



Archnet-IJAR: International Journal of Architectural Research
www.archnet-ijar.net/ -- <https://archnet.org/collections/34>

CONTESTED HERITAGE: AN ANALYSIS OF THE PHYSICAL TRANSFORMATION OF DERRY/LONDONDERRY'S SIEGE MONUMENT

DOI: <http://dx.doi.org/10.26687/archnet-ijar.v11i3.1407>

Gehan Selim, Mohamed Gamal Abdelmonem, Sabah Mushatat, Abdulaziz Almogren

Keywords

heritage; Derry/Londonderry;
contested space; memory;
Northern Ireland; walls

ArchNet-IJAR is indexed and listed in several databases, including:

- Avery Index to Architectural Periodicals
- EBSCO-Current Abstracts-Art and Architecture
- CNKI: China National Knowledge Infrastructure
- DOAJ: Directory of Open Access Journals
- Pro-Quest
- Scopus-Elsevier
- Web of Science

Abstract

Transformations of Derry/Londonderry's medieval city walls during the twentieth century have shaped an urbanism of segregated settlements within a city of religious confrontation. The heritage of military blockades, peace lines and watchtowers imposed upon the city's Walls has influenced the disintegration of public space and created areas of no man's land around the peripheries of the monument. The aim of this paper is to examine physical transformation and trace the consequences of urban planning regarding the historic city Walls. This change includes the shifting of residential settlements in the Bogside/Fountain areas and the movement of Protestant settlements towards the Waterside of Derry/Londonderry. The history and heritage of the Walls are analysed by focusing on four periods: 1600, when the first medieval walls were constructed; the housing crisis of 1948; the 1968 urban area plan and the beginning of the 'Troubles'; and the present day. This analysis offers an understanding of the spatial relationships between enclaves and the monument over key moments of conflict and political change. The paper reveals that the manifestations of the Walls have aided in the further division of religiously segregated communities in Derry/Londonderry.

G. Selim*, M. G. Abdelmonem, S. Mushatat, A. Almogren

G. Selim, Lecturer in Architecture, University of Leeds, Leeds, UK.

M. G. Abdelmonem, Chair in Architecture, Nottingham Trent University, UK.

S. Mushatat, Professor of Architecture, University of Wolverhampton, Wolverhampton, UK.

A. Almogren, Prince Sultan Bin Salman Chair for Architectural Heritage, King Saud University, Riyadh, KSA

*Corresponding Author's email address: g.selim@leeds.ac.uk

INTRODUCTION

Walled urban settlements have, over centuries, played a significant role in shaping the characteristics of the communities they embrace. Cities such as San Gimignano in Italy, Carcassonne in France and Nicosia in North Cyprus display a long-lasting fabric of civil defence, articulating inherent geographies of heritage, displaying considerable potential as cultural resources and exhibiting substantial challenges, practical and theoretical (Doratli, Hoskara, & Fasli, 2004). Walls in towns are intellectualised as a 'dissonant' form of heritage whose value is commonly contested among different interest groups and whose meaning is not static but can be interpreted in various ways. During periods of insecurity and past endeavours, walls portrayed cities as achieving order from chaos and providing protection for citizens, at the expense of putting up barriers to their free movement (Creighton, 2007).

The identities and heritage of walled cities are multi-layered and fluid, what renders them vulnerable to reinvention. By their very existence as defensive fortresses, walled cities witnessed violent histories that changed their political and national allegiance over time (Mulholland et al., 2014; Selim, 2015). These cities, while superficially embracing citizenship and collective sense of spatial belongings, are also inescapably performing other forms of exclusion and marginalisation of other social groups. The urban impact of walled cities on infusing segregation has been well documented. Andreas Huyssen (2003) interrogated the Berlin Wall through narratives of people's collective memory and past experience of spatial division that continue to exist as an invisible barrier in the psyche of many residents until today. Eyal Weizman (2012) examined the Jerusalem/Palestine Wall through a strong understanding of the key political and social motivations of its construction. Others employed visual analysis to understand the forced urbanism of interface areas in Belfast and Northern Ireland by documenting shifts in religion, mobility and settlements (Abdelmonem & McWhinney, 2015; Selim & Abraham, 2016). Tracing physical attributes of segregated landscapes such as frontiers, watchtowers, and housing decay offers an insight of how spatial geography shifts in post conflict cities for a long time after peace has been achieved (Misselwitz & Rieniets, 2006).

The walled city, Derry/Londonderry in Northern Ireland, has been branded as a city that exhibits long-rooted clashes of religious identities between Catholics/Nationalists and Protestants/Unionists. It was named the UK City of Culture (CoC) in 2013, building on the successful experience of Liverpool as the EU Capital of Culture in 2008. This distinctive status has offered local authorities the advent prospect of refashioning the city as a model of unity and healing whilst being distanced from its troubled past. In part, this included redefining multiple readings of the city's character, history and heritage. The complete seventeenth-century circuit wall surrounding the post-conflict renaissance city had stood intact as a symbol of civilisation for hundreds of years (Murtagh, Boland, & Shirlow, 2017). The uninterrupted and continuous city wall is one of the oldest historic defensive walls to survive in Europe (Hume, 2002). The transformation of the wall during the twentieth century eroded an architectural dialogue with the heritage of the city and shaped an urbanism of defences and segregated settlements (Figure 1).

The paper aims to interrogate how the military blockades, peace lines and watchtowers being imposed upon the city's historic Walls during the troubles in the second half of the Twentieth Century have influenced the segregated urban planning of Derry/Londonderry. Tracing two pivotal moments of transformation prior to the 'Great Siege' of 1689 and the 'Battle of the Bogside' of 1968 illuminates the shifting residential settlements in the Bogside/Fountain areas and the migration of Protestant settlements towards the Waterside

on the east bank of the Foyle river. Each era of transformation resulted in significant shifts in settlement, segregating communities using natural as well as physical boundaries as domains of division. The paper also uncovers narratives of the ‘no man’s land’ developments at the peripheries of the monument, including the disintegration of public space within the city Walls and negative space at the external peripheries of the monument due to the evolution of military transformation.

