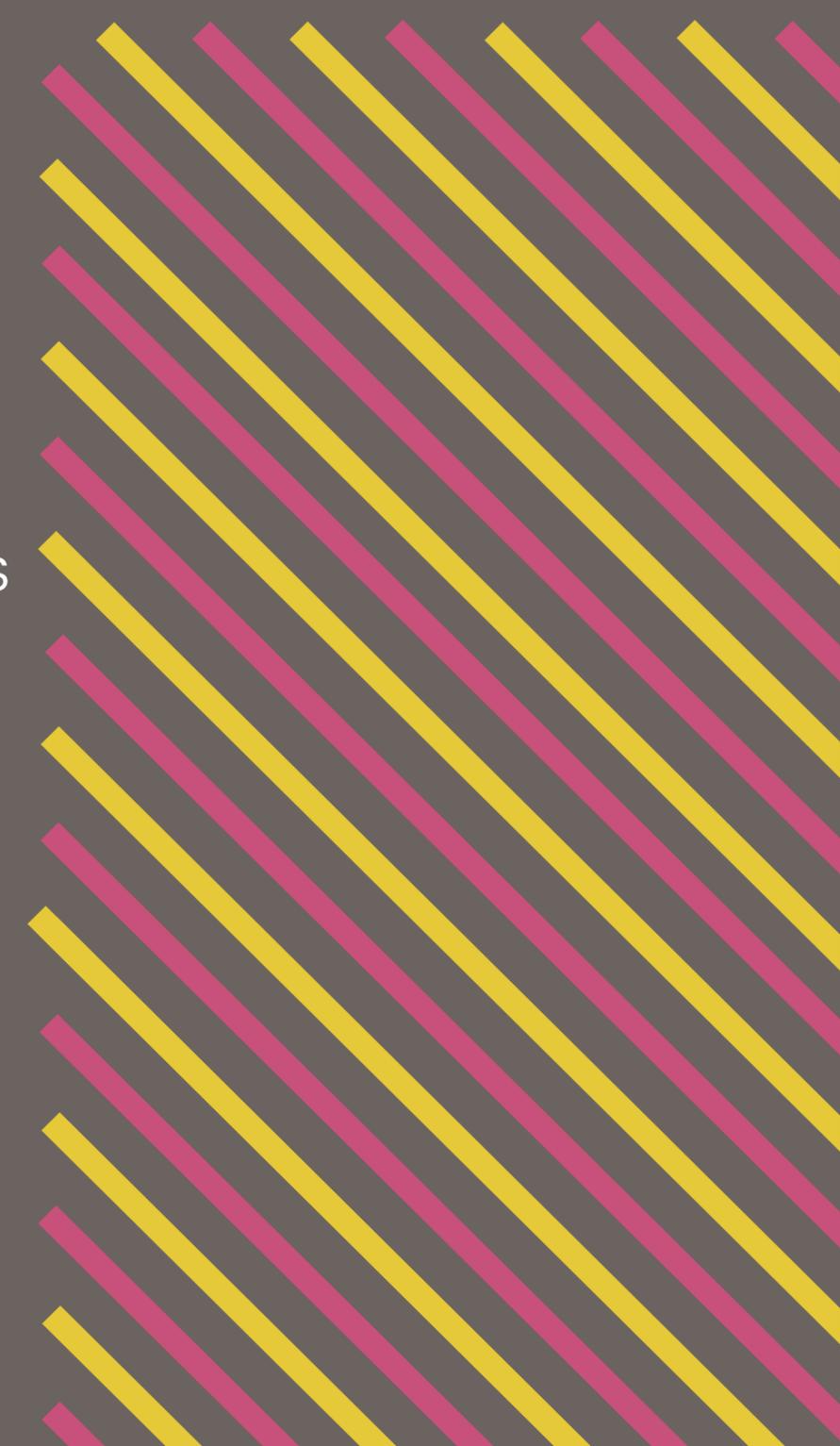


UNIVERSITY COLLEGE LONDON
FACULTY OF THE BUILT ENVIRONMENT
BARTLETT SCHOOL OF PLANNING

MAJOR PROJECT
FROM NON-PLACE TO THIRD PLACE:
RE-APPROPRIATING PRIVATELY MANAGED
PUBLIC SPACES IN INTERNATIONAL BUSINESS
DISTRICTS FOR PLAY

SAFEER SHERSAD
WORD COUNT: 7996
SUPERVISOR: PROFESSOR PETER REES

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE IN URBAN DESIGN AND CITY PLANNING



**UNIVERSITY COLLEGE LONDON
FACULTY OF THE BUILT ENVIRONMENT
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DISTRICTS FOR PLAY**

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Being a Major Project in Urban Design and City Planning submitted to the faculty of The Built Environment as part of the requirements for the award of the MSc Urban Design and City Planning at University College London, I declare that this project is entirely my own work and that ideas, data and images, as well as direct quotations, drawn from elsewhere are identified and referenced.

4 September 2017

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ABSTRACT

Privately owned public spaces in international business districts are becoming increasingly devoid of social opportunities for their inhabitants, partly due to the excessively formal environments created through design, and partly due to overt levels of control by managing authorities. The effects of incorporating elements of play to these areas are explored with the intention of improving sociability amongst users, who are primarily employees of surrounding office buildings. This is done by developing a practical toolkit based on academic literature as well as case studies, which is then tested in a pilot study in Finsbury Avenue Square in the Broadgate estate before being applied to CityPoint Plaza, in the City of London. The literature review first draws out the concept of sociability and its approaches to public space design and then outlines the relationship between play and disorder in urban design. Through this process, the drafted toolkit includes guidance for site management as well as physical design. Design principles include barrier-free access, including relaxing elements of control, the provision of loose space, the installation of flexible elements of play, facilitating triangulation by providing opportunities to observe playful acts and an attractive environment which supports play. Management principles included the nature of programmed intensification activities as well as the need for a modular methodology during the implementation process. Applied interventions should be implemented slowly, as mediating play and the instrumental rationality of work requires a paradigm shift for inhabitants of the space. During the application process, it was seen that physical design must be underpinned by management who are willing to effect change and invest in their public spaces.

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1

INTRODUCTION

PROJECT INTRODUCTION

This paper seeks to improve sociability in public spaces in business districts by incorporating the concept of 'play' in the context of urban design. A central business district (CBD) is the commercial and business centre of a city. In larger cities, it is often synonymous with the city's "financial district", though it is typically home to a range of professional businesses (Yaguang, 2011). In larger, global cities, CBDs are separated from cultural centres, with most commercial activities designed to cater to its inhabitants, who are primarily employees from surrounding offices. Regarding the built environment, these areas are characterised by landmark skyscrapers and a linear gridded street layout. Though they contribute to the economic success of cities, public space in these districts offers little in the way of social opportunities for their inhabitants. Combined with increasing privatisation of public space in these areas, social opportunities are significantly lower when compared to other parts of the city such as creative clusters, traditional high streets and tourist hubs.

