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***Assessing the Financial, Social and Cultural Value of
New Developments: The Case of Port Loop, Birmingham***

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I confirm that the number of words in the main text is 7 998, and the number of words in the supplementary text is 2 000, excluding abstract; acknowledgements; illustrations and their titles & legends; reference list; appendices and quotations from primary data.

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Date: 4th March 2020

Abstract

Models of new build developments have received minimal attention in the UK since the urban renaissance highlighted the need for increased brownfield development to meet housing demands. Volume housebuilders subsequently extorted the opportunity to develop sites quickly, with minimal consideration of social and cultural value. Instead, the focus was centred around generating large financial turnover, created through fast construction and sales of houses.

Port Loop (PL) is a new build development located within Ladywood, Birmingham which challenges this standardised model of development. This research explores how PL differs from the traditional new build developments, due to PL's focus upon delivering heightened social and cultural value, whilst maintaining financial value production. PL's social and cultural offerings involve communal green and social spaces, waterways and a range of housing typologies, to entice a variety of homeowners to the development. Financial value is largely developed from PL's mix of housing typologies, including modular homes, standard construction homes and CLT apartments. Consequently, this research explores PL under the framework of valorisation, to establish the extent to which PL offers an alternative model of development. The research utilises interviews, field diary data and secondary questionnaire data to examine the various elements of PL, that together create its unique model. In doing so, the paper demonstrates the need for further academic study upon such alternative models of development.

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1. Introduction

Across the UK new build developments traditionally follow standardised schemes of development, involving standard methods of construction and private gardens. Thus, creating issues of homogeneity of the schemes. In Birmingham these issues manifest with schemes such as Miller Homes' Regency Fields, Solihull demonstrating a lack of individuality, resultantly reducing the sense of place in the development (Miller Homes, 2019).

The standout development in Birmingham which offers an alternative form of new build is Port Loop (PL). PL is a new build development offering housing, communal green spaces, a public park as well as commercial spaces known as Tubeworks. PL is located in Greater Icknield, Ladywood, Birmingham; a mere 15 minutes' walk into the heart of Birmingham's city centre (House, 2020b). Ladywood resides in the top 10% of the most deprived neighbourhoods in England (Figure 1) (Index of Multiple Deprivation, 2019). Awareness of such deprivation is needed when considering existing community members opinions of the development.

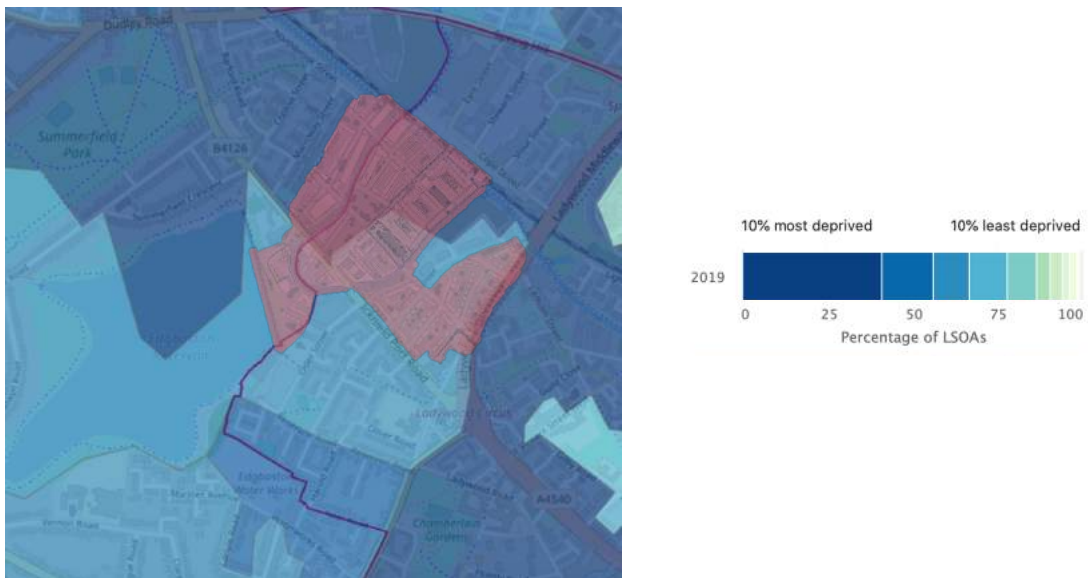


Figure 1: Image of the PL site (shown in red) in accordance to the Indices of Deprivation 2019 (shown in blue). (Source: Author with data from IMD, Available at: http://dclgapps.communities.gov.uk/imd/iod_index.html)

PL has been developed in joint venture between the Canal and River Trust and Birmingham City Council, both of whom are landowners; alongside Urban Splash and Places for People, as developers (Port Loop, 2019a). The site is surrounded by waterways, with Edgbaston Reservoir opposite and canals running throughout the development (Port Loop, 2019b). At present, PL comprises of 40 homes in Phase 1a, consisting of MMC modular houses named ‘Town House’ and 37 homes in Phase 1b, encompassing traditional build homes known as ‘Brick House’ (Port Loop, 2019c). Both Brick House and Town House have private terraced areas alongside communal green spaces to prompt social interaction (Port Loop, 2019b). Phase 2 is expected to come on sale in spring 2020, with a further 28 houses and 3 CLT apartment blocks, made of cross-laminated timber, which is intended to appeal to the affordable housing market (Port Loop, 2019b).



Figure 2: Image of PL Phase 1 site plan, demonstrating the sold properties through green sold stickers, as of the Brick House launch (Phase 1b) on the 21/09/19 (Source: Author, taken of Urban Splash documentation)

PL fits the need for affordable housing in the UK that has arisen due to the housing crisis, which will be further explored in the literature review. Across the UK developments strive

for PL's aims (see Supplement 1); such as New Islington in Manchester (Urban Splash, 2018). The work of Dixon (2007) has examined such brownfield regeneration developments, however, research in such areas regarding valorisation is scarce. Crosby and Henneberry (2015) inspects valorisation of urban developments, but lack specificity to new build residential developments. Consequently, identifying a gap within literature which this research fills by using valorisation as a framework to analyse PL and extract unstudied aspects of the development. This research argues that new developments, such as PL, contribute to aspects of valorisation. Such analysis is utilised to pass comment on the extent to which PL presents an alternative model of development from traditional, standardised designs; thus, identifying the need for further study on alternative models of development. Findings will sit in line with the work of Ball (2013) and David Adams, in particular his work with Tiesdell (2012). The research findings will predominately be used by developers of PL, as there has been negligible research upon PL due to its contemporary nature. Utilising a case study methodology has been informed by research such as Davidson and Lees (2005) also utilising case studies to examine new developments. Other topics surrounding PL which could be studied include community opinions of PL. However, studying valorisation of the project allows a greater contribution to the wider scope of future new build developments to be achieved.

Throughout the research value will be understood as a measurement of success (Johnsen, 1986), with the focus of value split into two, the study social and cultural value and then financial value (Mazzucato, 2018). Value will be further unpacked in the literature review. Traditional models of development will be referred to as those posing bland, standardised development schemes created by volume housebuilders, typical of the UK involving standard construction methods and private spaces for the homeowners (Adams and Payne, 2011). Volume housebuilders produced standardised developments due to there being limited competition, thus providing the opportunity to develop unoriginal designs (Adams and Tiesdell, 2012). Alternative models of development will be seen as those challenging the traditional model, primarily concerned with promoting increased social and cultural value through communal spaces and alternative housing types. Definition of alternative models is inspired by Elkington's (1999) 'triple bottom line'

approach, which recommends organisations focus on social and environmental concerns, just as with profits. Development types will be discussed further in the literature review.

The aim of the research is:

To investigate the financial, social and cultural values of the PL development and assess the extent to which it differs from traditional new build developments.

Consequently, research questions (RQs) have been created to fulfil this aim include:

- 1. How does PL offer a new interpretation of social and cultural value in the built environment?**
- 2. What are the impacts of maximising financial values on the built environment in PL?**
- 3. Does PL display an alternative model for new build residential developments?**

Case study methodology is implemented throughout this research to examine PL. The strengths of using case study methodology is explored by Noor (2008) due to its advantages in providing in-depth examinations of studies. This approach allows the research findings to be related to future new build developments across the UK (Yin, 2014). Interviews will be utilised as the primary method of data collection. A field diary kept throughout the research process will further elaborate findings. Independent statistical analysis of secondary data provided by the Canal and River trust will also be implemented to demonstrate the relationship between waterways and wellbeing. The research design and methods are revisited in the methodology section but are fully unpacked in Supplement 6.2.

The research will proceed through a literature review outlining key concepts of value, UK urban renaissance, sense of place and then a focus upon PL itself. Data collection methods utilised will be summarised. The findings of the research will then be unpacked and analysed under key themes of social and cultural value of PL, financial value of PL and PL as an alternative development; to determine if the value presented by PL offers justification for PL's distinguishing as an alternative model of development.

2. Literature Review

This chapter will address the key debates surrounding the value and development of PL. The wider notions of the composition of value will be examined; as will debates surrounding the UK Urban Renaissance in relation to value. Finally, theory on sense of place in urban developments will be studied.

2.1 What is Value

Value is largely seen as the consequence of efficient production factors in economic activity and is resultant from market demand for a product and people's ability to gain the product (Mazzucato and Shipman, 2014). Subsequently, value is dependent upon the relationship between individuals and objects, involving both economic and psychological properties (Heilbroner, 1983). Within the rhetoric of value there are three distinct forms of value, these being financial, social and cultural value (Mazzucato, 2018).

The composition of value is something that is undergoing change over recent years (Mazzucato, 2018). Traditionally, value has been seen as and, in many cases, taught as fact to be, solely considered with financial value (Mazzucato, 2018). Classical economists, for instance, Adam Smith in 1776 focused on value relating to the materialistic cost by describing value to be rooted from two theories, these being value in exchange and value in use; but he fails to describe the relationship between them (Smith, 2010). David Ricardo in 1817 complies with Smith's model of two concepts of value (Sraffa, 1951). However, Ricardo sees the concepts as related to the labour required to create value and the quantity of commodities that are exchanged for the item. Again, Ricardo does not describe how these two values are related. Karl Marx in 1863 is another key thinker in relation to value (Marx, 1971). Marx alongside Marshall in 1890 imposed the *Theory of Surplus Welfare* which suggested the purchaser gains greater satisfaction from purchasing a good at a lower price than the higher price he would pay rather than going without the good (Marshall, 2009). Consequently, Marx began to open up the debate that monetary value had social ties and implications (Fourcade, 2011).

