demonstrates just how "inadequate are small-scale, piecemeal reconstructions". For Banham "it was clearly good architecture [...] to take one really big bite at the job rather than several small nibbles" (Banham 1961), an observation that makes evident the different scale of the development compared to previous approaches.

The early days of the estate were marked by the same optimism and enthusiasm the young architects had in its design. A documentary from the early 60's by the BBC shows residents commenting on their new flats. One elderly lady says "It's like being in 'eaven up here, because we've always been poor people" (Dyckhoff and Nixon 2009), indicating the perceptions of the residents when comparing their new flats to their old houses. Interviewed residents were positive and optimistic about their lives in the development, and were looking forward to spend their rest of their lives there. A young mother comments in the same documentary on their modern conveniences and a boy talks of the low density. His impression was that they were now "not squashed together, just put together", compared to their previous conditions. Early photographs of the estate picture communities gathering on the elevated street levels, outside their doors and recreating the atmosphere of the street; kids are playing outside their flats and young mothers gather in the afternoons to socialise outside their flats. The same optimism transpired in the sociological report composed by Sheffield City Council once the first tenants had moved in (Anon. 1960).

The optimism however, was short lived. Following several years, of poor maintenance, the streets in the sky, some of which spanned up to 520 meters from the nearest street opening, and which were also connected vertically with intermittent stairs, became an ideal hiding spot for criminal activity. (Grindrod 2013:168; Interview 7:21/05/14). The deteriorating condition of the estate's image paired with a lack of maintenance, led quickly to its decay. The importance however of the building as the first manifestation of a street in the sky never faded away. On these grounds, English Heritage decided to list the building in December 1998.

Following the listing, Sheffield City council proceeded with the redevelopment of Park Hill, and by early 2013 some new private residents moved into the renovated flanks of the estate. Considering however the central role the streets in the sky had played in the original design, the redeveloped flanks reveal a changed role for the streets. Their layout is altered, although other layout arrangements remain largely unaffected. In this paper I visit the typology of the street in the sky in the listing and renovation. I conclude by arguing that the streets have shifted from being iconic, to being circumstantial in Park Hill. This is due to the changing needs and functions of residents, but also as a result of material findings on the site, changes in perceptions of professionals involved and everyday occurrences in the construction process.

To uncover the transformation of the streets in the sky in Park Hill, I will initially review the listing report. I have also visited the Sheffield Archives and the Local History Library archives, and over the period between November 2013 and December 2015 I have conducted observations documented in a series of diary notes. During the same period I have photographed Park Hill and conducted a series of interviews of both professionals and residents. All interviews and observations involved the re-development phase of Park Hill.

Reading the listing rationale

The rationale for the listing decision was based on Park Hill being "of international importance" as "the first built manifestation of a widespread

theoretical interest in external access decks". The streets in the sky were, according to English Heritage, "a way of recreating the community spirit of traditional slum streets, with the benefit of vehicular segregation" (English Heritage 1998).

It also mentions Sheffield (together with London) standing out from other local councils in the way they were dealing with public housing: "[the city] had the only major local authority departments designing imaginative and successful public housing in the 1950s" and Park Hill was "Sheffield's flagship".

This international importance lays, according to the report, in the way the decks are designed, as "a way of recreating the community spirit of traditional slum streets, with the benefit of vehicular segregation"; it comments on the uniqueness of the sloping site and that it has become a landmark for the city. The report also mentions the sociological implications the design had for its residents, and that it has frequently become the study of sociologists. It concludes by naming Park Hill as "Britain's first completed scheme of post-war slum clearance and the most ambitious inner-city development of its time" (English Heritage 1998).

The rationale of the report is clear and leaves no room for misinterpretation: the importance of the streets in the sky play a large part in its prestigious Grade II* listing. In fact, buildings of its era only made up for around 0.01% of all listed buildings in the UK, and the majority of those were Grade II, a lower listing category (Harwood 2003)¹. Thus, the international importance of the first built streets in the sky is recognised with the weighting of this listing.

The influence of Unité d'Habitation

The narrative of the influence Unité d'Habitation had on Park Hill can be identified from the early stages of the initial design. However, the typology bears a closer resemblance to other theoretical manifestations of elevated

living. Possibly due to the Unité d'Habitation having been materialised, it is often mentioned as having led the inspiration, although Ivor Smith himself recognised that Park Hill bears closer resemblance to the Ville Radieuse (Smith, 2013). Some of the architects in the redevelopment were aware of this, with some in fact finding the Unité d'Habitation quite different to Park Hill, particularly with respect to the social composition of the estate. As some architects recall: "it may have had similar technical problems but not necessarily social problems" (Interview 6: 28/07/14) and that "the use of the streets was very different in Unité d'Habitation" (Interview 4: 24/07/14), thus reflecting Ivor Smith's original view of the difference between the internal use of the street in the Unité d'Habitation and the external use in Park Hill.