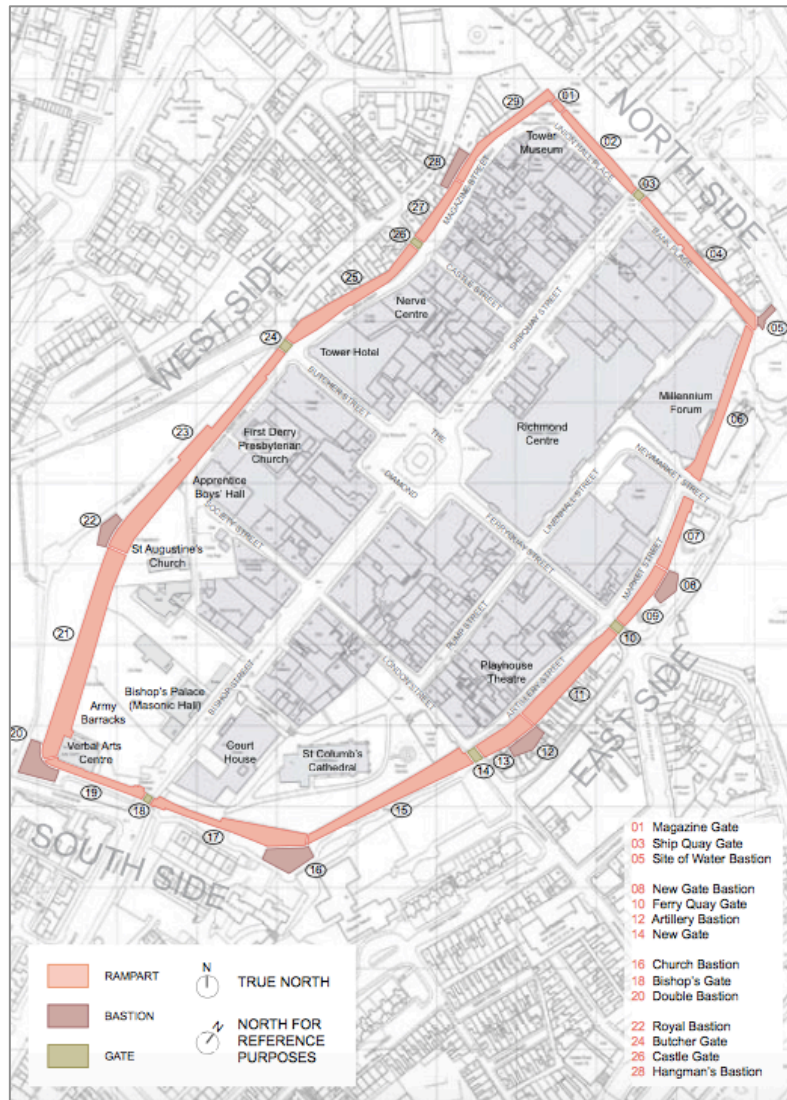


Figure 1. Walls of Derry (Source: NI Government, 2011; 2017).

The approach adopted for tracing the transformation of Derry/Londonderry’s city walls over time is based on a significant monograph written by Nobel laureate John Hume (Hume, 2002). His descriptive approach enabled analytical mapping to be conducted and the main events of conflict and statistical data to be cross-referenced. This research documents void spaces and disused sites at the peripheries of the city walls over several site visits and investigative fieldwork. To understand the physical presence of military transformation in the Bogside settlement, site sections were sketched to document the change to the Bogside

interface from 1968. The sections illustrated the physical prominence of Walker's Pillar (a Unionist monument) before it was blown up by the IRA in 1973 and the subsequent erection of a 60-m Masonic watchtower outpost by the British Army to survey the Bogside area. Finally, analysis of current dwellings within each residential settlement was conducted using mapping and first-hand census data to obtain a clear depiction of segregated settlements at the periphery of the city Walls.

HISTORY AND TRANSFORMATION OF DERRY

Derry's fortifications have followed a simple pattern: "their walls consist of large mounds of earth and sods dug out of the ground leaving a deep trench"; these mounds were transformed into basic defensive ramparts, sometimes reinforced with timber with parapets of earth, stone or wood fashioned on top (Hippesley, 2012). In its early foundation, the city of Doire Cholmcille was established as a monastic settlement in early Christian Ireland, where the monastery was founded near an oak grove by Colmcille (Columba) in 546 AD (Hamilton, 1999), around which Flathbert O'Brolchain built a stone 'cashel' fortification in 1156. It became the monastic site of Long Tower Church, Bogside, and served as a base point for early English settlers to build the first defensive fortifications in 1566. Initially, the fortifications were undermined by continuous movement of settlers who were prepared to flee to the countryside. Sir Henry Docwra arrived in Londonderry in 1600, at a time of rising religious tension in Europe and Ireland, that were to erupt later in Derry (Hamilton, *ibid.*).

Two additional fortifications were built using locally sourced earth materials in preparation for the impending conflict; transforming simpler structures into a major defensive complex, signalling the beginning of a strong military presence in Derry (Docwra & Kelly, 2008). This was approximately a quarter of the area later constructed by the Irish Society of London in 1614-1619 that resisted the attacks of Catholic King James II during the Great Siege, 1688-89. A small settlement of Protestants was founded just outside the Walls only to move inside when in face of the influx of Catholic settlers from Donegal. Bogside settlers had taken refuge within the walled city temporarily before returning to re-build outside Butcher's gate following the Royalist siege of 1649 (Free Derry Museum, 2012). The fluid elastic moves of settlements continued throughout the middle ages on the back of continuous religious wars.

Flourishing linen industry of the Nineteenth Century had brought about new patterns of spatial demographics with the growing use of the city's port for migration, especially in the years following the potato famine of 1845. The growing trade with the Western hemisphere saw the population of Derry rise from around 11,000 in 1800 to 40,000 by the end of the century (McSheffrey, 2000). In August 1803, the Irish Society made unsuccessful attempt to remove all housing within 40 feet of the monument to prevent encroachment upon the Walls. However, a decision was made to preserve the City Walls while it continued to accommodate local inhabitants (Milligan, 1948). More than a century later, In October 1943, town planning officer Major A.T. Marshall unsuccessfully articulated the desirability of a green belt around the exterior of the Walls. A similarity in void space between the monument and the Bogside interface is present to this day.