In academic literature, this is attributed to the lack of spontaneity and excessive formality and control of these spaces (Carmona, 2010b; Kallus, 2001; Lutzoni, 2016). This report asserts that in addition to high-quality design, the concept of 'play' as suggested by Stevens is a means of ameliorating these issues, as it can create unexpected opportunities and situations for its inhabitants (Franck & Stevens, 2006; Stevens, 2007). This also supports arguments made by Sennett (1970) in his notion of disorder, which he argues to be essential for vital public life.

This study aims to develop a practical toolkit which provides guidance for the management of these spaces as well as designers to create more sociable and flexible public space. In addition to providing a design toolkit, this project demonstrates the practical applicability of academic frameworks of play in urban design. This research adopts an iterative methodology in order to develop its toolkit. Following a literature review and the preparation of a conceptual

toolkit, a case study review in addition to findings from literature are used to prepare a draft practical toolkit. This toolkit is first tested through a pilot study on a successful public space in the City of London, after which it is refined based on findings from this study. This refined toolkit is then applied to a site which is found to be lacking in vitality, after which the proposal is evaluated based on user feedback, and meaningful conclusions are drawn.

2

LITERATURE REVIEW

This literature review begins by setting out the critical problem which this project seeks to solve, after which gaps in the relationship between sociability, play and the quality of privately owned public spaces is identified. These findings are then illustrated through a conceptual toolkit which provides the basis for the following research steps and presents the main research question for this project.

2.1 CRITICAL PROBLEM

Though there are often policy measures to ensure sufficient public space in CBDs, there is little emphasis on the quality of these spaces. Interests of property owners and developers to maximise each site often lead to limited public space in most development projects. The limited provision of public space in exchange for an emphasis on morphological qualities and interiors of buildings often means that the urban uses and social qualities emphasised by Gehl (1987; 2010), Jacobs (1961), Alexander (1966), Newman (1972) and Coleman (1985) are minimised. Significant amounts of leftover public space forget that they are places of human habitation, and seek to limit social activity due to their unpredictable nature (Kallus, 2001). Loukaitou-Sedaris & Banerjee (1998) note that to control these spaces, they are systemically separated, cut off and enclosed.

The characteristics of CBDs are ripe for the formation of these “cracks in the city” (Loutaikou-Sideris, 1996, p. 91): The causes for these lie with the car, urban renewal, the privatisation of public space, functional separation of uses, and the Modern Movement (Carmona, 2010a). Sorkin (1992) argues that

public space in the new corporate city is heavily managed, dominated by multi-national commercial outlets, and heralds an end to traditional public space. These areas, aptly labelled consumption spaces have become all too prevalent in cities, in large part to make the development economically viable. These spaces are often well-maintained and policed in CBDs, but are lacking in function for the public, or are excessively controlled which limits human activity (Brill, 1989).

It has been argued in literature, however, that the decline in the quality of public spaces has been exaggerated, and that these are consequences of evolving paradigms in the design and management of public spaces (Brill, 1989; Krieger, 1995; Lees, 1994; Loukaitou-Sideris, 1996). In efforts to evaluate and better understand these public spaces, Varna & Tiesdell’s (2010) model for assessing

the publicness of public space uses a series of parameters to evaluate the quality of public life in these spaces. When applying this model to open spaces in international CBDs, it is found that these spaces are not conducive to a vibrant public life. The private ownership, overt security presence, over-

management, poor physical configuration and poor animation all contribute toward a negative perception of public spaces in international CBDs and also highlight deeper causes for the poor quality of these places, often stemming from poor management approaches which compound lacklustre physical design.

Over-managed environments can result in public areas lacking vitality and can lead to a dearth of social interaction and spontaneous activities (Carmona, 2010b). Sennett (1970) argues that for cities to maintain their vitality, certain kinds of disorder need to be nurtured in cities. Further, a lack of social opportunities as well as for self-organisation mean that users are disconnected from their surroundings (Lutzoni, 2016). This makes public spaces in these financial districts devoid of what Holmes (2007) calls ‘situations’: moments of life deliberately constructed by the collective organisation of a single environment and the play of events (Sadler, 1999).

In addition to a poor sociability, these excessively formal environments do not allow employees to escape their work during breaks

through the day, which affects their emotional well-being and quality of life (Compier & Cooper, 1999; Lam & Lau, 2012; Wright, 2005).

This disenfranchisement has been proven to affect employee productivity, which can be economically harmful to businesses in the long-term (Baptiste, 2008; Erdil & Ertosun, 2011; Wright, 2005).

For these reasons, this research project seeks to incorporate elements of play into these privately owned public spaces, in efforts to improve social opportunities for employees of offices in CBDs.

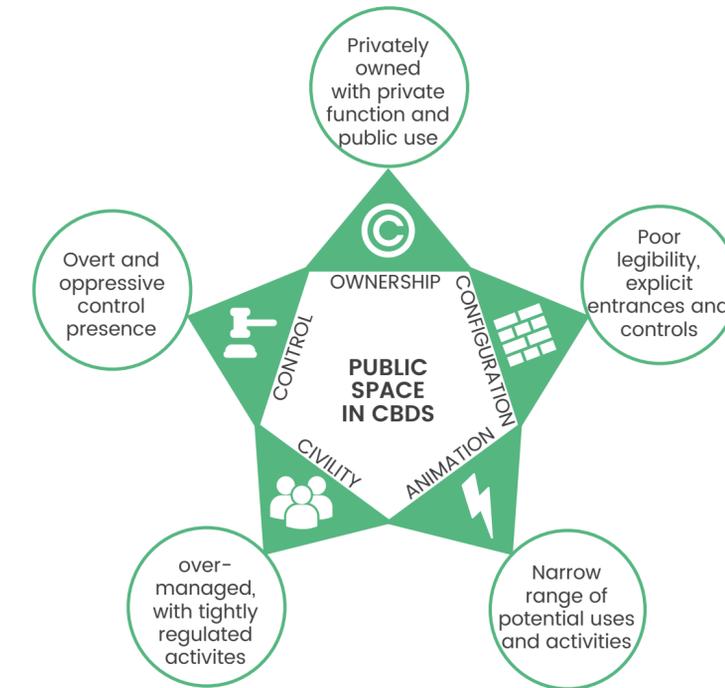


Fig 1: Tiesdell & Varna’s star model for assessing the publicness of public spaces, when applied to public spaces in international CBDs.

2.2 SOCIABILITY AND PUBLIC SPACE

Sociability is the ability of members of the public to become attracted to a space that allows them to conduct social and leisure activities, whether individually or as a group, but more broadly refers to the ability of a place to sustain vitality and public life (Zakariya et al., 2014). In order to be sociable, public spaces require physical design qualities of permeability, legibility, opportunities and robustness to support different purposes (Lynch, 1981). The nature of social interactions which may take place depend on the different qualities of the space, and the type of users occupying it (Aelbrecht, 2016). In addition to these physical qualities, they also require social qualities which can be illustrated through Oldenburg's (1989) concept of third place.