In more recent economic and social science studies, the social and cultural value of goods and services are being seen of equal importance to financial value, if not more so (Mazzucato, 2018). For the purpose of this research, value and wealth will be used as like

for like terms, as seen in Mazzucato (2018). However, to define the terms as a measurement, useful in determining the relative success of an attribute Johnsen (1986) is used.

Financial value is predominately constructed for monetary profit, whereas social and cultural value is often created for non-profit reasonings; although it can to be produced for profit (Smith and Stevens, 2010). Social and cultural value includes a diverse range of goods and services that are seen as being created rather than produced; and often involving more of a personal significance (Frey, 2005). Defining social and cultural value is scarcely seen among literature however, it can be determined that the creation of social value involves the facilitation of meeting of people’s reasonable and pressing needs within a society (Nicholls, 2008). Similarly, cultural value is formulated through the enhancement of cultural practises and beliefs held within the area across the society (Ravasi et al., 2012). Throughout this research social and cultural value will be grouped together as one, due to their overlapping nature. It can be argued that creating financial value leads to the beginning of a development, which consequently creates enhanced social and cultural value within the given area or society (Mazzucato, 2018). Market Theory offers an insight into the organisation of social processes in relation to value production, due to the market not being exclusive to economists (Slater and Tonkiss, 2013).

Table 1: Table outlining the differences between value types. (Source: Author)

Type of Value	Defining Features
Financial Value	<ul style="list-style-type: none"> - Created for profit (Smith and Stevens, 2010) - Concerned with producing monetary wealth (Mazzucato, 2018).
Social and Cultural Value	<ul style="list-style-type: none"> - Can be created for profit or non-profit incentives (Smith and Stevens, 2010) - Concerned with creating enhanced social (Nicholls, 2008) and cultural offerings across a society or area (Ravasi et al., 2012).

The concept of value is readily applied to discussion surrounding the value of place. Such discussion touches upon arguments of place attachment and the how the emotions and behaviours put into space contribute to a person's attachment with space; by extension their subjective view of the places' value (Ujang and Zakariya, 2015). Place attachment assesses the social and cultural value of the space (Ujang and Zakariya, 2015).

Throughout the research, notions of financial, social and cultural values will be understood within the context of the built environment with a view to unpacking the reasonings behind the areal variations of value across PL (Agnew and Duncan, 2014). Valorisation examinations of PL will be conducted with financial value encompassing profit orientated value (Smith and Stevens, 2010) and social and cultural value concerned with enhancing community experience (Nicholls, 2008; Ravasi et al., 2012). The features of PL will be explored under such an approach to valorisation to achieve an understanding of the overall worth of PL. The valorisation of PL will facilitate the judgement of PL as an alternative model of development. To compare PL to other development models, the emergence of new builds from the urban renaissance requires investigation.

2.2 UK Urban Renaissance

Urban renaissance is understood as a need to intensify housing development, with focus to brownfield development, in order to create a condensed city (Imrie and Raco, 2003). In UK policy making, the urban renaissance commenced in the late 1990s to early 2000s (Tallon, 2013) and involved the regeneration and resultant repopulation of numerous UK cities, for instance Birmingham (Barber and Hall, 2008). Focus shifted towards inner city development within the UK aiming to increase financial value. This differed from previous connotations of anti-urbanism (Colomb, 2007). The urban renaissance led to the establishment of new urban principles and triggered a rescaling of government processes, in relation to the built environment (Imrie and Raco, 2003). This refreshed approach to urban development exhibited a move towards increasing community involvement in urban policy; thus, exhibiting a greater awareness for social and cultural value in planning policy (Imrie and Raco, 2003). The snowball effect of this movement has led to new developments such as PL.

This rapid urban development, led to several social disputes (Marcuse et al., 2009). A primary example being the housing crisis, whereby there is a significant lack of affordable housing particularly in UK big cities (Maliene et al., 2008). The repercussions of this non-stop need for housing across the UK, led to planning policies approving vast numbers of standardised new developments; without necessarily considering who the developments were aimed to cater for and consequently whether they would in fact combat the housing crisis (Porter and Shaw, 2013). High demand for housing allowed developers to neglect social and cultural value and concentrate on financial gain through standardised housing.

Standardised developments are predominately of traditional methods of onsite construction (Pan et al., 2007). It was deemed that the main aspects putting housebuilders off implementing offsite construction are the alleged problems regarding manufacturing capacity, interfacing, the planning process, long lead times and the higher monetary cost; as well as the fear of the unknown (Pan et al., 2008). However, in more recent times, studies have found out that “two-thirds” of the top 100 housebuilders in the UK, believe modern methods of construction (MMC), which occur offsite, should be more widely implemented to meet the housing demand across the UK (Pan et al., 2007, pp.183). Such methods of offsite MMC are displayed within PL through their inclusion of modular housing in Phase 1a of development, Town House (Port Loop, 2018b); exhibiting potential added value to the PL site.

The focus upon financial value in new developments can be linked to the inside or outside the city conflict, which was another product of the urban renaissance (Whitehead, 2012). The conflict comprises of planners determining that urban green space may be valued more highly than greenfield land located outside of cities (Whitehead, 2012). Thus, demonstrating the conflicts associated with creating social and cultural value within an urban site through green space, just as in PL, due to the heightened financial value of the space (Lo and Jim, 2010).

Other issues which arose from the urban renaissance, relating to principles of financial value, include problems regarding financialisation in the city, due to the increased importance placed upon financial motives within the economy (O’Brien and Pike, 2017). Financialisation explains the pressures faced by developers to maximise financial value

within sites and helps to explain why there was less emphasis initially placed upon creating social and cultural value.

Additionally, debates of greenfield over brownfield sites emerged, focusing upon policies shifting developers' attitudes, to encourage increased usage of brownfield sites (Adams and Payne, 2011). The movement aimed to adjust housebuilders designs to be unique and better suited to local environments (Adams and Payne, 2011). Prior to development, PL was a brownfield site (Port Loop, 2018a). Subsequently, within the UK, the urban renaissance has notably shaped people's relationships with urban space; thus, sense of place in such development needs further exploration.

2.3 Sense of Place

Doreen Massey (2012) argues a global sense of place to be highly uncertain in this current postmodern era of increasing globalisation and interconnectivity. Harvey (1989) referred to this sensation as the 'time-space compression'. A product of this time-space compression is a muddled understanding of place and how individuals relate to places (Massey, 2012). Building upon the confused connotations of place, are concerns regarding how a local sense of place can be retained when there is such mass movement surrounding said locality (Massey, 1994). Subsequently, the ever-evolving nature of sense of place, raises the question of how a locality can retain its identity and sense of place when mass development enters the area (Najafi and Shariff, 2011).

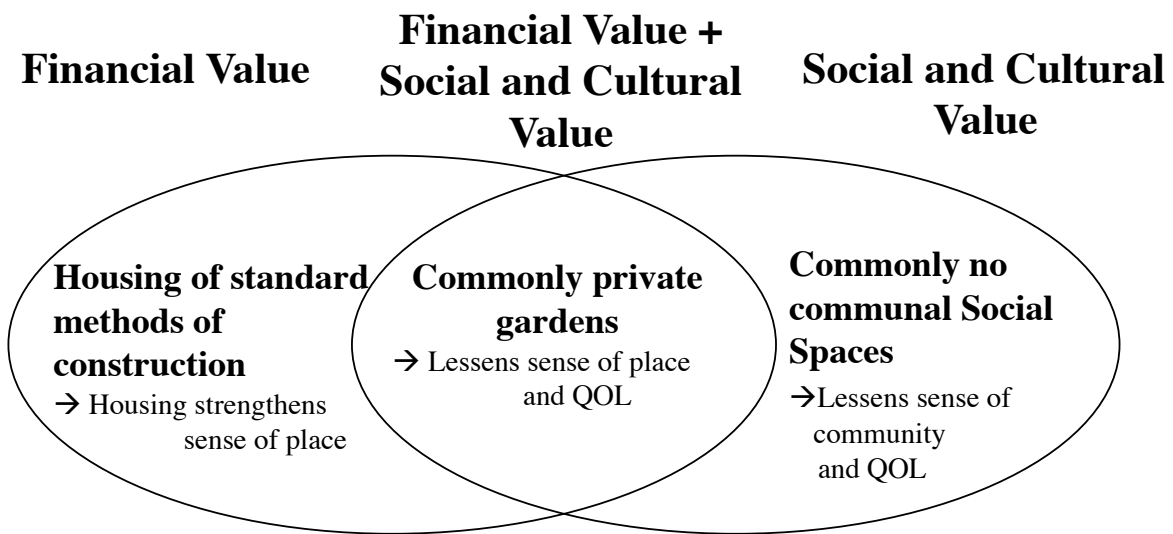
Community is a highly contested term throughout literature (Crow and Mah, 2012). However, due to constraints, further exploration of this debate is beyond the scope of this research. For the purpose of this study community will refer to a defined locality and the collective identity of the individuals living within said locality (Amit, 2003; Young, 1990). Whereas sense of place focuses upon the physical elements of the space contributing to its distinctness (Jorgensen and Stedman, 2001), sense of community is more largely concerned with the people within said space's relationship with the place's identity (Mannarini et al., 2006). Distinctiveness of a place can be closely linked to the concept of place attachment; with the more distinct a locality, the stronger the place

attachment (Scannell and Gifford, 2010). Consequently, it is of great importance to develop a distinct space with a strong sense of place and community within urban areas, as this helps to increase community development, participation and consequently social and cultural value within the area (Chavis and Wandersman, 2002).

Placemaking involves the formation of a central point of public space in the community which enhances relationships between people and place (Ellery and Ellery, 2019). Placemaking improves quality of life (QOL), liveability and identity of an area (Wyckoff, 2014). QOL incorporates a sense of wellbeing and life satisfaction (Centres for Disease Control and Prevention, 2000). Key arguments surrounding QOL include the paradox of affluence, whereby focus upon QOL has grown in proportion to technological and income advancements (Pacione, 2003). Therefore, it has been made apparent that QOL is not simply determined by financial wealth; thus, raising awareness to environmental and social factors impacting QOL such as the everyday environment (Pacione, 2003). Successful placemaking resultantly leads to enhanced social and cultural value of the place (Alzahrani et al., 2016); subsequently financial value may be increased, due to good placemaking increasing demand for the area, meaning greater profits (Salah Ouf, 2001).