Most of the construction professionals however were convinced of a special relationship between the two buildings. So close was the association of Park Hill to the Unité d'Habitation that the first response of the developers and architects to the redevelopment was a trip to Marseilles. Aware of this link from the early stages in the life of Park Hill, one of the senior stakeholders of the redevelopment said that: "Interestingly, the architects had visited the Unité d'Habitation before they first built it and our team went out to Unité d'Habitation before they [redeveloped it]" (Interview 1; 29/04/14). One of the architects was certain the redevelopment should bear a strong resemblance to Le Corbusier's masterpiece: he mentioned that the historical association with the modernism of Unité d'Habitation was essential for the preservation aspects of Park Hill, as "Sheffield City council and English Heritage made that [association] a core principle, so [we] did a lot of research on Corbusean precedents" (Interview 6; 28/07/14). Therefore, for some of the professionals involved in the reconstruction, the link with the Unité d'Habitation in Marseilles was an essential part of the renovation.

It is unclear at what point the link became so strong, and why some stakeholders and architects involved ended with a result close to the building in Marseilles. Furthermore it is interesting to see that this association was not necessarily shared by all the architects and in fact not by Ivor Smith himself. While the Unité d'Habitation had been an inspiration for everyone, the

resulting image of the building which bears a close resemblance to Corbusier's Marseille development, emerged as a factor of many diverse reasons, not necessarily associated with it. Technical practicalities coincided with the need for changing perceptions, and the requests by English Heritage to create a façade that coincidentally resembled the Unité d'Habitation.

The colour scheme is one more aspect that links the Park Hill's colourful renovated façade to Corbusier's work. Although the original consisted of pastel tones, in the renovation, bright and lively colours were chosen for parts that had been brick infill rendered in dull colours. The connection to the Corbusean scheme is visually clear in the renovation, while there is no apparent link to it in the original design (fig. 1). When questioned, interestingly, none of the architects seemed to think that the provenance of the colour scheme had anything to do with the Unité d'Habitation. Their responses centred around the agreement of English Heritage to grant permission for the use of colour, and the changed technologies available since the original design of the building. The way it would be seen from Sheffield and how well it stood out was also significant, mentioning that the choice had a shimmer that made it different "as you move past from Park Hill towards the city centre or ring road [...depending on the...] light conditions" and the new colourful aluminium panel would make the building look more "contemporary in nature" (Interview 6:28/07/14). The architects felt the need to change the perceptions of the locals and make it seem as though something radical had changed, and that was an important factor in their decision. Others mention more practical reasons, around the choice of the bright aluminium façade: "because of its qualities, of weather resistance" but also the "colour enabled the three floor levels to be separated and clearly demarcate a street" (Interview 1: 29/04/14) developing over three floors (fig. 2).

A shift in the original building typology

While the descriptions of the listing report reveal a clear picture on the intentions of English Heritage in including Park Hill on their lists and attributing

it a Grade II* rating, the story Park Hill tells during its actual renovations, reveals a shift in the priorities of the designers and the contractors involved. There is a shift in the prominence of the street in the sky is resulting from changing needs of the residents but also a change in the professional views of those involved in the redevelopment. This is not to say that the needs of the users created a shift in the perceptions of the developers. They occurred in parallel, and irrespective of each other.

The design followed a simple principle: it recreated the streets in vertical, so that the residents of each street, where possible, would simply be rehoused on the same street but in the other dimension, thus maintaining the same neighbours (fig. 3). The young architects took the term *street* very literally: the sloping site enabled them to reach them to the ground and make them accessible from at least one point on the site (fig. 4). This meant, that all streets (with the exception of the very last) were accessible by an electric milk float that delivered daily, directly outside the doors of the estate. The extreme slope of the site offered this unique opportunity for the young architects, and they took advantage of it in the fullest: as Banham pointed out in his December 1961 commentary, the plan and section of the building can "hardly be dealt with in any other way" (Banham 1961).