SOCIABILITY AND THIRD PLACE

Principles for third place are applicable when conceptualising sociability in context to public spaces. Oldenburg (1989) argues that public life does not need to be limited to public spaces, and also spread across what he calls third places, which are between the home (first place) and workplace (second place). Third places serve as informal

gathering spaces for the community, such as hairdressers, cafes, bars, restaurants, bookshops, and also public spaces like intersections, stoops, edge spaces, bus stops and waiting spaces, and provide personal benefits of novelty and perspective to individuals who use them. Aelbrecht's (2016) definition of "fourth place" introduces a new category of informal social settings, which are characterised by in-betweenness in terms of spaces, activities, time and management, as well as in perceptions of publicness. These fourth places can be argued to be a subset of third places, and encourage a sense of ownership over public space through social settings.

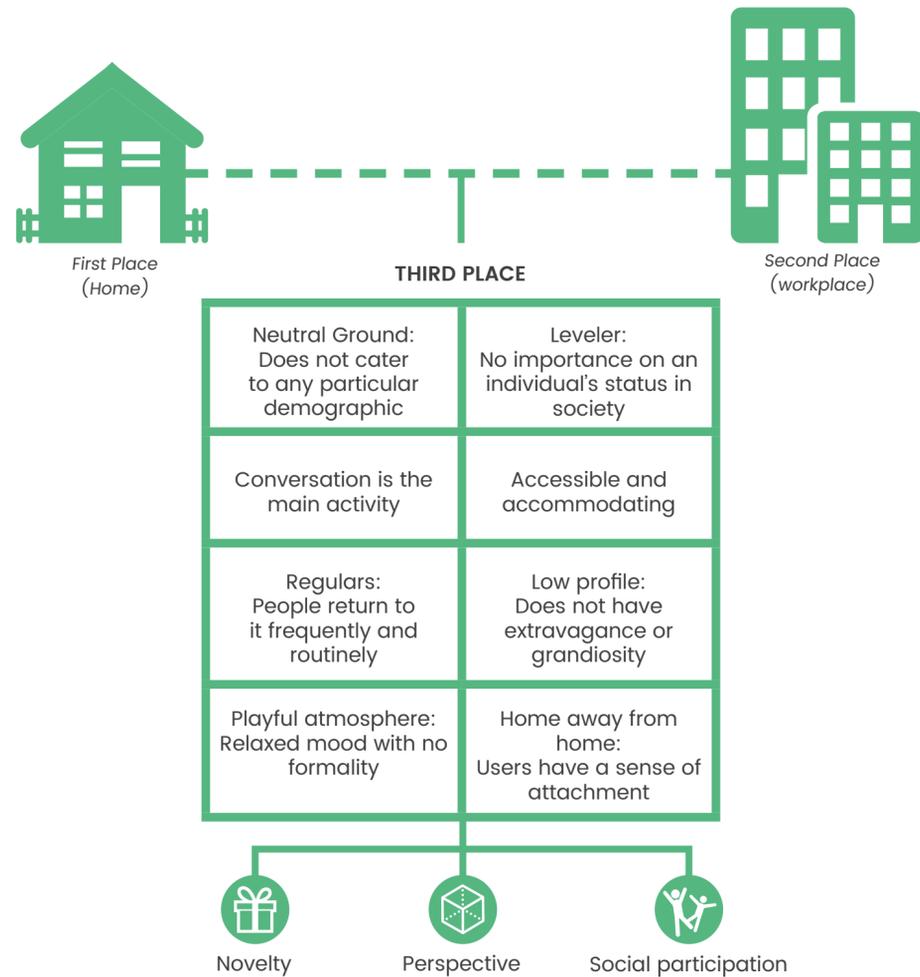


Fig. 2: Oldenburg's concept of third place (1989)

SOCIABILITY AND PLAY IN PUBLIC SPACE DESIGN

In applying the concept of sociability into the design of public spaces, Gehl Architects proposes 12 key quality criteria which provide quality public spaces while emphasising their social qualities (Svarre, 2015). Play is identified as a key feature amongst these principles, as well as opportunities for different scales of interaction. Whyte (1988) emphasises the need for opportunities to enjoy a public space, even if one is not willing to participate in activities. For this reason, he suggests providing opportunities for seating along the edges of open space, so that they may feel relaxed and may engage with other strangers in the audience; a phenomenon which he calls triangulation.

Hall (1966) identifies four distinct scales of interaction between people in public space:

- Intimate: 0m-0.5m
- Personal (0.5m-2.1m)
- Social (2.1m-3.6m)
- Public (4m-25m)

Building upon these scales of interaction, Stevens (2007) provides a guide for the distance of individuals to facilitate play. The

two key ranges are as follows:

- 25m (which is the approximate maximum distance for the recognition of what is going on in a public setting)
- 2.1m to 3.6m: the distance at which strangers first acknowledge each other. This is an important threshold at which people consensually determine their mode of encounter.

The social connotations of these boundaries and distances are also affected by the orientation of individuals. In a lateral arrangement, people's interpersonal boundaries are less clear and can be crossed without transgression. Personal space is closer to the sides and back than it is to the front of them, while face-to-face orientations are typically confrontational. He also notes that people converse with strangers seated diagonally, while individuals who are intimate or working together sit adjacent to each other.

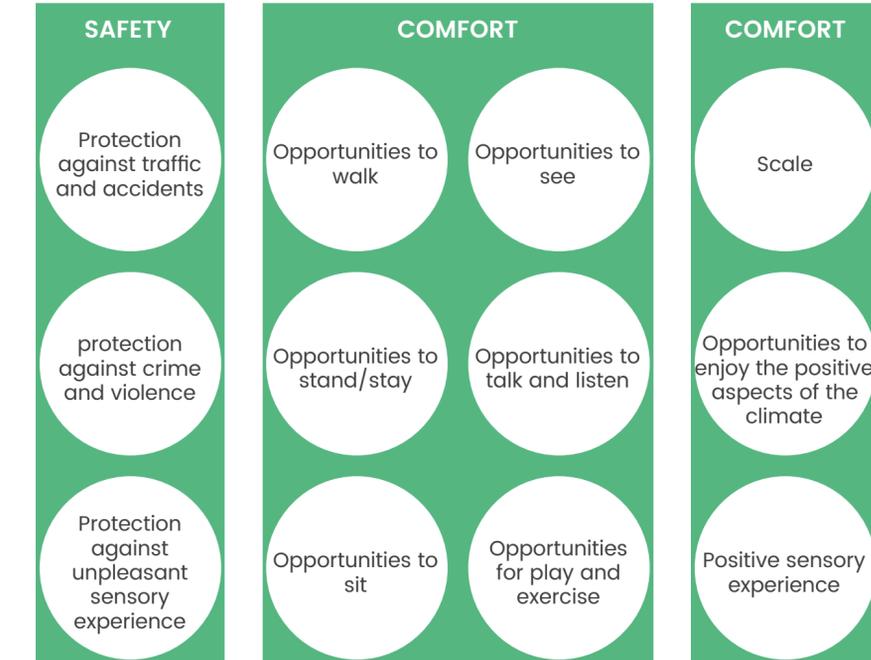


Fig. 3: Gehl Architects' 12 quality criteria for public space (Svarre, 2015)