When looking specifically at UK urban developments, many modern developers are emerging that are more socially driven, striving to create a strong sense of place within their developments, rather than purely profit driven (Jive'n and Larkham, 2003). As encouraged by the National Planning Policy Framework, many new developments are incorporating green belt into their schemes, which not only improves sustainability of the sites but also enriches sense of place (Ministry of Housing, Communities and Local Government, 2019). Consequently, demonstrating developing a strong sense of place being at the forefront of UK planning. Throughout this research traditional new build developments of volume housebuilders will be used for comparison against alternative developments, such as PL, to examine the difference in financial, social and cultural value offerings. Attention will also be placed upon PL's contribution to sense of place. Subsequently, the basis of the diagrams (Figure 3) will be used as an overarching framework for this research.

Traditional New Build Developments



Alternative New Build Developments

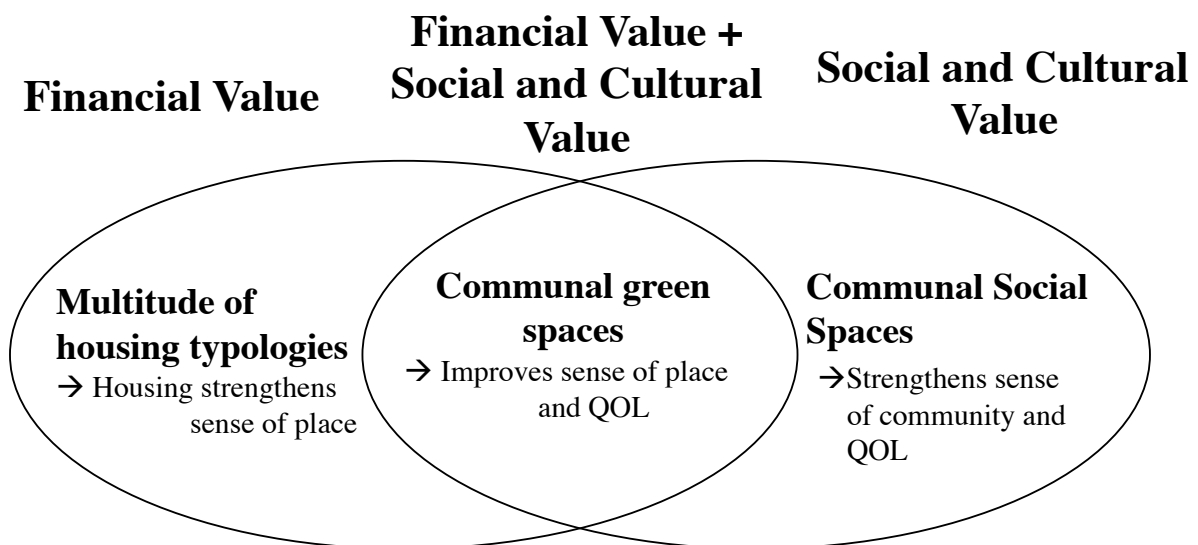


Figure 3: Diagrams outlining research framework, by demonstrating how value corresponds with the differentiating elements of traditional new build developments against alternative new build developments, and their contribution to sense of place. (Source: Author)

3. Methodology

The data collated within the research is the product of an array of primary qualitative and secondary quantitative data collection techniques. Primary data has been collected through the completion of fifteen interviews, each contribution lasting for around 40 minutes. Five of these interviews being with participants representing each of the developing bodies for PL, including the Canal and River Trust, Places for People, Urban Splash and Birmingham City Council. Furthermore, interviews with two representatives from the sales team of PL took place. Additionally, interviews were conducted with five existing community members of Ladywood and three new residents of PL. There is a reduced sample of PL residents, due to there currently only being ten residents occupying the development. All interviews conducted were of a semi-structured nature, involving open ended questions and the ability for participants to state additional information as and when they saw fit (Marshall and Rossman, 2014) (see Supplement 6.1).

Furthermore, primary data was collated through the completion of an on-going field diary by the researcher throughout the duration of the research process. The diary is comprised of recordings of informal conversation, observation and information given to the researcher at events relating to PL, such as the Brick House Launch day and the Ladywood Community Project meetings (Punch, 2012).

The interview data alongside the field diary data was later manually coded, from which key debates were highlighted (Clifford et al., 2016). Debates of the social and cultural value of PL, the financial value of PL and whether PL is an alternative model of development, will be explored throughout the analysis. These prominent debates each relate to research questions one to three correspondingly.

Additionally, secondary data, provided by the Canal and River Trust, will be independently analysed. The Canal and River Trust completed questionnaires of 2,781 canal towpaths passers-by across England and Wales, in September 2017. The information will be utilised within the research to support the wellbeing benefits of waterways within developments.

Throughout the analysis and discussion of the results, all interviewees and field diary notes will be referred to by the codes in Table 2. For further details regarding the research design see Supplement 6.2.

Table 2: Table featuring interviewee codes as referred to throughout the analysis. (Source: Author)

Interviewees	Code to Represent the Participant
Existing Community of Ladywood Interviewees:	IC1 (28/10/19) IC2 (22/10/19) IC3(22/10/19) IC4 (15/10/19) IC5 (15/10/19)
New Residents of Port Loop Interviewees:	IR1 (9/11/19) IR2 (9/11/19) IR3 (12/11/19)
Developers of Port Loop Interviewees: <ul style="list-style-type: none"> - Representative from the Canal and River Trust - Representative from Places for People - Representative from Places for People - Representative from Urban Splash - Representative from Birmingham City Council 	ID1, Canal & River Trust (10/10/19) ID2, Places for People (28/10/19) ID2a, Places for People (22/11/19) ID3, Urban Splash (30/10/19) ID4, Birmingham City Council (29/10/19)
Representatives from the Port Loop Sales Department:	IS1 (24/10/19) IS2 (30/10/19)
Field Diary (collated from informal chat, involving opinions and information, gained by the researcher at various visits and meetings): <ul style="list-style-type: none"> - Phase 2, Brick House, Launch Day (21/09/19) - Ladywood Community Project Annual Group Meeting (15/10/19) 	(FD, Brick House Launch, 21/09/19) (FD, Ladywood Community Project Meeting, 15/10/19)

4. Analysis and Discussion

Exploration of the themes of social and cultural value of PL, financial value of PL and discussion of PL as an alternative model of development will follow.

4.1 Social and Cultural Value of Port Loop

The social and cultural impacts and subsequent amounted value of the communal spaces, housing typologies and engagement with the local community created by PL, are heavily linked with the theoretical concepts of quality of life (QOL), sense of place and social interactions within communities. The contributions of such landscaping aspects to the valorisation of space within urban developments will be unpacked throughout the section. Findings exhibited through this section directly relate to RQ1.

4.1.1 Quality of Life

When examining QOL created by PL, green spaces, commercial structures and water are to be examined. QOL is associated to the value of facilities of leisure and public spaces, within urban developments (Lloyd and Auld, 2003). Within PL, the green spaces are split between communal garden spaces for residents and a public park. Urban Splash, regard the significance of the gardens when stating:

“communal gardens were always important from the start, to help the community interact. Our aim was to animate the spaces, so they become places for people to interact and get to know neighbours” (ID3, Urban Splash, 30/10/19).

For this developer, creating social relationships between residents is at the forefront of PL’s ambitions which goes in line with the work of James and Bound (2009) and Raman (2010) on good quality communal green spaces and social cohesion.

The appreciation of these communal green spaces is something already felt by the majority of new residents who were interviewed. One resident commented:

“it’s a much more European style of living which appeals to me greatly, no time wasted gardening; more time having fun” (IR3, 12/11/19).

However, not all residents of PL are budding socialites, as another resident remarked that, *“the communal green space will probably be fabulous in the summer, although I am not the biggest people person, so I will have to learn” (IR2, 9/11/19).* The comment

concerning having to learn is of particular interest, as it suggests the inclusion of these communal spaces is reshaping individuals thinking towards social interaction and consequently, linking green spaces and learning (Kearns, 2012). However, the time taken to learn to engage with these spaces can impede their initial success.

Alternatively, the public park featured within PL (Figure 4) develops a more outward-looking social and cultural value, in its aim to engage the local community. The impact of this park to the local area is heightened due to it being “*the first public open green space in central Birmingham in a long time*” (IS2, 30/10/19). QOL will be improved due to the known linkages between green space access and improved wellbeing (Chiesura, 2004; Baur and Tynon, 2010). The developer’s collective consciousness of wellbeing reiterates its importance in PL:

“we try to make use of any usable space to enhance wellbeing and build communities” (ID2a, Places for People, 22/11/19).

Here ideas of placemaking as a vehicle to improve QOL are prominent (Cilliers et al., 2015).



Figure 4: Image of the public park in the PL site. (Source: Author)

The abundance of water within the PL site also greatly add to the social and cultural value of PL through offering ample opportunity *“for living waterways to transform places and enrich lives, alongside the existing green spaces within PL; to develop a new family orientated neighbourhood”* (ID1, Canal and River Trust, 10/10/19). Consequently, improving sense of place and QOL. Clearly, the aim for PL’s waterways is to become active spaces of interaction. Such a type of placemaking has been noted by Ellery et al. (2017) in the context of place-led and person-driven advances in public spaces. There are plans to integrate PL’s waterways through *“having a bridge from the top of Edgbaston reservoir to the top of PL”* (ID3, Urban Splash, 30/10/19); creating greater connectivity to waterways throughout the development.

The presence of water in PL is of great importance due to its foundation in improving wellbeing, similarly to the green spaces:

“research shows that spending more time by water will have a positive impact on people’s health and wellbeing. The development encourages people to walk, canoe, jog, cycle and spend more time outside in social spaces which should have a positive impact on the health and wellbeing of the residents of Ladywood.” (ID1, Canal and River Trust, 10/10/19).