The second era of transformation occurred during the latter half of the twentieth century. These transitions coincided with the 1968 Urban Area Plan and key events of the conflict, such as Bloody Sunday (30 January 1972), which linked together to form a new segregated urbanism. During this era, the monument was largely "constructed from random rubble shale with dressed brown sandstone used on the outer walls for copings to parapets, dressings to embrasures and loops and quoins to bastion angles" (NIEA, 2011, p. 29). Throughout 1968,

Derry Housing Action Committee staged several protests, most notably the Civil Rights March of 5 October (which culminated in violence at Duke Street, Waterside) to highlight deteriorating conditions in dwellings huddled beneath the Walls. In the same year, the “Derry Area Plan stated the need for 9,600 houses in the city between the periods of 1968-81” (Murtagh, 1996, p. 45), leading to a complete rebuilding of the Bogside. This decision signalled the commencement of an era in which the monument would play a key role in violence and forced segregation that persist to the present day.

Throughout the Troubles, the entire wall walkway was resurfaced in exposed-aggregate concrete c. 1985 and sub-divided into sets of palisade fences and gates erected for security purposes. The attractive promenade became somewhat diminished by the spontaneous evolution of its military transformation. In summary, the following timeline was produced to indicate major shifts in spatial structure of division:

British Army Checkpoints at City Gates [1969-1980]: Each gate in the city Walls had restricted mobility, and civilian and vehicle searches were required for entry into them. This attests to the deterioration of mobility through the Walls from 1969 to the early 1980s, as security force checkpoints at all city gates were constructed to prevent potential IRA movement from the Bogside throughout the city centre (Figure 2).

Closure of Walls as Public Space [1969-2005]: The beginning of the Troubles signaled the end of the city Walls as a public space within Londonderry. Due to the walls bordering several contested spaces, and in view of rising tensions between settlements, the British Army barricaded the walkways to maintain peace, thereby using the monument as a buffer between settlements (Figure 3).

Watchtowers and British Compound on the City Walls [1973-2005]: At the north-western corner of the Walls of Derry, as seen from the Bogside, the watchtower remained a prominent feature from the early 1970s until the end of 2005. This surveillance point was known as the Masonic Observation Post, as it was built next to the Masons' Hall, currently the Verbal Arts Centre. It was a facility for watching and listening to the Nationalist Bogside below.

City Walls and Political Graffiti [1973 onwards]: “It is one of the ironies of Londonderry that long stretches of its walls are now more visible than they have been at any stage in the past 150 years, and so they make a much clearer, and so to many people a more unacceptable, statement than they used to” (Cornforth, 1985, p. 1060). Presently, the walls are often used to display both Unionist and Nationalist political graffiti.

Peace Line Constructed: Bishop’s Street [1975]: The Bogside/Fountain peace line served two functions: it provided ‘peace of mind’ for residents and protection against repeated attacks on either estate. These functions are crucial to the stability and long-term sustainability of communities (Figure 4).

Peace Line Constructed: City Walls [1975 onwards]: Several steel posts and wire mesh secondary defenses were placed upon the existing medieval walls. The peace line overlooked the Bogside area and prevented missiles from being thrown from within the City Walls at two buildings of heritage – the Apprentice Boys Hall and First Presbyterian Church, the latter constructed in 1702.





Figure 2. British Army checkpoints at city gates (Source: University of Ulster).

IMPACT OF 1968 DERRY AREA PLAN ON SOCIAL SEGREGATION

During the 1960s, apart from the Provisional IRA bombings in NI, the violence in Derry/Londonderry was often the result of clashes with security forces, but not between communities. The 1968 physical plan for the city aimed to retain and expand the city centre to avoid an emerging dual city with twin centres based on ethnic groupings. Planners anticipated that social goals could be achieved through physical means. Thus the plan showed high ambitions for better housing conditions, the attraction of new industries, and a developed and enhanced commercial centre. Despite the high hopes for the Derry/Londonderry's future, we witness today an overwhelming segregation between Catholics mostly living in the west bank and the Waterside on the east bank dominated by Protestants (McSheffrey, 2000: 112) (Figure 5).

Until 1947, when the first plans were made to alleviate overcrowding around the periphery of the city Walls, much of Derry's housing stock dated from the nineteenth century and most of the dwellings in the inner city were completely unfit for human habitation by the late 1940s (Ó Dochartaigh, 1999). At that time, Unionist Mayors of Derry were allocating houses on a sectarian basis, leaving the Northern Ireland Housing Trust (NIHT) with a housing waiting list that was almost exclusively Catholic (Ó Dochartaigh, 1999). By 1962, no interventions were made to halt the deterioration in housing following the Bogside demolition (Cornforth, 1985a). The Rossville Flats were constructed then and were completely alien to the city, as 'a horrifying view' (p. 1090). The flats were built as ten-storey deck-access blocks based on the ideals of Swiss-born architect, Le Corbusier.



Figure 3. British Army occupation of the Walls, 1969 (Source: i.pining.com).



Figure 4. Bishop's Street peace line (Source: Authors, 2017).

In 1967, NIHT approved the new, 537-dwelling Creggan estate, overlooking the Bogside, on a hill in the south ward of the city: “The estate was expanded haphazardly, and Creggan estate was eventually to have 1,800 houses and by the late 1960s a population of at least 15,000 people ... it was overwhelmingly Catholic in population” (Ó Dochartaigh, 1999, p. 5).



The latter recalls comparison being made between the Bogside and Creggan settlements as “Catholic ghettos” and that these settlements created tension with nearby Protestant settlements like the Fountain. Ó Dochartaigh (1999) further recollects that in September 1963, NIHT began its first slum-clearance scheme in the city by taking ownership of all properties in the Rossville Street ‘redevelopment’ area and overseeing the complete demolition and rebuilding of the settlement. This shifted the spatial arrangement of the Bogside/City Wall interface, pushing the settlement back further from the monument.

The Victorian commercial and residential buildings fronting the walls were in an advanced state of disrepair, with many on the verge of collapse. McSheffrey (2000) states: “Today, the walls have been exposed and the talus landscaped; they form attractive glimpses of how the walls might have appeared when first built in the seventeenth century” (p. 122). In fact, the 1968 area plan had a crucial role in transitioning the urbanism surrounding the city Walls. While development of some kind was inevitable, even in the absence of a plan, it is doubtful whether much-needed large-scale housing developments on the west bank of the Foyle would have taken place (McSheffrey, p. 116). Demolition has opened up new views of the Walls but resulted in the loss of some streets and buildings which reflect the pattern of historic settlements outside the Walls (Planning NI, 2011).