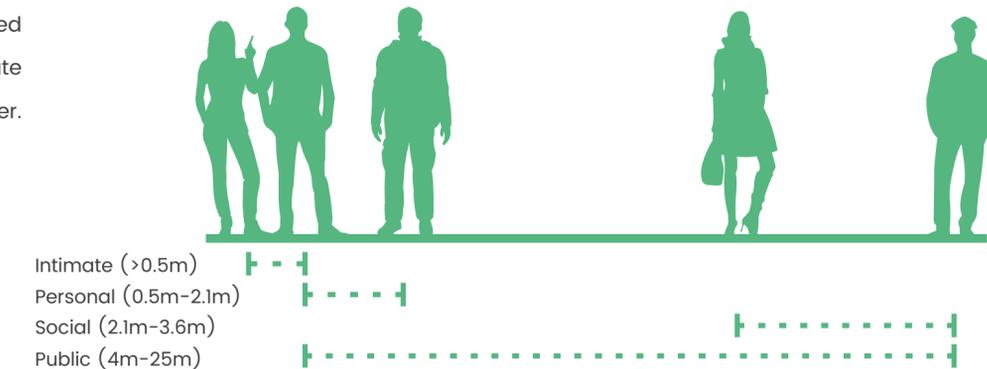


Fig. 4: Hall's scales of interaction between people in public space (1966)

2.3 PLAY AND URBAN DESIGN

In general, play is used to describe a counterpoint to behaviour which is normal – everyday, conventional, calculated, constant, expected. Uses in public spaces that are different from the original design intention of the space. Play is about more than letting off steam; it can be quiet and contemplative, as well as active and boisterous, and is argued to be a necessary component of human life (Stevens, 2007). With regards to play amongst adults, Lester & Russell (2008) provide a conceptual definition based on the variety of types of play and their definitions in literature and assert that play is freely chosen, intrinsically motivated, a state of mind, non-instrumental and not directly productive. Spencer (2013; Spencer et al., 2013) also notes the parallels between quality of life indicators amongst adults alongside this definition of play and the close relationship between them.

Following Stevens' (2007) argument that incorporating opportunities for play should be a priority for planners, the playable city initiative aims to apply the concept of play into the design, management and governance of cities (Bland, 2016) (Fig. 6). In addition to providing opportunities for play,

it also seeks to improve sociability, respond to local debates and tackle larger social issues through restructuring hierarchies of governance.

AFFORDANCES AND PLAY

Gibson's affordance theory in environmental psychology asserts that the environment contains information about the functions of objects in the form of affordances. Affordances are therefore the possibility for interaction afforded to an observer by an object in the environment. For instance, a chair provides affordances of sitting, while a piano provides affordances of listening to its music or playing it. These affordances are easily discernable by users and increase the options available to them. When applying this to play, designers should aim to create a variety of affordances into built elements in order to normalise these acts over time (Fig. 7).

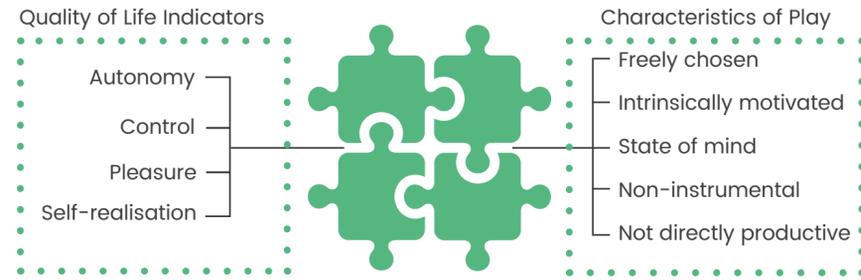


Fig. 5: Comparing quality of life indicators with characteristics of play (Spencer, 2013)



Fig. 6: Playable City principles (Bland, 2016)

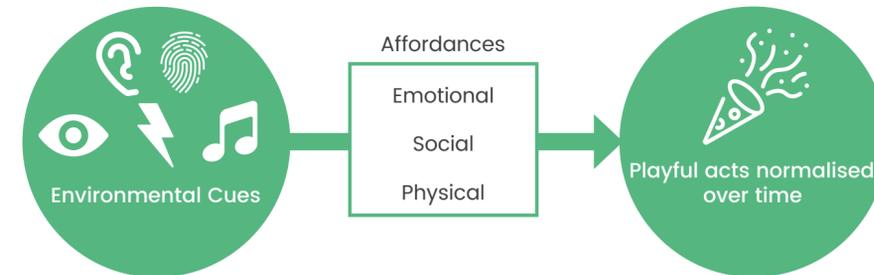


Fig. 7: Applying Gibson's affordance theory to play

SPONTANEITY AND PLAYABILITY

Stevens (2007) argues that in their current approach to the design of public space, urban practitioners pursue clear cut goals such as comfort, practicality and order. However, the scope of life in urban spaces cannot be confined to predetermined objectives. Activities in a given urban space regularly generate disorder, risk and change. He therefore proposes a paradigm which shifts the purpose of public spaces from the instrumental rationality of work to the creative freedom of play, and for its users to evolve their habits of alienation to those of participation.

In Sennett's arguments for disorder, he proposes creating spaces that encourage discovery through organic changes to the modern grid to make it more expressive (Sennett, 1970). Further, he suggests turning public spaces into open systems by reducing control over public space (Sennett, 1990). These spaces, which are in constant evolution, should have the potential to be upgraded continually. This also contributes to what Amin (2008, p. 8) calls a "civic appreciation of a shared urban space", creating a stronger

emotional connection between the space and its inhabitants. Based on these arguments, Sendra (2016) proposes infrastructures for disorder, which are mechanisms through which disorder can be planned in cities. He conceptualises his proposal through three terms: surface, section and process. The surface refers to the physical dimension of the space, the section refers to the urban experience and atmosphere, and the process relates to the civic dimension of the space. These terms can also be used to encourage spontaneous play through urban design.

LOOSE SPACE

Franck & Stevens (2006) term the dynamic appropriation of urban space for unexpected uses as 'loose space'. Loose space allows for new attitudes and behaviours by relaxing the dominant meanings of specific sites. This emancipatory approach is in contrast to the tight controls seen in privately owned public space, and is argued to improve the perception of these areas to allow for a greater range of activities amongst users. In the context of privately owned public spaces, this will require mediation with goals of security and access.