The link between waterways interaction and wellbeing is further demonstrated through the research of Völker and Kistemann (2015). Additionally, statistical analysis of questionnaires conducted by the Canal and River Trust uncovered that all users of the canals, reported a higher level of overall life satisfaction; with the most frequent users of the waterways demonstrating the highest levels of wellbeing. Water’s potential in developments is noted by Pinch and Munt (2002). However, it is agreed by the developers of PL, that *“local planning authorities have an important role to play in water’s acknowledgement in planning policy”* (ID1 Canal and River Trust, 10/10/19).

Consequently, the waterways, alongside the greenspaces add meaningfully to the social and cultural value of PL. However, the alternative contributions of the commercial spaces in PL must also be considered.

Commercial structures set out for PL help to enhance a different aspect of social and cultural value. The Tubeworks aim to “*retain the heritage of the site, by redeveloping existing buildings for commercial space*” (ID3, *Urban Splash, 30/10/19*) (Figure 5). This claim is supported by the findings of the field diary (FD, *Brick House Launch, 21/09/10*) and the work of Baker et al. (2017). Keeping the heritage of the site intact is unusual in most new developments, as “*other developers would have knocked down the existing buildings*” (ID3, *Urban Splash, 30/10/19*). Therefore, demonstrating PL’s unique attention to maintaining cultural value and awareness of the importance that preserving heritage and local identity has on integration with the local community (Loulanski, 2006).



Figure 5: Image of original buildings being retained to house the Tubeworks.

(Source: Author)

Furthermore, the Tubeworks plan to involve “*independent local operators, to help integrate with the existing community*” (ID2, *Places for People, 28/10/19*). Linking the space to local services should enhance the sense of community in the area and improve QOL. However, the creation of a strong sense of place is also crucial in determining the social and cultural value of PL and the housing choices in PL that are key contributors to this sense of place, so they will now be discussed.

4.1.2 Distinctiveness and Sense of Place

A defining element of PL is its array of housing types. The mix of modular housing, alongside brick housing and apartments makes the development increasingly idiosyncratic; subsequently stating PL's distinctiveness as a model of development.

The modular housing included as Phase 1a of PL is met with mixed reviews from developers, residents and community members. Predictably, the resounding majority of new residents love the *“exciting, fresh and unusual”* (IR2, 9/11/19) modular houses. Many residents agreeing that *“the eco-standards of the houses”* (IR3, 12/11/19) and the *“high ceilings and large windows, really attracted me to PL”* (IR1, 9/11/19). However, some residents granted that *“you have to be a particular type of person to like these modular homes, not many people find them comfy or cosy enough”* (IR2, 9/11/19). This doubtful view of modular builds was echoed by community members stating they look like *“Lego houses”* (IC4, 15/10/19) and even some developers who argue:

“variety and identity are still important to homeowners, and in my opinion, this is still a challenge for modular homes” (ID1, Canal and River Trust, 10/10/19).

Interestingly, the point of identity within modular home developments is something PL has tried to develop, through *“the cladding on the façades of the Town houses, tries to create some difference in the appearance of the houses”* (IS2, 30/10/19) (Figure 6).



Figure 6: Image of the rear view of finished modular homes in PL, featuring external cladding. (Source: Author)

Alternatively, featuring in Phases 1b and 2 respectively, are the traditionally constructed Brick House and CLT apartments, which add to the mix of housing types and consequently the distinctiveness of the space; thus, enhancing sense of place. Specific judgement cannot be passed on these phases due to their current vacant status, but the *“mix of typologies should mean that there is something for everyone”* (IS1, 24/10/19). However, many of the local community feel:

“the Phase 2 apartments as the affordable housing option, are not social houses for people who are on low income, which the local community needs” (IC2, 22/10/19).

Subsequently, raising issues of what is classed as ‘affordable’ when pricing this type of housing; a debate which is further explored by Tighe (2010), Reeves (2013) and Stone (2006). The unaffordability of the apartments may result in a lessened sense of place, if the local community attempt to boycott the development. Therefore, the sense of community created by PL is of the utmost importance.

4.1.3 Sense of Community

Integration of the new and existing communities has been endeavoured by PL through placemaking events and by increasing public accessibility to spaces. The developers recognise the importance contributing to the local community has in delivering a successful development through their aim: *“to deliver homes, but to create communities”* (ID2a, Places for People, 22/11/19). The reality of this aim in practise is demonstrated by the sales department when stating:

“PL is not an inward-facing development, it is part of Ladywood and this is why we have built community structures, such as the Park, first; thus, enabling the new community within PL to merge with the existing community of Ladywood” (IS1, 24/10/19).

Such attention given to local communities by developers is becoming of increasing relevance in new developments, as *“public bodies are becoming more aware of the importance to create communities”* (ID3, Urban Splash, 30/10/19).

Developers of PL invest great time and resources into placemaking events. For instance, Play Out ‘Til Tea was held on 27th July 2019, “to mark the completion of the public park and it attracted about 1000 people across the day, that were non purchasers” (ID4, Birmingham council, 29/10/10). Success of the event was agreed by all interviewees, proving PL to be merging with its surrounding community, even in its current early stages, and developing strong social and cultural values. Figure 7 was “created by children at the ‘Play Out ‘Til Tea’ event, who were asked what makes a good neighbourhood” (FD, Brick House Launch, 21/09/19). The role of such placemaking events in improving sense of place is studied by Richards (2017). Developers and sales representatives stated further “placemaking events are planned to be held about twice a year, but they are weather dependent as they need to be outside” (ID2, Places for People, 28/10/19); thus, proving an ongoing intention for community integration.



Figure 7: Image of a wall created by children attending the Play Out ‘Til Tea event. (Source: Author)

All community events held by PL are free to encourage participation. This is something initiated by all developers, as a result of Ladywood being “recognised as one of the most deprived wards in Birmingham” (ID1, Canal and River Trust, 10/10/19). Recently, developers have “given the start-up funds for Park Run to start near Port Loop at Edgbaston Reservoir, which is a hugely successful weekly community event” (IS2, 30/10/19). Such events enhance QOL for both the residents and community members

resulting in heightened forms of social and cultural valorisation present within the PL model.

Moreover, improving public facilities is of vast importance when attempting to heighten the sense of community in an area, as shown by the work of Zolnik et al. (2010). PL opens its spaces up to the public realm firstly through its inclusion of the public park and the waterways. The Tubeworks, “*will also be accessible to the wider general public and it will offer a place for community interaction and social gatherings*” (ID3, *Urban Splash*, 30/10/19). PL has led to a leisure centre being built just outside the PL site, that has been “*in demand for 28 years*” (IC4, 15/10/19). The provision of the leisure centre was “*delivered by Birmingham City Council and it shows our attention to placemaking across Greater Ickniel*” (ID4, *Birmingham Council*, 29/10/19). Wider public facilities help to strengthen sense of community and place, in and surrounding PL; thus, contributing to a heightened QOL, expressing significant social and cultural value.

4.1.4 Divergent Values

Interestingly, even though PL “*has put social change at the heart of its manifesto*” (ID2a, *Places for People*, 22/11/19) and thus inherently embodies attempts to establish social and cultural value through landscaping elements; there are still some community features which are left absent in PL. For instance, some local community members are:

“concerned that there are not enough community elements, for example, places of worship, secular facilities, youth clubs and so on. So, people will have to go out of the area to access such things, thus hampering community bonding.” (IC1, 28/10/19).

Such views are also supported by findings from the Ladywood Community Project Meeting (FD, *Ladywood Community Project Meeting*, 15/10/19). Furthermore, the deficiency of such elements in PL is due to “*the capacity of the existing local infrastructure being deemed suitable to currently withstand the new population of PL*” (ID2a *Places for People*, 22/11/19). Taylor (2007) shows this type of community critique to be common of most new developments. Although, in the case of PL, higher house prices due to the resultant gentrification throughout Ladywood may displace existing residents from the area (Boddy and Lambert, 2002); thus, apprehension towards PL by

these residents may be justified. Consequently, PL's instigation of such gentrification through its attempts to produce financial value warrants examination.

4.2 Financial Value of Port Loop

The creation of financial value remains to be the primary concern in PL, as with any new development, although in PL it is seen in a more equal capacity to forming social and cultural value (Bryson et al., 2009). PL's model and financial value creation demonstrate this altered perspective, by stepping away from the norm of fitting as many houses as possible onto a site to maximise financial value. Financial value generated through alternative construction methods and the unique site of PL will be addressed, alongside PL's initiation of further developments, within its own site and across Ladywood.

Consequently, PL's expected triggering of gentrification across Ladywood, creating better QOL and public facilities in the area; demonstrating a positive trajectory of regeneration and outcomes for valorisation across Ladywood, will be explored. Conclusions drawn in this section will directly correlate to RQ2.

4.2.1 Construction and Attractiveness

It will be determined why modern methods of construction (MMC) attracted the developers of PL and how housing is used as a form of value creation. Additionally, why modular houses have been developed as Phase 1a will be explained.

Modular housing, as seen in PL, is constructed offsite in a factory and later brought onto site (Alia et al., 2010). The techniques of this factory production are "*highly efficient*" (ID4, Birmingham Council, 29/10/19) specifically "*when compared to standard labour construction*" (FD, Brick House Launch, 21/09/19). The improved efficiency is rooted in increased construction speeds, due to the "*construction in the factory using lasers*" (ID3, Urban Splash, 30/10/19). Amplified speed intensifies output of modular homes and thus increases financial profits. Community members commented that "*PL has flown up*" (IC2, 22/10/19) demonstrating the visible difference to traditional construction methods. PL's "*modular homes take 1 week to make, a day to crane into place on site and a final week to finish it off and connect it up to the mains*" (ID3, Urban Splash, 30/10/19) (Figure

8). The sheer speed and consequent increased output at which a new neighbourhood can be produced from this construction style, demonstrates the increased financial value that can be produced by MMC over the same time period as traditional building techniques. The speed of modular construction is undoubtedly increased by the *“lack of delays for bad weather and there are fewer health and safety accidents”* (ID1, Canal and River Trust, 10/10/19). The minimal delays allow for increased delivery of homes to site, to meet demand, leading to increased financial value; as investigated by Gorgolewski (2008). Furthermore, modular homes reduce environmental costs, as *“modular involves less trips to site to drop off materials”* (ID2, Places for People, 28/10/19), furthering efficiency of MMC, and thus growing developer’s attraction to these methods.