The 1905 Londonderry property valuation map produced by the Royal Irish Academy (2005) shows that over 50% of property valued lowest (from £5.00 to £14.19) is situated in the Bogside, particularly in the streets near the Walls. This housing was left untouched until 1947; therefore, low-income housing became a major factor in spatial segregation (Ó Dochartaigh, 1999). By 1990, equilibrium had been reached through improved housing in segregated settlements. A report prepared by John Hume contained ample evidence of the horror of some of the housing conditions encountered:

“The Association had carried out their own survey and had found, for example, that 336 families, or 25% of those surveyed, lived in tenements and 160 completely in one room. Altogether, about 1,300 shared toilet facilities ... 181 had to carry water from outside ... In 140 cases, the principal worry is rats. In a flat in Bishop’s Street, a mother discovered a rat feeding on the baby’s bottle in the cot” (McSheffrey, 2000: 64).

In identifying the housing shortage as a key factor in the migration of Bogside residents, McDowell and Switzer (2011) suggest that due to impoverished housing in the Bogside, around 15,000 people had left that area by 1974, ‘halving its population density but breaking up extended families, religious, social and community ties’ (p. 84). The Bogside disaster, as it is described by McDowell and Switzer (2011), arose in the sense that “disasters are moments when the social fabric is torn ... violence and legacy have had a profound effect on the streetscape of the Bogside” (p. 100). The urban renewal, i.e. the removal of entries, the layout of cul-de-sacs, large open spaces and positioning of public buildings, all functioned to maintain order in the settlement and offered the military access streamlines to defuse hostile situations. This suggests that the basis for new segregated urban planning in the Bogside was the prevention or uncomplicated easing of conflict with neighbouring Protestant communities.



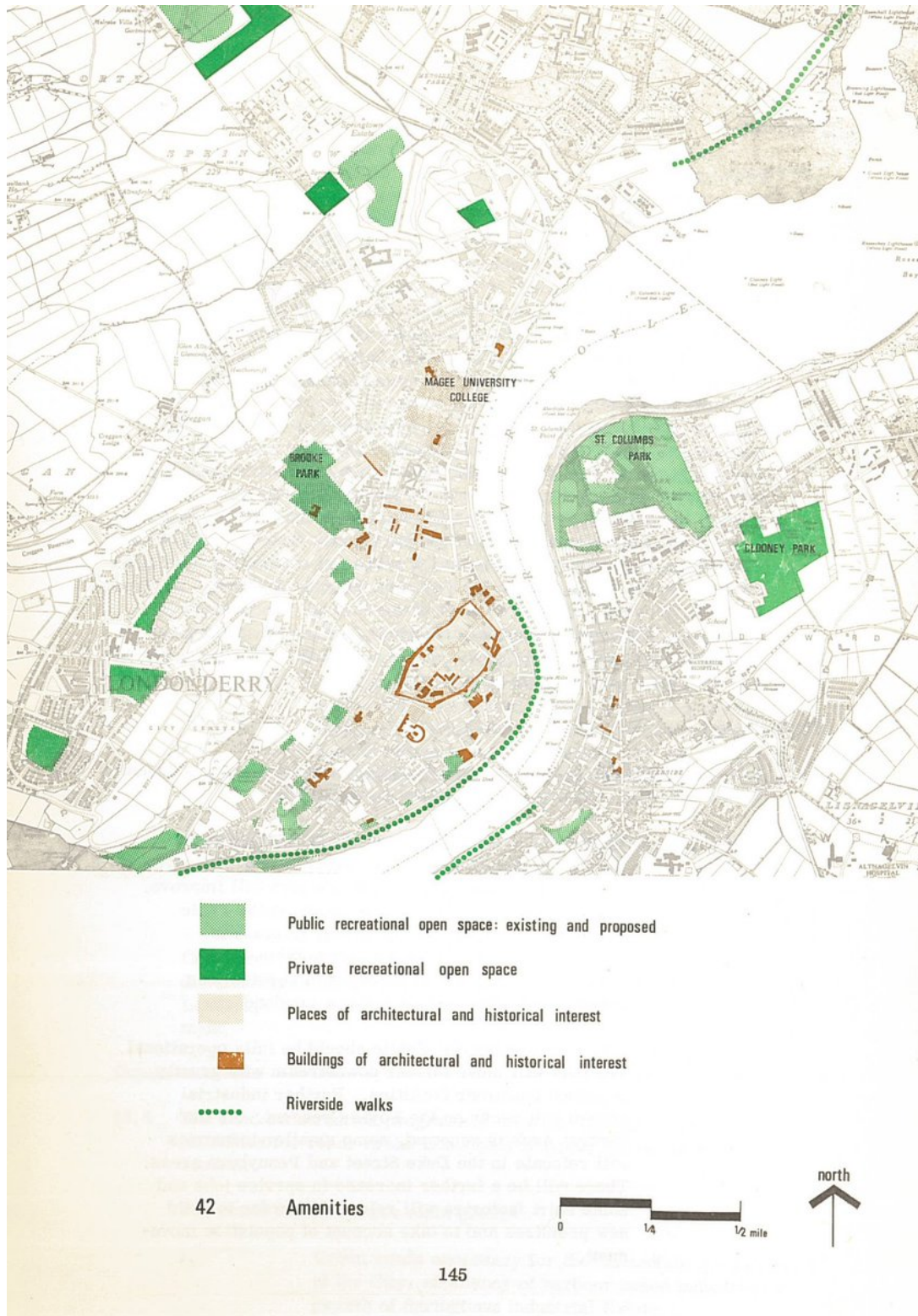


Figure 5. Derry/Londonderry 1968 plan (Source: <http://cain.ulst.ac.uk/>).

TRANSFORMATIONS OF CITY WALLS

The rituals associated with the Walls' martial past were a major factor in the creation of various contested spaces in the city (Creighton, 2007). Both the Unionist celebration of annual marches around the Walls and contested spaces exemplify the Walls as a symbol of division. For decades, the Walls, looking down upon the Bogside, represented a symbolic partition. In an account of life on the interface of the Bogside throughout the 1950s, Deane (1992; 1997) observes that the Protestant cathedral was girded by the city Walls, while Governor Walker's monument towered over the small huddled houses of the Bogside. In fact, Derry's town planning was a key factor in developing unused negative space at the peripheries of the city walls, whereas "the open spaces of earlier years have been replaced by bleak apartment blocks ... the shape of the neighbourhood has been changed ... a city besieged within the siege" (Deane, 1992, p. 18).