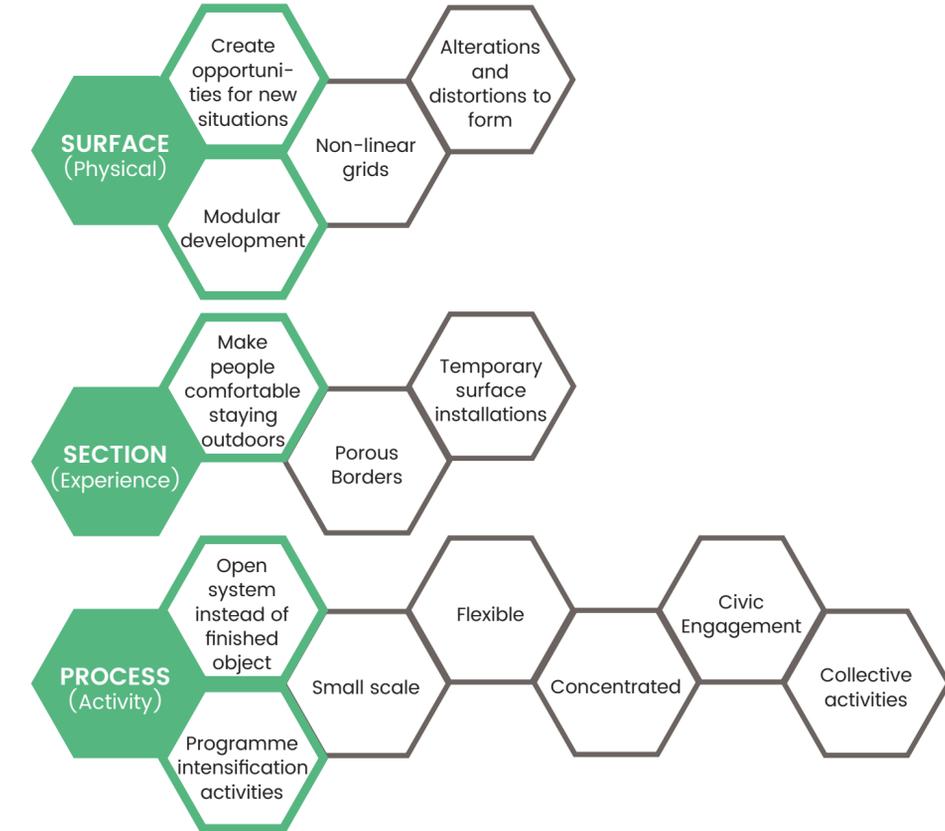


Fig. 8: Sendra's (2016) infrastructures for disorder.

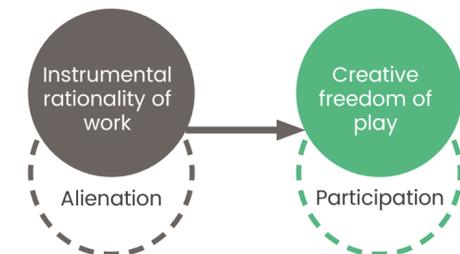


Fig. 9: Benefits of playable space on individuals (Stevens, 2007)

2.4 CONCEPTUAL TOOLKIT

The conceptual toolkit brings together the issues identified in the critical problem, with the benefits of play and sociability, which can be attained by implementing principles from the playable city, characteristics of play and planning for disorder.

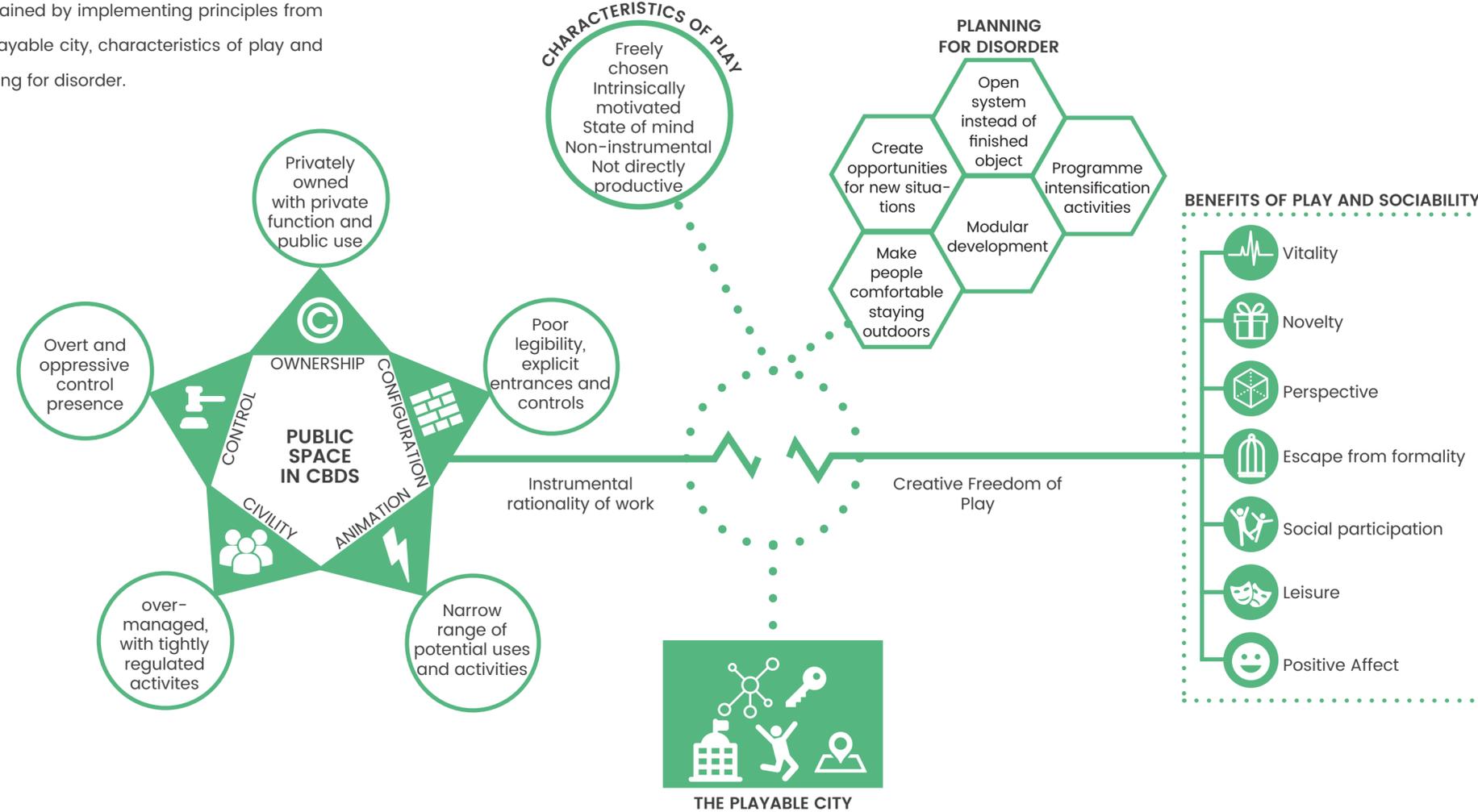


Fig. 10: Conceptual Toolkit

2.5 RESEARCH QUESTION

HOW CAN THE CONCEPT OF 'PLAY' BE USED TO IMPROVE SOCIABILITY IN PRIVATELY MANAGED PUBLIC SPACES IN INTERNATIONAL BUSINESS DISTRICTS?