Figure 8: Image of modular homes being craned into place. (Source: Moore, K. (2019) [Online] [Accessed 10/10/19] Available from: <https://www.birminghamupdates.com/first-of-40-modular-homes-installed-at-icknield-port-loop/>)

A result of the efficiency of MMC, is the quality and consistency of the homes produced. The quality is achieved through a rigorous process:

“each part of the houses is on a rung for 13 hours and if any issues get spotted, they are logged. At the end of the month these issues get reviewed and then fixed. Nothing like this happens in standard buildings, as the tradesmen only have their

own part to do and will be on a new site in a week, so they don't care about the finish" (ID3, Urban Splash, 30/10/19).

Quality control implemented in MMC is widely examined by literature, such as the work of Lopez and Froese (2016). Many residents of PL commented that they would recommend the development to others based upon *"the quality and size of the homes"* (IR1, 9/11/19); thus, demonstrating how quality attracts buyers to PL and by extension, greatens the financial value of the development. Another incentive for the purchaser is the bigger homes for their price point, offered by the modular builds, as it can be seen by the purchaser that they are getting a better deal financially; thus, contributing to the financial value of PL.

In regard to PL, *"Urban Splash have bought their own factory for modular construction, however modular housing is all about quantities of scale and currently the factory is only running at a quarter capacity, so it has great potential"* (ID3, Urban Splash, 30/10/19). Therefore, if a greater volume of homes were being produced, it would massively reduce the cost of construction; as explored by the work of Leite (2016). The higher price of PL modular homes on the housing market, as set out by the developers, has led to their place in Phase 1a. This agenda was outlined by the sales department:

"Modular is one of the more expensive phases and so they have been built in Phase 1 to gain profit into the development, which will help fund other phases (IS2, 30/10/19).

Subsequently, PL's further strategies for financial viability will now be unpacked.

4.2.2 Financial Viability of Port Loop

Financial viability of PL is largely reliant upon the unique nature of the site. The distinctive features of the site will be unpacked by exploring its history, proximity to the city centre and the abundance of water and green spaces in the site.

PL utilises the site's history as *"a former brownfield industrial site"* (ID4, Birmingham Council, 29/10/19) to its advantage. The development plans to reinstate some of these former industrial buildings as commercial spaces (Tubeworks). Thus, aiming to minimise the higher redevelopment costs of brownfield sites over greenfield and make the project

of PL financially viable. Raco and Henderson (2006) encourages such development upon brownfield land and explores its advantages for urban development.

PL's prime location being just a *"15-minute walk down the canal to the city centre"* (IR2, 9/11/19) is seen as a big draw factor for PL by the interviewed residents. Consequently, showing the premium PL can charge, due to its in-demand location; thus, exemplifying the financial viability of the development. The work of de Groot et al. (2015) examines the heightened value of city centre urban development due to its location, proving city centre locations directly correspond with augmented financial value. As a result of the *"large scale of the PL site"* (ID3, *Urban Splash*, 30/10/19), the potential value of PL's location is dramatically increased. Property prices and financial value of PL are further heightened due to the *"vast amounts of water in and surrounding the development which separates PL from many other developments"* (ID2, *Places for People*, 28/10/19) as studied by Cho et al. (2006). Just as, the inclusion of added green spaces (Jim and Chen, 2010) and proximity to public parks increases property prices (Crompton, 2007). Such communal spaces offer their own contribution of financial value (Mell et al., 2013) as well as added social and cultural value; which is *"something buyers are willing to pay a premium for"* (ID2a, *Places for People*, 22/11/19). The inclusion of the communal spaces demonstrates PL's commitment to improve the wider existing community, these improvements' contributions to increased financial value within the PL site and beyond require exploration.

4.2.3 Spatial Gains

Spatial gains achieved by PL in relation to the financial value created will now be considered, in respect of both the masterplan of PL and the Greater Icknield Masterplan. The masterplans open up suggestion for new waves of development across Birmingham, with similar motives, to create added value. The possible challenges facing these developments will also be considered.

The masterplan of PL (House, 2020a), is *"based upon the shared vision to create a high-quality, family oriented, sustainable and mixed-use, waterside neighbourhood by 2025"* (ID4, *Birmingham Council*, 29/19/19). All developers agree that the masterplan maintains

“the flexibility to be altered due to demand” (IS1, 24/10/19). The adaptability of the plans to cater for the economic climate will no doubt be crucial to creating financial value and aiding the success of PL. Investigations into the importance of malleability in planning have been conducted by researchers such as Bullivant (2012) and Bouten (2008).

PL fits into a bigger picture within the local area, as it is a part of the Greater Icknield Masterplan. The Greater Icknield masterplan has opened a corridor of development within Birmingham and is anticipated *“to provide a catalyst to wider regeneration activity” (Birmingham Council, 29/10/19)*, consequently increasing financial value throughout the locality, as well as within PL’s site into the future.

4.2.4 Future Prospects for Port Loop

While PL is largely focused upon creating financial value and subsequent profit, through the valorisation of housing alongside elements such as PL’s location adding to the value of the site. Financial value still remains as a subliminal aim; with the greater focus being upon developing social and cultural values.

Subsequently, there remains ways in which PL could further maximise its financial value. For instance, other developers aim to extract the greatest value of the site by taking the approach of *“its’s easy to cram as many houses as possible onto a site” (ID3, Urban Splash, 30/10/19)*; but such an approach goes against the motives of PL. PL could obtain greater financial value from wider regenerations instigated by the development. Moreover, the extent to which PL can maximise its financial value is dependent upon whether PL offers an alternative model of development, which will be explored in the following section. If PL is deemed an alternative model, the developments individuality will increase financial value.

4.3 Port Loop as an Alternative Model of Development

As highlighted throughout the research, PL differs greatly from traditional models of urban development. The extent to which PL offers an alternative model of development, which may set the precedent for future developments, and the forms of valorisation the

model upholds will be addressed. Key aspects of the model instigating change will be examined, followed by challenges facing the model. The findings displayed in this section correspond to RQ3.

4.3.1 Is the Model of Port Loop New or Not?

When seeking the confirmation on the individuality of the PL model, a re-evaluation of the literature on new developments must be undertaken, whilst examining similar developments to PL.

PL follows the development of New Islington, Manchester, which similarly features:

“a large proportion of modular homes, in a heavily deprived area, closely linked with canals; and built in joint venture (JV) with similar developers including Urban Splash, the Canal and River Trust, Manchester City Council and then Great Places, who have a similar agenda to Places for People” (ID3, Urban Splash, 30/10/19).

Consequently, great parallels from the Manchester development and PL can be drawn. It was noted from the Brick House Launch that *“New Islington was 20 years in the making and is now finished, so has provided good lessons for PL to learn from” (FD, Brick House Launch, 21/09/19).* For instance:

“there were complaints from residents that people could see into their homes from the towpaths, and so they kept their curtains closed which made it look as though the development wasn’t inhabited. So, PL has included spaces between the houses and towpaths, to avoid this” (ID1, Canal and River Trust, 10/10/19).

PL’s echoing of New Islington allows the argument that PL isn’t a new model to be formed. However, PL has advanced from its predecessors’ mistakes, consequently suggesting it to embody a new model of development. There are further examples of similar developments to PL created by one or more of the PL developers, in JV (see Supplement 6.1).

A determining feature of PL, setting it apart from models of volume housebuilders is *“PL’s concentration on using different housing models from the norm” (ID2, Places for People, 28/10/19).* The modular housing offers *“huge layout choice, as there are 72*

different combinations, whereas with the more traditional Brick Houses, there are only 2 options” (IS1, 24/10/19); such internal changeability is studied by Doe and Aitchison (2015). Consequently, PL’s flexibility “*allows the properties to be adapted as occupier’s circumstances change, therefore offering PL as a lifetime house*” (ID3, Urban Splash, 30/10/19). Additionally, aesthetic features of “*the large windows, gallery type floors and high ceilings*” (IR2, 9/11/19) are elements agreed by residents to distinguish the homes. The amalgamation of these modular features contributes to PL offering an alternative model of development. Moreover, Brick Houses and the apartments cater for buyers looking for “*more traditional homes, even the apartments have a CLT frame but are being fitted out in the traditional manner*” (IS1, 24/10/19). Inclusion of Brick House is not necessarily an innovative addition to the PL model, but Brick House combined with modular houses and CLT apartments creates a new mix of housing types, adding value and innovation to the site, that is indicative of a new model of development.

In relation to PL’s communal green spaces, it can be argued:

“they are not a new model, because they reflect the green squares of London, where people use the spaces when children want to kick a ball about or people want to have a BBQ, because people don’t want to pay for a private garden that they barely use” (IS2, 30/10/19).

However, “*the issue with public green squares is that the spaces are not animated, so this is something we tried to correct in PL*” (ID3, Urban Splash, 30/10/19). PL’s communal green spaces may be unoriginal, but PL’s adaptations of the features from an existing model, suggests PL’s model is alternative, because the combination of communal green spaces in residential developments, rather than the qualities of the spaces, offers a relatively new model in the UK (Boddy, 2007). Tubeworks offers commercial space, which is generally an afterthought in traditional developments, furthering social and cultural value from traditional developments (Boddy, 2007).

PL’s creation heightens land value, which is typical of the UK market (Davidson and Lees, 2005). Resultantly, activating change throughout Ladywood by a form of gentrification, coined by Boddy and Lambert (2002) to be residentialisation. The ways in which PL creates these changes will now be explored.

4.3.2 Elements of the Port Loop Model Activating Change

In considering how the model of PL has instigated change, the areas of PL's creation through JV, PL's interaction with the local community and PL's unique scale all need to be scrutinised. Prior to PL Ladywood was deprived, however PL will lead to improved QOL for everyone in the locality through provision of new commercial opportunities and public facilities. As it stands PL offers a positive trajectory of regeneration across Ladywood and a range of positive outcomes from PL in the future, leading to various forms of valorisation, is expected.