Listing the reasons behind the fragmentation of the Bogside settlement from the Walls, in particular, those imposed upon the monument overlooking the Bogside, Cornforth (1985b, p. 1091) explains that the Walls' military transformation over the course of 1969 to 1985 played a key role in continuing segregation. The Apprentice Boys of Derry's hall just behind the wall served as a "convenient point for lobbing missiles over ... hence, the mesh screen was constructed upon the city walls" (p. 1060). In 1969, a ballot was held amongst Bogside residents in response to the 'Bogside Peace Ring' barricades and police actions. It is notable that 3,613 residents voted 'no' when asked whether the barricades should be taken down immediately and unconditionally, a figure over three times higher than had said 'yes'. Furthermore, a very similar vote in favour of a dedicated police force for the Bogside, one unconnected to the Royal Ulster Constabulary, implies that many Bogside residents were satisfied with imposed segregation and would have chosen to set up services organised within the Bogside itself independently of the city authorities.

In order to develop a vehicular buffer zone between the city Walls and the Bogside, only two possibilities existed: one that would have cut through the Bogside (the 'Lecky Road Flyover') or the quayside route. Either "would assist in the early clearance of obsolete and unsightly buildings" (McSheffrey, 2000, p. 77). The former, constructed in June 1974, effectively cut off the Bogside and associated nationalist murals from the embankment, over which the Walls loom. McSheffrey (2000) notes that people were worried about MacKinder's insensitivity to the importance of the existing city fabric, regarding him as a Baron Hausmann, "the most famous exponent of massive urban surgery" in the nineteenth century who had destroyed the medieval areas of Paris to create his splendid boulevards (p. 77).

A significant shift in population density at the periphery of the city Walls took place over the course of the twentieth century. This shift is mainly attributed to the change in housing density from 1948 to 2012, following the 1968 area plan and replacement of the Bogside's terraced housing with accommodation blocks rising up as high as the medieval walls on the hill above. The terrain above the Walls served to accelerate segregation afterwards. The oblique drop from the Walls to the Bogside below gave the British Army a panoramic view of the ground below to monitor signs of imminent conflict. Due to this surveillance, the Fountain was permitted to become a protected enclave on higher terrain (Figure 6).



“As the role of the British Army expanded, Protestants in the Fountain had less and less contact with and knowledge of the conflict in the city due to the peace line. While this ensured that the conflict did not have as strong a sectarian component as Belfast, it also served to distance the Protestant community further from the Catholic community.” (Ó Dochartaigh, 1997: 31)

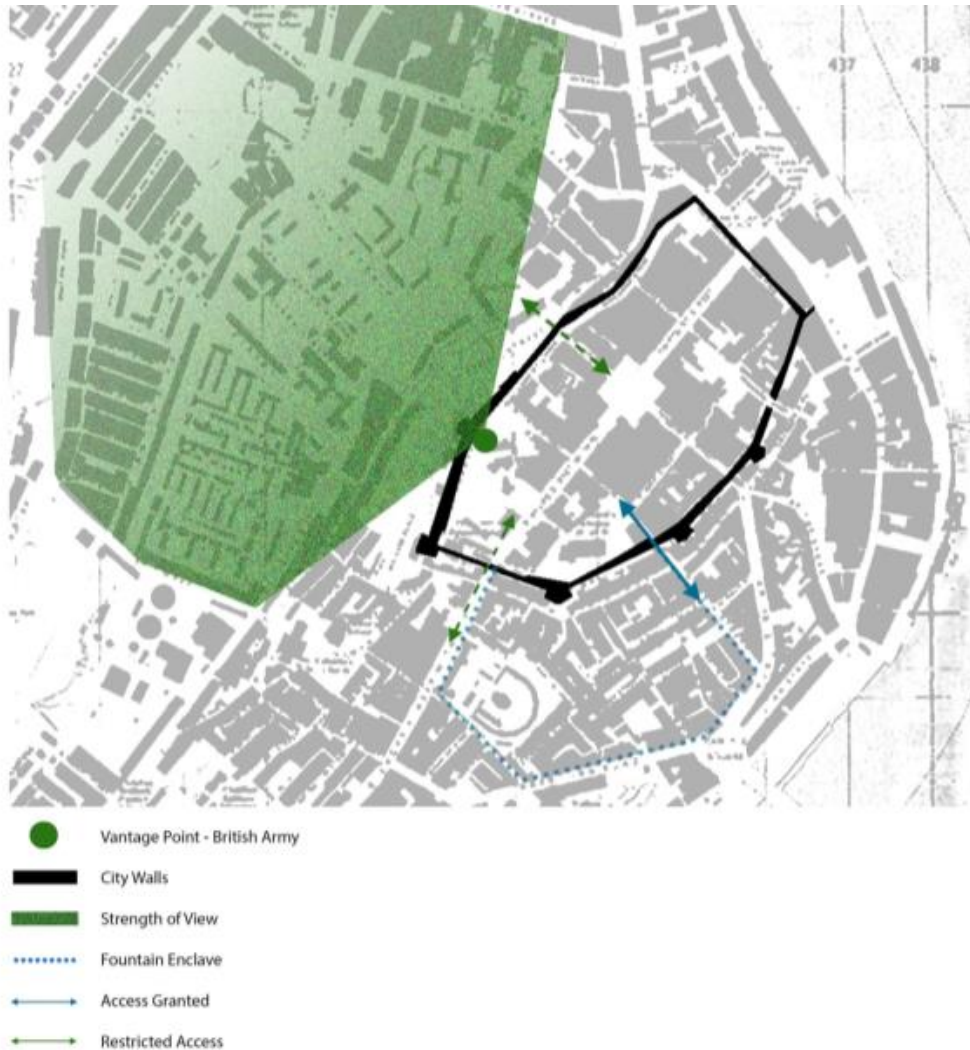


Figure 6. Surveillance map illustrating British Army vantage point above the Bogside and protected Fountain enclave (Source: Authors, 2017).

As the 1948 site section depicts, the progression of the Bogside city Wall interface, the density of pre-existing terrace housing and the dominance of Walker’s Monument antagonised the Nationalist community below (Figure 7). Figure 8 also shows the movement of the Bogside away from the Walls, creating an area of no man’s land between the Walls, the Free Derry Monument, Nationalist murals and the sparse cul-de-sac housing beyond.