Objectives:

- To develop a practical toolkit for the management of public spaces in international business districts based on literature and current practice.
- To test this toolkit on a site in order to evaluate its effectiveness in improving sociability and resolving issues found in privately managed public spaces.

3

METHODOLOGY

This chapter sets out the process undertaken in carrying out this project, and the different research and design approaches taken. This project adopts an iterative methodology wherein each step evolves based on findings from the research. A critical reflection and limitations of this methodology are also outlined.

METHODOLOGY

3.1 RESEARCH DESIGN

After undertaking a literature review which identified the critical problem, key themes of research and a conceptual toolkit, the researcher adopted an iterative process which incorporates reflection, evaluation and refinement throughout the project and in subsequent project proposals (see fig. 11). In an iterative methodology, interaction with the designed system is used as a form of research for informing and evolving the project (Kock, 2003).

In addition to a literature review, case studies provided an insight into the topic before applying and testing the project proposal. This approach provided the author with a deeper understanding of the realities and challenges beyond existing published academic literature (Mills et al., 2010). A review of case studies was conducted to critically examine current practices regarding public space, as well as the implementation of playable strategies and interventions in urban spaces. From the above review of literature and case studies, a draft toolkit was developed. This toolkit was tested through a pilot study, which applied the toolkit to a privately managed public

space which currently attempts to create a sociable space with elements of play, after which it is refined based on findings from this study. This updated toolkit was then applied to a site which is found to be lacking in vitality, following a site selection process. This proposal was then evaluated through user feedback before conclusions were drawn from findings.

3.2 PRIMARY DATA COLLECTION

Site visits: Site visits were conducted throughout the design and application sections of the research project, both for the pilot study, as well as for the application of the toolkit.

Unstructured interviews: To obtain detailed information on programmed activities in public spaces, property developers and estate management of public spaces in the City of London were contacted in person as well as by email. However, none of the contacted organisations were willing to participate in interviews for the project, so data was collected from their websites. Interviews were also conducted with users of each space during site visits.

3.3 SECONDARY DATA COLLECTION

Policy: Planning documents from the City of London were consulted in order to better understand the planning context of these public spaces, and to ascertain ownership of different sites during the site selection process.

Publications: Publications from key authors in their respective fields, in addition to journal articles from emerging fields of research were used when preparing the literature review. In addition to the robust analysis of these documents in the literature review, opinion pieces and newspaper articles from news outlets were also collected in order to study the perceptions of privately owned public spaces as well as best practice from case studies. Publications and research from architecture firms were also used when collecting data for case studies. Data regarding the hours of use and the nature of programmed activities in public spaces included in the pilot study as well as the final application site were gleaned from developer websites.

3.4 ETHICAL CONSIDERATIONS

All interview data was anonymised in efforts

to preserve the privacy of interviewees. All recordings were deleted by the author to maintain privacy.

3.5 LIMITATIONS

Due to time constraints, more stages of evaluation could not be added. To mitigate this, sections were included throughout the application process in order to evaluate the proposal and ensure that it met requirements of both the toolkit as well as broader public space quality criteria outlined in the literature review.

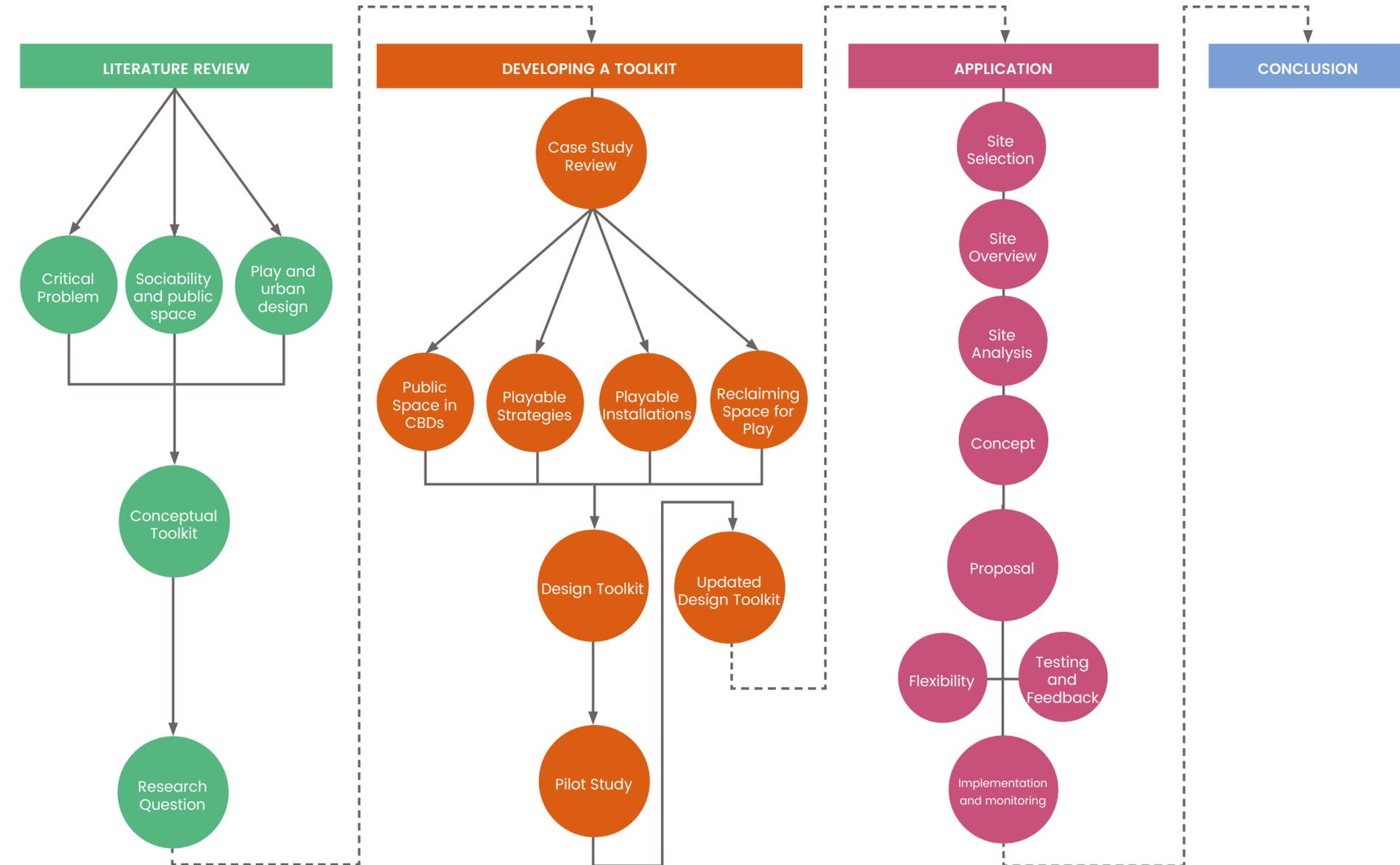


Fig. 11: Project methodology

4

DEVELOPING A TOOLKIT

This chapter seeks to bridge the gap between concepts from literature and practical considerations of the research. Following an extensive case study review, which analyses existing approaches in practice, a practical toolkit is drafted which is based on literature as well as the conceptual toolkit. Before being applied to a site, a pilot study is carried out which allows the researcher to evaluate both the site chosen as well as gaps in the practical toolkit.