Urban Splash resonates with *“the business model of Places for People which is non-profit driven, profit that is made is pumped back into the company; unlike many other housebuilders, for example Barrat Homes, who have to give money back to their shareholders” (ID2 Places for People, 28/10/19)*. Consequentially, providing reasoning behind their strongly orientated actions towards creating social and cultural value within PL. Resultantly, *“PL demonstrates what people can do in Partnership” (ID2, Places for People, 28/10/19)* and it is agreed by all developers and sales representatives that *“working in partnership is a key to PL's success and it has allowed much to be achieved in a very short space of time” (ID1 Canal and River Trust, 10/10/19)*. The JV demonstrates how value creation has occurred within PL through the pooling of ideas and resources from all concerned parties. Similar processes explain the creation of the PL's alternative model, as all parties' opinions were heard regarding a multiplicity of viewpoints and amalgamated together to develop the model. The JV also shows premise of how future regeneration will be maintained and additional value added the PL.

Initially, community engagement was achieved by PL through public consultation involving:

“a number of events during 2011/12 that were in preparation of the initial planning application. These events helped shape the initial masterplan for PL, which was formulated by URBED” (ID4, Birmingham City Council, 29/10/19).

Preliminary consultations included *“a lot of community engagement, in which development was generally supported” (ID1 Canal and River Trust, 10/10/19)*. However, expectedly *“some community members were apprehensive to start with,*

because locals generally see developers as out to make money and not engage with them” (ID3, Urban Splash, 30/10/19). Community engagement was also achieved through “good social media content and updates, with on-going opportunity to visit the showroom” (IC5, 15/10/19). Such engagement has been essential to the success of PL creating meaningful value and change for the wider community, as demonstrated by the work of Chavis and Wandersman (2002). Presently, “community engagement continues by way of events, open days and drop in sessions” (ID1, Canal and River Trust, 10/10/19). Community engagement is expected to continue to grow with the development and in return so will PL’s role in promoting positive change and value creation.

The scale of PL has been pivotal in creating positive change, as demonstrated by Urban Splash’s remarks:

“PL has the scale to address the ideals of creating a community and to generate social benefits brought to the area. For example, economic improvements, jobs, health and wellbeing, which are all becoming more important in development. There simply aren’t enough people to create impact and change in smaller developments.” (ID3, Urban Splash, 30/10/19).

The impacts scale of developments can have upon contributions to wider society is studied further by Swyngedouw et al. (2002). PL’s scale provides ample opportunity for value to be created into PL’s future, implying there are only negligible obstacles which could impede PL’s success. Such marginal barriers to success will now be examined.

4.3.3 Challenges of the Port Loop Model

Issues facing PL will be assessed by looking at community integration, PL’s schedule and comparatively at developments with similar MMC to PL. However, positive trajectories predicted for the PL model, as outlined by this research, imply PL to be overcoming said challenges and to present a positive process of transformation which contributes great value as a model of development.

Although PL’s engagement with the local community created change, interaction with the community is of equal challenge to the PL model. Some of PL’s residents commented on feeling *“currently excluded from the activities of the community of Ladywood” (IR2,*

9/11/19). Oppositingly, other residents feel they have been welcomed into the community as they *“have been contacted by the Summerfield residents’ community and attended a few local events”* (IR3, 12/11/19). Developers have *“seen more people, both residents and community members, attending local events”* (ID1 Canal and River Trust, 10/10/19). Varied community interaction insinuates that individual preference dictates engagement with the local community, rather than the PL model restricting interaction.

PL’s building schedule presents a challenge to the model’s success, as the sales team remarked:

“If we could go back, we could have brought forward the cheaper apartments sooner, as they might have attracted a different audience and could have appealed more to the local community” (IS1, 24/10/19).

Realising such actions would have improved initial social and cultural values of PL. Consequently, community members feel cheated, as *“we were told there was to be social housing included and as of yet, no social housing has gone up”* (IC4, 15/10/19). It must be taken into account that the building schedule is a short-term issue, to be resolved through PL’s completion.

MMC is growing within urban development, but there remains a lack of knowledge surrounding modular homes, as demonstrated by one of the first modular developments, Oxley Woods (Architects’ Journal, 2014). Oxley Woods experienced severe issues such as flooding which would deem the project a failure (Architects’ Journal, 2014). The feature of MMC in PL showcases growth of trust and confidence in the method, but there remains uncertainty over how modular will develop. Upton, Northampton exhibits challenges over knowledge transfers, as the development was based upon sustainability, but after the initial residents who held information on how Upton should be used vacated, this knowledge was lost (Horner et al., 2007). Raising speculation that the values of PL may be lost once the first wave of residents move out, if a conscious effort is not made to instil PL’s principles in the wider community.

Underpinning all the challenges currently facing the PL model, is *“PL being only onto the Phase 2 of the development, with only a handful of residents having moved in; the*

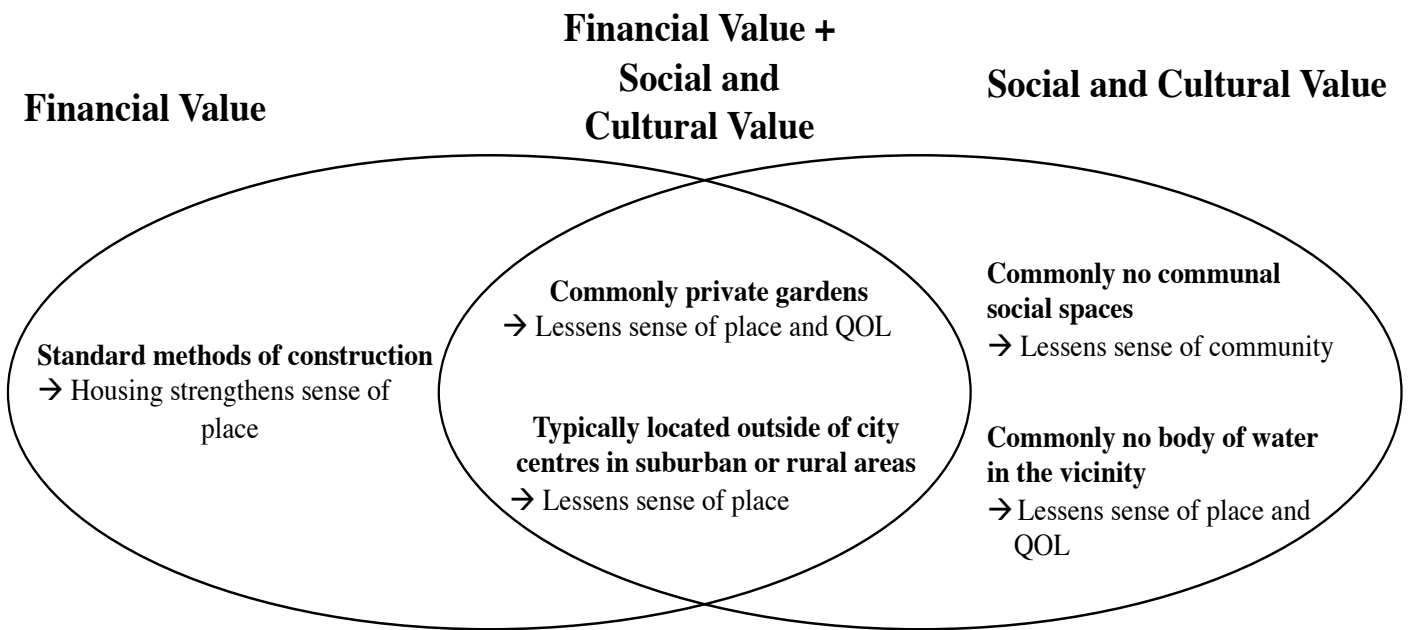
earliest of which was in August 2019” (IR, 9/11/19). The incomplete construction of PL is currently hindering the development of a strong sense of place and community; however, nothing raised in this research suggests PL to be at risk of failing. Within 5-10 years PL is expected to have significantly impacted Ladywood through transforming a derelict space into a new part of Birmingham city; thus, creating greater liveability, QOL and social and cultural value.

4.3.4 Intrinsic Principles of the Port Loop Model

In summary, whether PL offers an alternative model of development is somewhat contested. This is largely due to PL gathering many of its ‘new’ ideas from other developments, such as New Islington. Although, PL takes inspiration from such developments, it is the way in which PL has adapted their ideas and coalesced different elements together, which sets PL apart from traditional models. Consequently, PL is classed as an alternative model of development.

When referring back to the diagram of Figure 2 featuring the research framework, in comparison with the matured diagram of Figure 9, developed from the research findings; the progressions made by PL to define itself as an alternative model are highlighted. Themes of value in relation to sense of place and community showcased throughout the literature, confirm the attention PL has given to developing social and cultural value is uncommon for new developments. Moreover, the value created by PL is not only for its residents but will impact the wider community of Ladywood through the consequential gentrification. It is advised, from the observed successes of the PL model that the principles of the model are something that should be upheld and carried forward into future developments.

Traditional New Build Developments



Alternative New Build Developments

Such as Port Loop

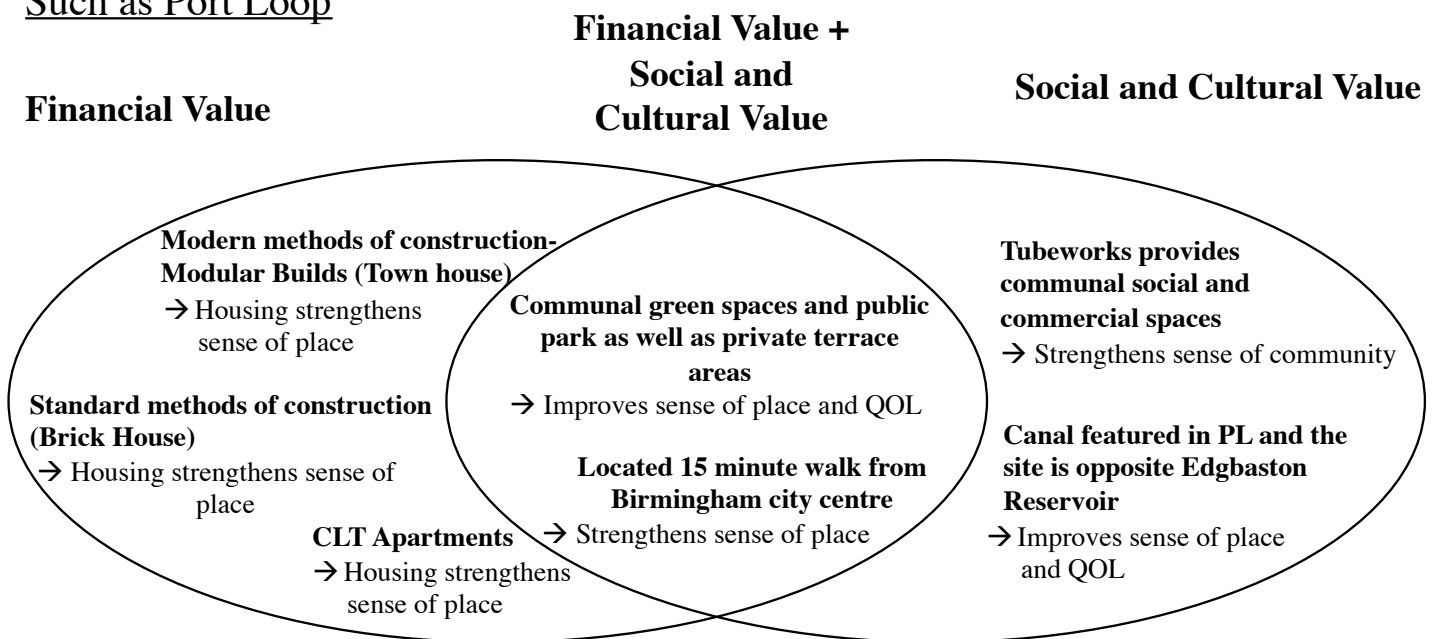


Figure 9: Maturation of Figure 2, demonstrating PL embodying an alternative model of development in comparison to traditional models of development. (Source: Author)