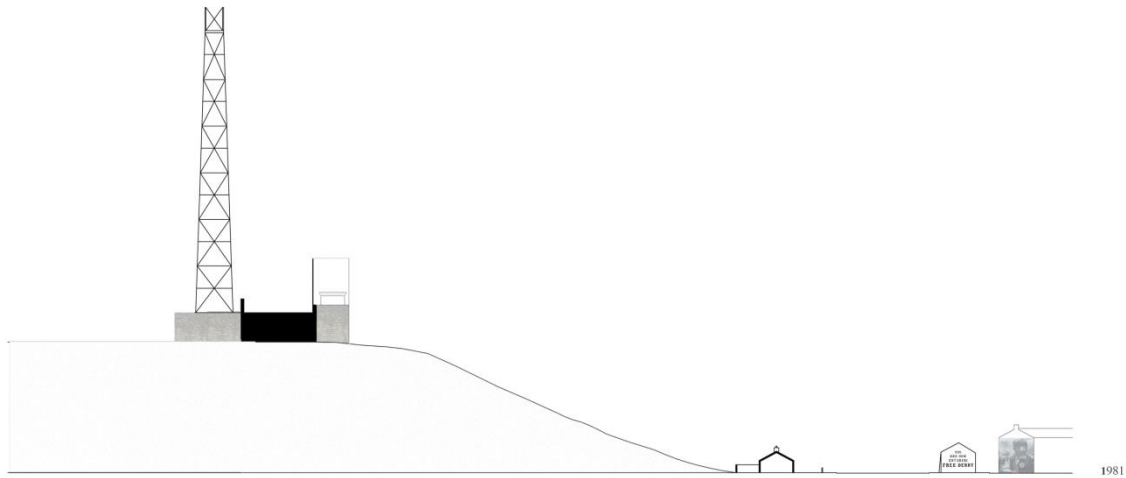


Figure 7. 1948 site section showing Walker's Pillar and Bogside dwellings huddled beneath the Walls (Source: Authors).



Figure 8. 1985 site section showing observation tower and peace line overlooking the segregated Bogside (Source: Authors).

By that time, settlements were manipulated and moulded around the contours set out by military transformation. The Unionist Fountain estate has become an enclosed enclave due to the brick-and-wire peace wall separating it from the Bogside. With a majority of people moving to the east bank of the River Foyle, the Fountain exists as a Protestant minority on the Cityside. The Nationalist Bogside has also been pushed back from the Walls and its pre-existing density of terraced housing has been lost, with cul-de-sac micro-settlements sprawling back from the monument. The line the Bogside Peace Ring took in 1968 contains the Bogside settlement to this day, despite the fortifications now being long deconstructed. This is evident in the undulating shape of the settlement's edge, following the line of pre-existing defences. Perhaps most striking about the results is the apparent area of no man's land fronting the Walls' peace lines. A clear break in the settlement has occurred, aided by the Lecky Flyover (Figure 9).

The transformation of the Walls reduced mobility in the years following the Battle of the Bogside (1969) which was regulated, with restricted access at both Butcher's Gate and Bishop's Street Gate bordering the Fountain. Residents of the latter estate also had



restricted access to the city centre, with the settlement becoming increasingly enclosed within its surrounding fortifications, both historical and modern. Evidence supports an influx of Protestant settlers into the east bank of the city over time. As the twentieth century progressed, Catholic settlements began to expand into the western quarter of the city, while Protestant communities migrated across the River Foyle. Hence, due to the physical transformation and fortification of the Walls, only the Fountain enclave remains on the Cityside.

The vast areas of no man's land at the peripheries of the Bogside and Fountain interface illustrate that 63% of void space within a 400-m radius of the monument lies within the Bogside. Figures show that military intervention in the Bogside has resulted in the area migrating from its original proximity to the Walls. The void space (18%) contained within the Fountain enclave accounts for 40% of the total area of the settlement, with the majority of negative space occurring at the peripheries of the monument or Bishop Street peace line. The formation of cul-de-sac housing to replace terraced housing has also contributed towards this situation. Only 8% of total void space is found within the Walls; however, 90% of this occurs at areas of direct military transformation. The Masonic Observation Watchtower and British Compound account for 6,555 m² or 68% of void space within the Walls.

This area, once belonging to the Bishop of Derry, was transformed into a compound for the British Army in 1975 and functioned as such until 2005 when the base was decommissioned. The area now serves as a carpark, due to the proximity to the Bogside/city Walls interface lined with dismountable peace lines. Of the 30% of void space at the exterior peripheries of the monument, 93% was in direct contact with a physical transformation or military interface point. The Lecky Road Flyover, which cuts off the Bogside from the hill upon which the monument sits, accounts for 15% of the total void space in the 400-m radius. Of that amount, 20% is due to physical 'islands' or other buffers built as an infrastructure requirement (Figure 10).

In fact, the formation of void space following military transformation accounts for 51% of the total negative space within the designated radius. This evidences the shifting of settlements due to military intervention, with negative space being left behind. Of this total, the Masonic Observation Watchtower accounts for the highest amount of negative space (52%) due to the combination of derelict space within and without the Walls. The progression of Walker's Pillar to an even more dominant vertical presence has evidently led to an area of no man's land beneath the Walls, where rows of terraced houses previously stood. Bishop Street peace line accounts for 18% of this total due to a combination of void space within the settlement and at the Bogside/Fountain interface. Peace lines established upon the monument following the British Army's closure of the city Walls as public space impacted not only on the surrounding Bogside area but also on the streets within it. Missiles thrown at the Presbyterian Church and Apprentice Boys' hall were a threat both to architectural heritage and human life. This area fell into decline throughout the Troubles, with many sites remaining vacant today.



Table 1. Analysis of void space within 400-m radius of monument following transformations (Source: Authors).