Each street level in Park Hill has entrances that extend to flats either a floor below, or a floor above them. These entrance floors above and below do not include a street in the sky. The street arrangement is only in the level in between. This typology is replicated from the original estate and carried forward to the final redevelopment (fig. 5). It has remained unchanged, and although the developers had to strip back the building to its bare structural frame during the renovation, and could have rearranged this typology, they chose not to. It is an arrangement that had worked well in the past, and preserving it can allow the concept of the streets in the sky to remain in line with the listing report. Therefore, in the redevelopment, the street in the sky concept remains as in the original, on an intermediate level with two floors, one above and one below, supplementing a street, and thus enabling the flats to deploy over them (fig. 6).

Preserving this typology of the intermediate street with one floor above and one floor below making up a complete unit was one of the early decisions the architects took, according to an interview. As one of them reveals, they "spent a lot of time debating what the new street should be and what [it] is about." (Interview 4: 24/07/14). When the designers of the redevelopment however began to figure out the details of the arrangements, they decided that the streets in the sky that would remain on the intermediate level, would have its dimensions changed. Figure 7 compares the layout of the original flats, to those in the redesign. They are largely unchanged, except from minor interior wall moves, and very importantly, the streets in the sky have changed.

Comparing the plans of the original development, to those of after the renovation, the changes are not significant in terms of the organisation of the flats, and the square meters do not significantly change. What is clear however is that the dimensions of the streets in the sky have changed: their width has been reduced by almost one meter. This observation is not important simply because it is in contrast with a listing which hailed the street's design. Besides, the listing does not mention anything explicitly about the dimensions of the streets in the sky, and therefore does not make any suggestion to specific dimensions being preserved. The *concept* is listed, *not* the actual dimensions of the building. The result, however, is that by changing the dimensions of the streets, a vehicle can no longer circulate the levels of the estate (fig. 8). The rationale for this move was clear by the developers: changing times require for different typologies.

Besides, the change in the streets can be justified, and reasonably explained if one is to consider the changing vehicle access. By closing off access points, and reducing the clearance of the street, the access of a milk float is no longer possible. The type of milk float appearing in archival material is of a specific type- it is called a "baby float", of smaller width, and this is what would allow it to circulate in Park Hill. This type was constructed in the 50s and is not in circulation since. Therefore, no vehicle would have been available to fulfil this purpose, and the purpose of maintaining larger dimensions has been made

redundant. The developers saw a larger need in enhancing the interior spaces of the flats, rather than keeping the old dimensions of the streets in the sky.

Another reason behind the change in the way streets in the sky operate in the new development is related to the changed security needs of the residents. The streets in the sky have also changed in their concept by the fact that they are no longer publicly accessible: where they were to be accessed by pedestrians on any level (but the top), they now feature closed security entries on any part where they connect to the ground, and at intermediate points in the building. Access to the open decks is now closed off with security measures in place. Where they were once accessible providing circulation from any part of the building to another, they are now inaccessible and one is only able to enter the specific part of the street that he has a connection to. Access is also controlled by a camera intercom, so that residents can only allow their own visitors inside. The community spirit and the lively street lives envisaged by the original design are no longer feasible. This is no surprise given the amount of criminal activity Park Hill was associated with in the 80's and 90's. The developers had one more reason to sacrifice the way the streets in the sky were performing, in order to enhance the security of the estate and protect the new residents.

Finally, some senior professionals on-site seemed to have a different perception of what the renovation of Park Hill involved. In their collaboration with English Heritage they felt there was a lot of emphasis on the concrete of the building, and did not mention anything about the streets in the sky. For one of them it was "the concrete that we needed to keep. To keep the features of the concrete frame and the physical features of the building" (Interview 2: 17/06/14). Similarly, another professional mentioned that: "they didn't want us to change the appearance too much of the facade regarding the frame [...] they wanted to visually see all the repairs so that it shows the next stage of the history of the building" (Interview 3: 17/06/15). This view that "English Heritage wanted to return the concrete structure" (Interview 2: 17/06/14) does not necessarily mean that it was the sole priority of English Heritage. Being, however, involved with the technical details of the renovation,

it is easy for professionals to lose sight of the main objective. While the main emphasis by both English Heritage and the designers had been on the streets in the sky, the activities professionals are engaged with on-site on a daily basis, gave them a different perception of the historical importance of Park Hill.

Changing Lifestyle

As the Sheffield city architect J.L. Womersley confirms in his interview in a recent BBC documentary, these flats were designed for a time when people "wanted to live close to each other" (Dyckhoff and Nixon 2009). A similar reflection on how opinions on Park Hill have changed, is made by Roy Hattersley, chair of Sheffield city council at the time of original construction, who argued that the elevated decks quickly became obsolete in Modern Britain, as the residents were looking to "become a part of the new individualism, with custom-built bow-windows and curtains which can be identified from the road" (Moran 2010). The changing lifestyle of the residents created the condition for the streets to be closed off, inaccessible but only to a few neighbours.