5. Conclusion

Referring back to the research aim of investigating the financial, social and cultural values of the PL development and assessing the extent to which it differs from traditional new build developments as produced by volume housebuilders; and RQs (Table 3), it is determined that PL offers an alternative model of development. Such classification is due to PL's advanced social and cultural value, alongside significant contributions to financial value within its site and into the wider community; that differs greatly from traditional new build developments.

Table 3: Table of stated research questions. (Source: Author)

	Research Questions
1.	How does PL offer a new interpretation of social and cultural value in the built environment?
2.	What are the impacts of maximising financial values on the built environment in PL?
3.	Does PL display an alternative model for new build residential developments?

This paper contributes to research on large scale, volume housebuilding, the future applications of MMC as well as studies of sense of place. The findings of this research will be an asset to all developers of PL, but each will use it differently. Additionally, findings will contribute to existing literature on new developments whilst providing new direction for the discourse. There has there been very minimal research undertaken on the development since construction of PL began, especially in relation to community and new resident opinions and so this research offers understanding of the development across all stakeholders. The research provides insight into aspects of PL which may provoke challenges, especially integrating PL within the existing community. The research findings suggest use of alternative models should become more prevalent throughout urban development, resultant of current and expected future success of PL. Consequentially, the research highlights that greater research is needed into alternative models of development to promote a positive future for urban development.

5.1 Research Questions

Reflecting upon the RQ1, PL provides a new interpretation of social and cultural value through PL's unique combination of communal green spaces, public parks and commercial spaces; alongside the activation of the canal spaces. The modular homes attract a different clientele which in turn develops a different variation of social and cultural value. Community placemaking events alongside public infrastructures featured in PL offer increased social and cultural value for the wider community of Ladywood. The value created in PL can be transferred into similar, future new build developments. In regard to RQ2, it is clear that PL still has a focus on creating financial value, whilst this may not be the developments priority, as it would in traditional developments. PL aims to maximise financial value through its array of housing types as well as added financial value in housing prices, through enhancing green and social spaces. Modular homes are high quality, quick output and cost effective when created on mass, as Urban Splash intend. These alternative methods of construction have altered the appearance of the built environment into a more diverse landscape. Finally, when considering RQ3 the findings of this study have made it explicitly clear that PL exhibits an alternative model of development. Whilst the elements featured in PL may not be new innovations, the combinations used to create the development of PL is alternative.

5.2 Limitations, Further Enquiries and Recommendations

There are multiple limitations to the research, the most prominent being the early stages of the development limiting the scope of the research to look to future successes of the development as these are only speculative. For further limitations of the study see Supplement 6.3. Consequently, when considering future avenues of enquiry, it would be prudent to re-examine PL under the framework of valorisation once the development has been completed (2025). A longitudinal study of the value of PL could then be developed to establish the success of the alternative model. Thus, allowing an assessment of how the adaptations to the PL masterplan have altered the value. It should be assumed that adaptations to the model will have minimal impact to the principles of the development, unless PL faces major unpredicted issues over the years to come. See Supplement 6.4 for extended recommendations.

6. Supplement

6.1 Similar Developments to Port Loop

As discussed in the main body of the research, New Islington, Manchester is the development which possesses the most similarities to PL. However, there are other developments across the UK which bode similarities to PL, which will be discussed in this first supplementary section.

Smith's Dock in North Shields began in 2017, after New Islington was underway, and showcases similarities to PL through its implementation of Town House modular builds alongside other modular models (Urban Splash, 2020a). Smith's Dock is also built in joint venture (JV) with Urban Splash and Places for People, offers communal spaces, waterways integration and city location (Urban Splash, 2018). Smith's Dock incorporates lessons learnt from New Islington but also offers an example for PL to learn from (Urban Splash, 2018).

Looking to developments in the future, Campbell Park in Milton Keynes closely resembles PL's principles, through its creation in JV with Urban Splash, Places for People and also Crest Nicholson (Urban Splash, 2020b). Similarly, Campbell Park mirrors PL's implementation of modular housing, communal spaces and city location, but the development lacks waterways (Urban Splash, 2020b). Campbell Park is still to be completed and so offers the opportunity to build upon the successes of the PL model and implement any lessons which are learnt from PL (Urban Splash, 2018).

The qualities demonstrated by the similar developments to PL strengthen the argument of PL as an alternative model of development; under the reasoning that PL has evolved elements from existing models and combined them in a new way to offer an alternative model.

6.2 Methodology

Justifications of the research design and utilisation of interviews, the field diary and quantitative analysis of Canal and River Trust questionnaire data, exhibited throughout the research will now be unpacked.

6.2.1 Research Design

The research framework of examining the valorisation of PL alongside debates of traditional versus new developments has been laid out in the literature review, forming a contextual background for the research within academic debate.

The case study approach to studying PL is utilised due to PL's contemporary nature and current lack of academic study on the development. Utilising a case study approach allows for a detailed and holistic understanding of the value of PL (Hardwick, 2016). The case study compliments the usage of such theoretical concepts of valorisation, as well as the qualitative methods of interviews applied within this research (Hardwick, 2016). Moreover, studying the case of PL allows for the generalisation of research findings to other UK new build developments (Yin, 2014). However, there are complications associated within generalising findings, due to circumstances differing across spaces and geographies; thus, creating variants in opinions and landscapes in other new developments (Yin, 2013). Consequently, only broad principles from the research findings are suggested to be carried into future new developments, such as PL's unique combination of multiple landscaping elements to add value.

6.2.2 Data Collection

Interviews are the predominant source of data collection conducted throughout this research. Semi-structured interviews were utilised to collate primary data, due to their ability to ask specific questions whilst maintaining freedom from the participant to provided added information when answering (Marshall and Rossman, 2014). Subsequently, the interviews collated vast quantities of data with great variance and depth; thus, allowing for new insights into PL to be uncovered (Marshall and Rossman, 2014). Interviews also allow emotions to be represented within the data, which was especially useful when examining the emotive opinions of community members and new

residents towards PL (Clifford et al., 2016). However, a key limitation of interviews involves interviewees unconsciously providing answers they think the researcher desires; due to being officially asked upon a specific topic causing their cultural and socially constructed ways of answering to ensue (Diefenbach, 2009). Therefore, it should be noted that it is impossible to conduct a neutral investigation, free of such stereotyping (Diefenbach, 2009). Nevertheless, in the context of this research, unearthing these layers of cultural scripts in the different stakeholder groups allows for stigmas relating to new developments and differentiating models of development to be studied, creating an added layer of analysis.

Interview participants were collated via numerous methods, primarily of an opportunity sampling strategy (Cloke et al., 2004). Developers and sale representatives were contacted through email and telephone correspondence in order to arrange interviews (Kemper et al., 2003). Community members of Ladywood were firstly contacted through Facebook groups such as 'Ladywood Community Project', due to their status as a hard-to-reach population (Dusek et al., 2015). From such correspondence, the researcher was invited to attend a community meeting, where further interviewees were obtained. Gaining interviews from new residents of PL proved most difficult, due to the minimal number of residents occupying PL at the time of the research. Consequently, after numerous attempts to contact residents through PL events days and social media platforms, the most effective strategy resulted to be door knocking on the inhabited homes to gain interviewees (Davies, 2011). Such methods achieved three out of a possible ten residents as participants. Utilising such a range of sampling approaches allowed for a representative sample of all PL stakeholders to be obtained (Kemper et al., 2003).

Upon gathering participants, face-to-face interviews were conducted involving questions specifically tailored to the interviewee and that related back to the RQs (see Appendix 1). Each interview was recorded, following consent, and lasted approximately 40 minutes. All interviews were conducted in locations that were familiar for the interviewee, to ensure all participants felt at ease, allowing for honest answering (Flowerdew and Martin, 2005). Such locations included the offices of the developers and sales representatives and the community centre, for community members. In regard to the new residents, one

resident interview was conducted inside the resident's home, whilst door knocking. Meanwhile, letters were posted through the doors of the remaining inhabited new resident homes, containing links to the interview questions (see Appendix 2). The letters allowed questions to be answered either through scanning a QR code to a google form of the questions, or through a web link provided, the questions were also typed in the letter which residents could answer via email. All interviews were later transcribed ready for coding.

Alongside interviews, a field diary was completed during the course of the research, to collect primary data and allowing for immediate accounts of events and opinions in the field to be conveyed (Punch, 2012) (see Appendix 3). Minimal quotes are used from the field diary within the research analysis, to preserve the line of argument to be one of expert opinion. However, the field diary is used where applicable, to showcase observations which support the line of argument.