4.1 CASE STUDIES: PUBLIC SPACE IN CBDs

CANARY WHARF, LONDON

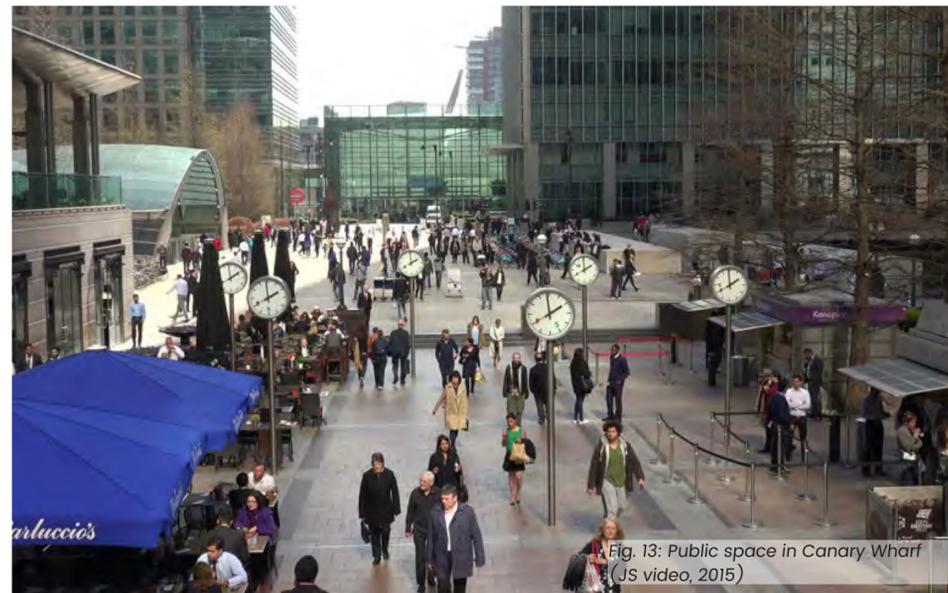
Canary Wharf is a business district in East London with 16,000 square feet of office and retail space housing the European headquarters of several major business firms (Lazarus, 2014). It contains some of the tallest buildings in Europe and managed by the Canary Wharf Group plc. Canary Wharf is a typical example of management approaches to privately owned public space. Designed by a Canadian architect, the North-American architecture caters to a range of white-collar services (Reuters, 2007). Though it is one of London's largest major business districts in terms of the number of employees (Jenkins & Hammond, 2012), there are limited opportunities for employees to unwind. The original design has been heavily criticised due to the lack of social opportunities outside of consumption spaces, as evidenced by the lack of sociable public space and corporate atmosphere (Shenker, 2017; Vasagar, 2012; Woodman, 2016). Public space in this development is minimised in efforts to maximise profitable uses. This results in a non-place, which prioritises the values of transactional, anonymised markets over the need for sociable space and interaction

(Hutton, 2013).

Of late, Canary Wharf Group plc has taken these criticisms into account, and have made efforts to improve public spaces through programmed activities and art installations. Though time and money has been invested, the outcomes do little to address the anonymity of the place, as these do not address the formality or over-control of their open spaces.

LESSONS LEARNT

This case study shows that programmed activities must ensure that they cater to the users of these spaces, while poor implementation can mean that they are not relevant to the existing users and therefore may not contribute positively towards the vitality and sociability of a place. Adaptable elements and flexibility are needed to ensure that these initiatives can be modified based on user feedback to achieve intended results.



ROCKEFELLER CENTER, NEW YORK

When the Rockefeller Center was officially opened in 1940, (then named "The Radio City"), it was the largest ever private building project at the time, with 14 buildings covering 22 acres of land in the center of Midtown Manhattan (Goldberger, 1989). Over the next few decades, with the addition of more buildings and programmed activities, The Rockefeller Center has grown into a landmark commercial centre and is a central attraction of the city. Practitioners celebrate the development for its progressive approach to open space, which has been balanced to provide public access as well as private enterprise. Rockefeller Centre offers a unique mix of activities which cater to a wide range of demographics, such as ice skating, fountain watching, dining and leisure outlets and ample seating for people watching from the edges. This development's success has made it a model for private estates and has been instrumental in helping developers realise the benefit of creating accessible public spaces in their own projects across the world. While the site attempts to provide barrier-free access, the series of level changes throughout the estate somewhat hinder this aim.

LESSONS LEARNT

This case study shows that the right balance was achieved in this business district due to the optimum mix of public space with appropriate seating. It is clear that loose space is an important requirement for the vitality of this district. Public spaces are easily adaptable, and allow for modular approaches to their refurbishment or intensification. Installations of programmed activities and physical or emotional affordances also contribute to its success, but intensification activities need to be planned carefully to facilitate existing uses in the development.



4.1 CASE STUDIES: PUBLIC SPACE IN CBDs

KINGS CROSS DEVELOPMENT, LONDON

King's Cross is an example of a privately-owned estate which places emphasis on community within the development and provides a significant amount of well-designed open space for visitors, workers and residents. Catalysed by developer Argent, along with significant investment from high-profile occupants such as Google, there are several interactive initiatives which encourage users to engage with their surroundings in addition to input from internationally renowned architects. Granary Square, the development's most successful public space, features water features which can be controlled by visitors through a mobile phone app. The site also features several popups for meanwhile uses, such as the Skip Garden, where visitors are encouraged to use planters for personal projects.

LESSONS LEARNT

This estate is exemplary of how a community can be nurtured in a private development while remaining economically viable. Programmed activities are aligned to the anticipated interests of users. Adaptable installations allow for modular development, which are flexible enough to receive feedback and adjust accordingly. Encouraging users to feel a sense of ownership in public spaces contributes to the increased use of these spaces, and creates a vibrant atmosphere in the public realm.



Fig. 16: Granary Square, Kings Cross (Heath, 2013)



Fig. 17: Food stalls on Kings Boulevard (Kings Cross, 2016)



Fig. 18: Playful furniture creates affordances for users (Kings Cross, 2016)

CAMDEN TOWN UNLIMITED, LONDON

Camden Town is the administrative centre of the Borough of Camden and is identified as a major centre of Greater London in the London Plan (Greater London Authority, 2016). The Camden Town Business Improvement District (BID), marketed as Camden Town Unlimited, was designed to cut crime and improve the public realm of the neighbourhood to support local businesses (Camden Town Unlimited, 2013). Another purpose of this project was to preserve the bohemian character of Camden and to keep it appealing to start-ups. The outcomes achieved were improved management and upkeep of public space, which was jointly managed by businesses in the area. Funding was garnered from the Mayor of London's Business Improvement District budget, as well as from occupants of office space in the area such as MTV and Viacom. However, efforts to reduce crime have been criticised for alienating user groups. The Camden bench, for instance, is designed to be intentionally defensive, with goals of reducing rough sleepers and drug trade.