According another view by urban historian Michael Hollow, the original design by J.L. Womersley and his team attempted to cater "toward the quantifiable and measurable citizen of biological needs" by being very functional and utilitarian in tis design. These needs, however, as Hollow suggests, were thought in an abstract way, without detailed analysis, in a manner similar to Le Corbusier, who also assumed people function as machines. In doing so, Hollow continues, the design of Park Hill attempts to exert some form of power that "seeks to regulate and discipline the subject's body" (Hollow 2010). The provision of a given set of modern conveniences, were requiring the residents to operate in a specific way.

Social needs in particular are addressed in this design with the provision of the streets in the sky. Yet, where the flats had attempted to replace slum conditions with modern conveniences, these streets were designed to replicate what existed previously (Hollow 2010). These conditions were again forced upon residents who had to accept them, and expected to perform in a certain way within them. Evidence of these expectations exist in early photographic material of the estate as previously mentioned: The ladies gathered outside their flats discussing while children were playing nearby, in an exact manner to that encountered in local neighbourhoods on the ground level. But while it is evident that this type of behaviour existed in the early phase, there is no indication that the streets carried on having the same amount of traffic in later years. Based on the arguments by Hollow that the streets were simply replicating slum conditions while the rest of the flats were trying to move away from them, one can argue that they were not fit for purpose and had therefore already failed. If the ground conditions could not be replicated, then the streets in the sky had become redundant long before the flats were listed.

Ivor Smith himself, while reflecting on his work, mentions that he would have changed something in Park Hill, were he to go back in time. He is critical of the fact he and his colleague Jack Lynn did not provide any visual connection between the flats and the street. In the original design, connection between the two was the entrance door. Were he to rethink the planning of the street, the original designer would have placed windows next to the doors and in other spaces of the flats where possible, to allow residents to see what is happening on the street (Smith, 2013). This is one aspect of ground floor living that was not incorporated in the elevated street. The priority for openings from the flats was given towards the city, ignoring how the streets would be viewed.

Regardless of how the needs of residents changed overtime and how perceptions of professionals were affected in the renovation process, the notion of the streets in the sky never ceased being iconic. Besides the transformation they have undergone in Park Hill, other similar typologies of elevated walkways and circulation corridors have also become iconic, in recent times. Robin Hood in East London by Peter and Alison Smithson went under demolition in late 2017, but not before the Victoria and Albert museum

in London got hold of part of it to turn it into an exhibition item. The optimism and futuristic endeavour the social high rises carried in the 60s and 70s is now preserved by the V&A (Morisson 2017).

A shift on many levels

In their evolution, the streets in the sky have shifted from a futuristic ideal to a listed concept, and they have again transformed during the recent redevelopment. They have undergone phases where they were central to the way the development was designed and used, and moments in time when they drifted in the background during the renovation. These transformations happened in parallel to how needs of residents were changing and to the way perceptions of professionals were affected in the renovation process. They have occurred over time and on multiple levels and have affected the streets in the sky both in their international importance, and their local presence. They have involved participants both in the construction, from developers to contractors and architects, down to some users and occupants.

This shift is not simply a move from one idea to the next. It is a move from something that is theoretical, a concept, to something that is material. The streets in the sky were listed as an idea, a manifestation of the futuristic vision, and the optimism of the original architects. In parallel to the shifts happening to streets in the sky, the material of concrete has evolved from a mere presence, an ignored existence in the development that was simply there to fulfil a superior purpose, to a critical presence during the renovation, being perceived as very important in the redevelopment. It has only been one of many actors involved in the original construction, but a critical actor in the redevelopment of Park Hill. This change is not only a move from the streets in the sky being important to the concrete being important, but also a shift from a constructed idea to a material presence. The decision to create new streets narrower than the original, marks a change from the initial concept of international significance, to a more practical and on the ground change. It is a move away from the idea, to something more tangible, and materially present. In the way the streets are perceived by someone walking the estate,

their physical embodied experience gains a more important existence in the redevelopment, than the connotations the streets carry on a constructed level. The renovation is interested in the daily performance, rather than the visual iconography that the streets in the sky carry. The renovation has ultimately rescripted the layout of the streets and has added their material presence into their narrative. Cultural heritage is only one of the considerations in decisions taken on site along physical and tangible presences.

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