Finally, raw quantitative secondary data provided by the Canal and River Trust features within the research. The data was collated by the Canal and River Trust as part of their 'Assessing the wellbeing impacts of waterways usage in England and Wales' report through questionnaires completed by passers-by of canal towpaths, as an opportunity sample. Details of the research design were provided by Canal and River Trust economists. Such quantitative data allowed for statistical verification of the linkages between waterways and wellbeing (Matthews, 2013). However, a weakness of secondary quantitative data is that there remains uncertainty surrounding any obstacles that were encountered through the data collection and how these were overcome (Kitchin and Tate, 2013).

6.2.3 Data Analysis

Thematic manual coding of the collated interview and field diary data was conducted. Such coding allowed for over 40 key descriptive themes to be identified within the data, through highlighting and colour coding frequently mentioned words and phrases (Clifford et al., 2016). The emerging themes were then grouped into larger analytical debates (Clifford et al., 2016), which related to RQs 1-3 accordingly; being social and cultural

value of PL, financial value of PL and PL as an alternative model of development. Within the 3 debates, 12 sub-themes were identified, and key issues raised were analysed within them. Analysis through coding under such themes allowed a deep understanding of the valorisation of PL to be developed, which was utilised to unpack the argument of PL embodying an alternative model. However, manual coding results in a small selection of the collated data featuring in the data set (Alvesson, 2003). Said limitation is in consequence to manual coding being reliant on the researcher's subjective discretion to interpret which data is useful and significant, rather than it being numerical fact (Pyett, 2003). Therefore, researcher bias may sway the outcome of the findings (Pyett, 2003).

Contrastingly, the quantitative questionnaire data, provided by the Canal and River Trust was independently analysed by the researcher. The statistical analysis allowed for percentages to be obtained, which consisted of canal tow-path users' overall life satisfaction in correlation with their usage of the towpaths. Additionally, percentages of users with highest levels of wellbeing in relation to their usage of the towpaths were developed. Percentage data was utilised to provide an further support and insight into the linkages between waterways interaction and wellbeing; thus, adding depth in a secondary element of the research. Obtaining percentage data was conducted in line with other studies examining linkages to wellbeing, such as the work of Albrecht and Ramasubramanian (2004) which examines accessibility to health services and wellbeing.

6.2.4 Ethics

Participant anonymity was maintained through all interviews and field diary entries, to abide by ethical practise (Longhurst, 2003). Anonymity was ensured by all participants being assigned a code representing the stakeholder group they belong to, in replacement of their name (Longhurst, 2003). Furthermore, consent from all participants was obtained prior to partaking in interviews and field diary data collection; as well as for interviews to be recorded (Madge, 2010). All participants were informed that they had to right to withdraw from the research at any time, without providing reason (Madge, 2010). Moreover, all participants were offered a copy of the research findings, to ensure they were aware how their data was being utilised (Flowerdew and Martin, 2005).

6.3 Limitations to the Research

A key limiting factor to the research is the development of PL being in its early stages and so it is not currently completed. Subsequently, the examination of the value of PL and its assessment as an alternative model of development primarily focuses upon the elements of the development that are currently completed and planned future elements. The future of the development is speculated upon from the current findings. Therefore, demonstrating why further enquiries into the value of the development upon its completion would be advantageous. However, this apparent limitation allows the model of PL to maintain an aspect of adaptability and so PL has the premise to change and incorporate the findings of the research to better the development.

Other limitations to the research include a restricted sample size (Secor, 2010), particularly of the new residents due to only ten having moved into PL at the point the research was conducted. Nevertheless, having gathered three out of ten possible residents, it was deemed the sample size to be significant at around a third of the inhabited population. Moreover, in regard to the quantity of participants gained from each developer, it may be thought the research offers a restricted sample size. However, due to the research having gained interviews with senior members on PL of each developer and their agreement to speak on behalf of their organisations, the sample is representative of each organisation and so has overcome this issue.

The positionality of the researcher as an outsider to Ladywood and having extensively researched PL before conducting the interviews poses another limitation, as such factors may have influenced the conclusion drawn from the research. Although the research has endeavoured to remain neutral and maintain objectivity (Tarrant, 2013).

6.4 Extended Recommendations

Alongside reconducting the research upon PL's completion, developers are recommended to maintain a close relationship with and awareness for the existing community of Ladywood. Although the resultant gentrification triggered by PL will be to the benefit of all in regard to public infrastructures; it will also result in heightened house prices, which may drive some existing residents from their homes. Therefore, developers are advised to keep an awareness of such negative side effects in mind when approaching the existing community in future engagement activities.

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Appendices

Appendix 1

Appendix 1: Samples of interview questions put to each stakeholder group.

	Developer Interview Questions
1.	How does PL differ from traditional new build developments? – when creating the development were you conscious to make PL different from the norm of traditionally built houses with private gardens?
2.	In the process of constructing PL has the developer- community relationship been? – is it harmonious?
3.	Do you feel the existing community of Ladywood has embraced PL?
4.	Do you feel the inclusion of the canals has played a big part in the success of PL, have buyers commented on the inclusion of water?
5.	What aspects of PL would you change given the opportunity? -More social spaces? commercial spaces? Less residential or more? Different building schedule?
6.	How does PL plan/ aim to integrate with other developments as part of the Greater Icknield masterplan?

	Sales Representatives Interview Questions
1.	What is the age range/ background of the majority of the PL buyers?
2.	In the process of constructing PL has the developer- community relationship been? – is it harmonious?
3.	How has PL aimed to include the existing community of Ladywood?
4.	How does PL aim to differ from traditional new build developments?
5.	What aspects of PL would you change given the opportunity? -More social spaces? commercial spaces? Less residential or more? Different building schedule?
6.	How does PL plan/ aim to integrate with other developments as part of the Greater Icknield masterplan?

Community Member Interview Questions	
1.	Have you visited PL or been involved with any of its placemaking events/ consultations?
2.	Do you feel the existing community of Ladywood are embracing PL?
3.	Have you seen improvements/ changes across Ladywood since PL's construction?
4.	Do you feel PL is attempting to successfully integrate well with Ladywood?
5.	In the process of constructing PL has the developer- community relationship been? – is it harmonious?
6.	What aspects of PL would you change given the opportunity? -More social spaces? commercial spaces? Less residential or more? Different building schedule?

Resident Interview Questions	
1.	What attracted you to live at PL?
2.	Did PL attract you to Birmingham, or were you already looking to live within Birmingham?
3.	Do you feel PL has improved the area of Ladywood?
4.	Do you feel included as part of the local community being a new resident of PL?
5.	What aspects of PL would you change given the opportunity? -More social spaces? commercial spaces? Less residential or more? Different building schedule?
6.	What are your opinions on the modular housing over traditional housing?

Appendix 2

Appendix 2: Letter distributed to homes of new residents of Port Loop, if they did not answer the door for a face-to-face interview.



Dear Resident of Port Loop,

My name is Nicole Parkes and I am a third year Geography Student at the University of Birmingham conducting my dissertation research. My dissertation is aiming to determine the value of Port Loop through assessing the financial, social and cultural values of the recently developed neighbourhood and whether Port Loop offers an alternative model of development from traditional standardised new builds.

For the purpose of my research financial value will constitute of monetary wealth added to and created within the project, for instance Port Loop's efficient building allows money to be saved on traditional building delays. Social and cultural value will consist of adding to the culture of the area and sociability of the space, such as communal green spaces featured in the development. The development of Port Loop will be referred to as PL.

Additionally, if more than one person lives in the home, it would be greatly appreciated if all members of the household could respond separately to gain the largest sample possible for my study.

I would really appreciate any information and perspectives you have on the development, as this is crucial to my research. Thank you for your help.

Ethics:

All responses will be securely stored and kept anonymous, so names and addresses of participants are not required. If you wish to have the finished findings of my investigation shared with you, or if you have any further questions, please email:
nxp786@student.bham.ac.uk

To Complete my questions, you can either (all methods lead to the same questions):

Scan the QR code below with any smart phone camera, which will take you to the internet link to fill out my survey online.



Or, go to this web link to complete my survey online.

<https://forms.gle/J9UT4wYqzRyCFLTEA>

(Please Turn Over)

Or, fill out the questions which are typed below and then email over your answers or email over pictures of your written answers to nxp786@student.bham.ac.uk

1. Age Group:
18-34 35-54 55-74 over 75
2. Occupation:
3. What attracted you to live at PL?
4. Did you consider other new build homes before choosing PL?
5. Did PL attract you to Birmingham, or were you already looking to live within Birmingham?
6. Would you recommend living at PL to others?
7. Do you feel PL has improved the area of Ladywood?
8. Do you feel the existing community of Ladywood has embraced the project? → have they interacted with PL so far? Eg: play out till tea?
9. Do you feel included as part of the local community being a new resident of PL?
10. Do you think there should be more developments like PL?
11. How do you feel PL differs from traditional new build developments? Do you like these differences? Eg: communal green space, modular housing
12. What are your most used aspects of PL? - green spaces, the location?
13. Do you feel the inclusion of the canals has played a big part in the success of PL, did the inclusion of water attract you to the development?
14. What aspects of PL would you change given the opportunity? -More social spaces? commercial spaces? Less residential or more? Different building schedule?
15. What are your opinions on the modular housing over traditional housing?
16. Do you feel PL integrates well with other new developments in the area? Eg: new leisure centre?
17. Do you feel the model and principles of the development of Port Loop are something that should be carried forward into future new build developments?

Any Further Comments:

Appendix 3

Appendix 3: Sample of Field Diary, an extract from the Brick House launch event.

Brick House Launch Day - 21/09/2019

- 37 brick houses left

Modular Builds - Town House:

- 40 houses, about 8 left
- supporting walls all outside allowing for easier internal modification without steel beams - can't move bathrooms or kitchen due to electricity/ water/ gas supplies
- modern methods of construction mmc:
 - higher quality
 - more efficient
 - timber frame- sustainability

Commercial Spaces:

- big brown buildings - Tubeworks
 - trying to keep the heritage and character of the buildings
 - will be made as commercial space
 - film studios
 - independent cafes
 - possible micro-brewery

PL

- developing a community feel- added social value
- going back to older times when kids can play out in the gardens and neighbours having bbqs together and going round for drinks
- all houses have a terraced area and then shared green space
- all looking round were late 20s early 30s about 20 people attended the show home between 11-1:30
- everyone very positive towards PL, all really like the development, received no negative feedback when talking to people looking round
- people particularly liked the big houses and open plan spaces, with large windows and balconies