	Area m ²	%
Total Void Space	141679	
Fountain settlement	25448	18%
Bogside settlement	88694	63%
Other	27537	19%
Void Space within Monument	10696	8%
Void space at interfaces	9619	90%
Other	1077	10%
Void Space at exterior of Monument	130983	92%
Exterior void space at military interfaces	39117	93%
Void Space in Direct Contact with Lecky Road Flyover	20882	15%
Void space Incorporated within flyover	4181	20%
Void Space as a result of Transformations	71596	51%
Bogside Peace Ring: 1968-1970	17764	25%
Dismountable peace lines upon city Walls: 1968-2013	28197	39%
Bishop Street peace line: 1975-2013	12783	18%
Masonic Watchtower/British Army Compound: 1975-2005	37008	52%
Political graffiti	25960	36%

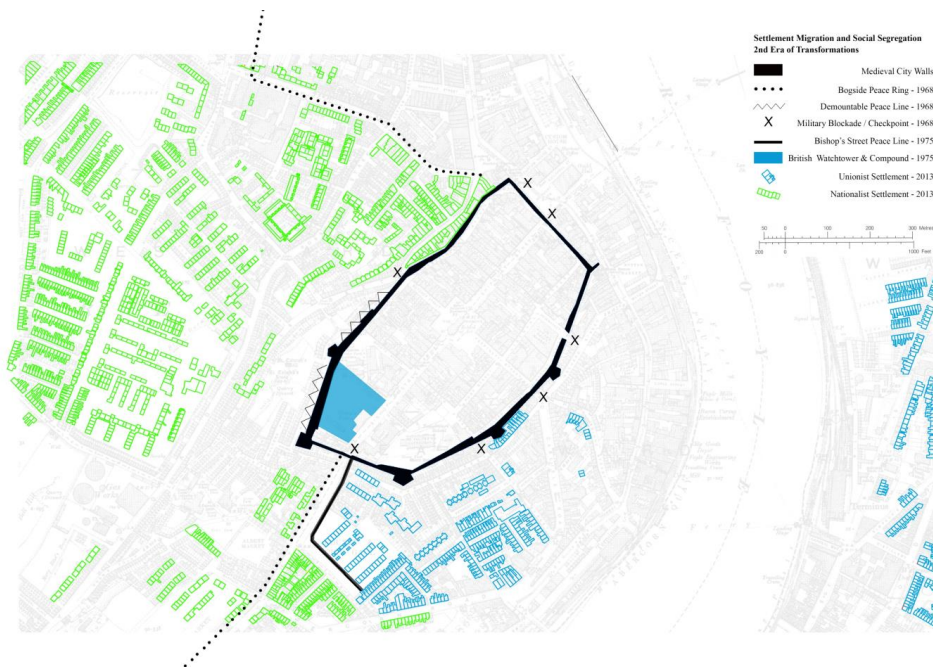


Figure 9. 2013 settlement migration and social segregation based on 1951 OSNI historical base map – second era of transformations (Source: Authors).

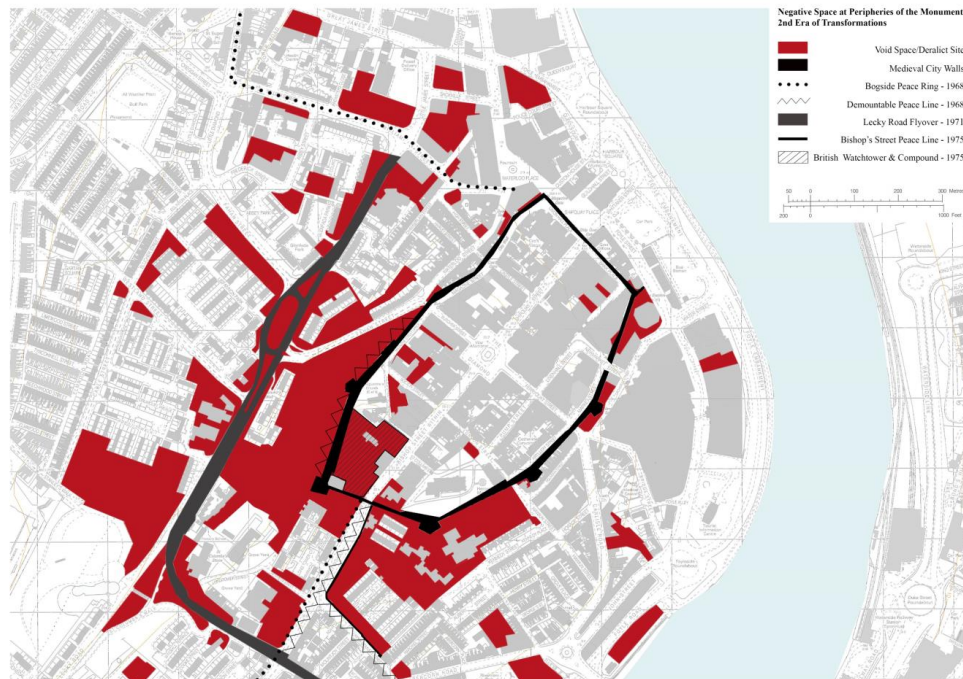


Figure 10. Negative space at peripheries of the monument, based on 2012 OSNI base map – second era of transformations (Source: Authors).

CONCLUSION: MONUMENT DIGITAL PRESERVATION

Several factors contributed to the segregation of the Fountain/Bogside interface on the west bank of the River Foyle – primarily, the 1948 Housing Crisis and 1968 Derry Area Plan. This paper has described how the Fountain settlement has become an enclave protected by the Bishop Street peace line, with the Bogside settlement being progressively pushed back further from the opposing settlement and city Walls. These changes contributed to an increase in negative space surrounding the monument at transformation interfaces, with a majority of void space occurring directly at points of military intervention.

The recently adopted Derry Area Plan 2011 suggests that although there is an intention to preserve the architectural and spatial character of the city within the Walls, it is not proposed to bring the settlements closer to their historical organisation. Despite this reality, the plan shows that the section of the monument overlooking the Bogside has a history of close spatial relationships with buildings and the city Walls, and proposals can be made to restore this urbanism within the Walls. Hence, in 2005 the 24 cannons that remained on the walls were refurbished. Under expert supervision, and often by hand, craftsmen cleared the barrels of centuries of rubbish, stripped off layers of paint and corrosion, and bathed, sponged and waxed the guns back to their former glory. These cannons are displayed throughout the Walls, with the impressive “Roaring Meg” located on the double bastion.

When Derry/Londonderry was named the UK City of Culture in 2013, the strength of the heritage of the Walls led to their being actively promoted as a tourism destination through festivals, social activities and expatriate links. One of the main initiatives was the development of electronic commerce, creating ‘virtual tourism’ of the Walls to offer new collaborative opportunities. This venture has the potential to create ‘virtual co-operation’,

whereby potential tourists are able to browse the website, develop a coherent picture of the 400-year-old Walls and experience their history by taking a stroll along the rampart walkway (NI Government, 2013). A set of 360 cameras document the main four points on the wall – Bishop's Gate, Butcher Gate, Shipquay Gate and Ferryquay Gate. Famously, the latter was closed by 13 apprentices to prevent Jacobite troops from entering the city, leading to the siege of 1689, while the Double Bastion offers a fine panoramic view over the Bogside and the slopes above where Jacobite guns were positioned during that siege.

The interactive website provides a good opportunity for uplifting the tourism market in Derry/Londonderry by uniquely fashioning together specific components of the Walls sought by individual visitors. In addition, in 2013, through a fund established by the Northern Ireland Environment Agency (NIEA), the Department of Communities published *Walk the Walls*, a visitor guide, and developed an interactive mobile-friendly App that provides an exclusive guide to the history of the city and the Walls using CGI, videos, photos and 3D-animations. Some of its key features include a 3D-image of the Walls with each gate identified, a GPS map showing the location of 12 key sites along Walls and 'Stories of the Siege' sections that provide colourful information on events in 1689.

The heritage of conflict in Derry/Londonderry is one of the most fiercely contested heritage in contemporary Europe. The irony of that conflict lies in the way it has altered the urban fabric, landscape and demography of the city with forced segregation due to violence, yet it preserved its historic wall. With grievances continuing until the present day and young generations embroiled by the remnant of such history of violence, virtual heritage applications emerge as non-physical, neutral and adaptive tools that allows different stories to appear side by side. While history is contested in Northern Ireland, the visualisation of its conflict and the understanding of its urban change has offered some grounds for a neutral domain for the benefit of the distant onlookers or temporary visitors.

NOTE

This article reports on research that investigates the landscapes of division in NI. Thanks are due to James Boyd for his support with fieldwork.

REFERENCES

- Abdelmonem, M. G., & McWhinney, R. (2015). In search of common grounds: Stitching the divided landscape of urban parks in Belfast's interface zones. *Cities*, 44, 40-49.
- Cornforth, J. (1985a). Survival of a city: Londonderry I. *Country Life*, 178 (4596), 784-787.
- Cornforth, J. (1985b). The grid within the Walls: Londonderry II. *Country Life*, 178 (4598), 974-976.
- Cornforth, J. (1985c). Views of a city: Londonderry III. *Country Life*, 178 (4599) 1060-1062.
- Creighton, O. (2007). Contested townscapes: the walled city as world heritage. *World Archaeology*, 39(3), 339-354.
- Deane, S. (1992). Derry: City besieged within the siege. *Fortnight*, 198, 18-19.
- Deane, S. (1997). *Reading in the dark*. London, Vintage.
- Doratli, N., Hoskara, S. O., & Fasli, M (2004). An analytical methodology for revitalization strategies in historic urban quarters: A case study of the Walled City of Nicosia, North Cyprus. *Cities*, 21(4), 329-348.
- Docwra, H., & Kelly, W. (2008). *Docwra's Derry: A narration of events in north-west Ulster 1600-1604*. Belfast: Ulster Historical Foundation.
- Free Derry Museum website. Retrieved from <http://www.museumoffreederry.org/history-bogside01.html>
- Hamilton, R. (1999). *100 years of Derry*. Belfast: Blackstaff Press.

- Hipsley, P (2012). *The Walls of Derry, Londonderry*. Retrieved from <http://www.derryswalls.com>.
- Hume, J. (2002). *Derry beyond the walls: Social and economic aspects of the growth of Derry: 1825-1850*. Belfast: Ulster Historical Foundation.
- Huyssen, A. (2003). *Present pasts: Urban palimpsests and the politics of memory*. Chicago: Stanford University Press.
- McDowell, S., & Switzer, C. (2011). Violence and the vernacular: Conflict, commemoration & rebuilding in the urban context. *Journal of the Vernacular Architecture Forum*, 18(2), 82-104.
- McSheffrey, G. (2000). *Planning Derry: Planning and politics in Northern Ireland*. Liverpool: Liverpool University Press.
- Milligan, C. D. (1948). *The Walls of Derry: Their building, defending and preserving*. Londonderry: the Londonderry Sentinel Printing Works.
- Misselwitz, P. and Rieniets, T. (2006). *City of collision: Jerusalem and the principles of conflict urbanism*. Walter de Gruyter: Switzerland.
- Murtagh, B. (1996). On Derry's Walls, segregation and space in Northern Ireland. *Administration*, 44(1), 30-47.
- Murtagh, B., Boland, P., & Shirlow, P. (2017). Contested heritages and cultural tourism. *International Journal of Heritage Studies*, 23(6), 506-520. <http://dx.doi.org/10.1080/13527258.2017.1287118>
- Mulholland, C., Abdelmonem, M. G., & Selim, G. (2014). Narratives of Spatial Division: The Role of Social Memory in Shaping Urban Space in Belfast. *Journal of Civil Engineering and Architecture*, 8(6), 746-760.
- Northern Ireland Government (2011). *Derry City Walls Gazetteer October 2011*. Retrieved from <https://www.communities-ni.gov.uk/publications/derry-city-walls-gazetteer-october-2011>
- Northern Ireland Government (2017). *The Derry Walls*. Retrieved from: <https://www.communities-ni.gov.uk/articles/conservation-case-studies>
- Ó Dochartaigh, N. (1997). *From Civil Rights to Armalites: Derry and the birth of the Irish Troubles, 1st edn*. Cork: Cork University Press.
- Ó Dochartaigh, N. (1999). The Politics of Housing; Social Change and Collective Action in Derry in the 1960s (625-646). In *Derry and Londonderry: History and Society*. Dublin: Geography Publications.
- Pinimg (n.d.). *Bogside demolition and construction of Rossville Flats in 1963*. Retrieved from: <https://s-media-cache-ak0.pinimg.com/736x/4a/0f/97/4a0f97bd9a9a2b81ab974921f6be5090--irish-flats.jpg>
- Planning Northern Ireland (2011). *Derry Area Plan*. Retrieved from https://www.planningni.gov.uk/index/policy/development_plans/devplans_az/derry_2011/derry_benvironment/derry_benv_policies/derry_benv_policies2.htm
- Selim, G. (2015). The Landscape of Differences: Contact and Segregation in the Everyday Encounters. *Cities*, 46, 16 - 25.
- Selim, G., & Abraham, A. (2016). Peace by Piece: (Re) imagining Division in Belfast's Contested Spaces through Memory. *Athens Journal of Architecture*, 2(3), 197-221.
- Thomas, A. (2005). *Irish historic towns atlas – Derry/Londonderry*. Dublin, Royal Irish Academy.
- Weizman, E. (2012). *Hollow land: Israel's architecture of occupation*. London, Verso Books.