In addition to physical regeneration efforts,

Camden Town Unlimited run a series of projects which also seek to contribute to Camden's character, such as art festivals like Camden Create and Points of View, which encourage local artists and visitors to participate in Camden's cultural offer.

LESSONS LEARNT

This project is a clear example of how investing in a locality's charisma can attract people, which in turn lead to business gains. A boom in traditional culture and arts using programmed activities can lead to positive commercial outcomes for local businesses. The character of a public space can vary drastically depending on its management approach and is integral to defending the interests of its users. However, efforts should be made to minimise alienation, which can lead to disenfranchisement and exacerbate social issues.



Fig. 19: Camden High Street (Jump Tourism, n.d.)



Fig. 20: The Camden Bench (Factory Furniture, n.d.)



Fig. 21: Camden Create Festival (The Landscape Journal, 2015)

4.2 CASE STUDIES: PLAYABLE STRATEGIES

WIMBLEDON TOWN CENTRE, LONDON

Wimbledon Town Centre is a BID located in the retail area of Wimbledon district in Southwest London. The winning entry to a design competition for the town centre, Lugadero's (2014a) gamification concept is being used as a springboard for advising the masterplan and regeneration of the town centre. The concept incorporates spontaneous pop-up activities that facilitate engagement between residents and creates opportunities for play, leisure and relaxation. It also uses this approach to engage residents in the decision-making process through the use of interactive pop-ups and social media and informalizing the process of community engagement. It is a concept and the final masterplan is still in its early stages, but the design process aims to incorporate these elements. This case study is an example of a novel concept which facilitates engagement of community with the built environment.

LESSONS LEARNT

The use of gamification to obtain community feedback for a masterplan for the built environment could be the ideal platform for creating ownership and accountability. Inculcating a sense of ownership is anticipated to evolve into a sense of responsibility to maintain the environment, and are expected to improve sociability while reducing rates of crime. Enhancing the public realm through indirect means of play are beneficial to users while being attractive for developers as they add value to the development (Carmona et al., 2002).

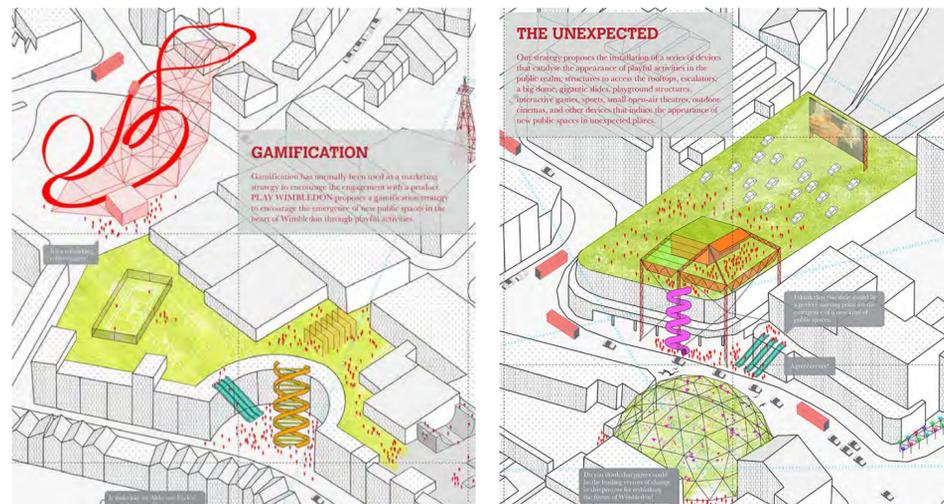
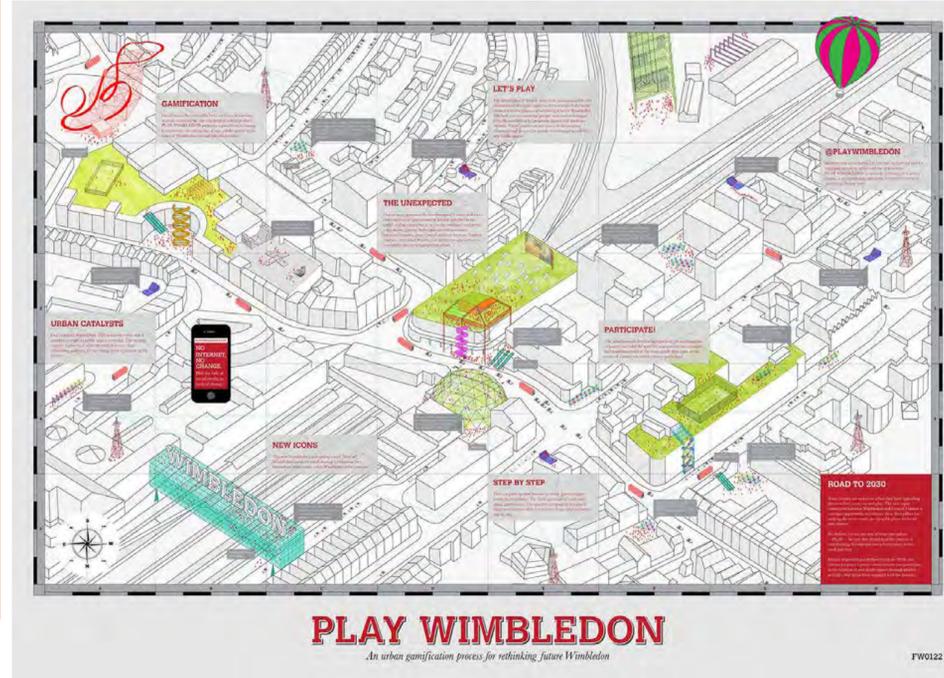


Fig. 22: Wimbledon Town Centre competition entry (Lugadero, 2014b)

GOOGLE HEADQUARTERS, LONDON

The Google headquarters is currently situated in Pancras Square but is set to move to its new 11-storey, 1 million square-foot office in the King's Cross development. Google has a unique approach to workplace design, which has been replicated across different sectors, with varying levels of success.

At Google, creating opportunities for play, as well as an emphasis on empowerment were measures to improve productivity and brand loyalty amongst employees. A variety of flexible configurations of meeting space, customizable office cubicles develop the sense of ownership. Providing opportunities to unwind helps employees to stay focused and improve performance outcomes, which contributes toward keeping employees happy and improving job satisfaction (Stewart, 2013). Dan Copley, the UK's managing director for Google, Inc., stated that nurturing "serendipitous interaction" between workers was beneficial not only for employee well-being but also supported innovation across departments (Walker, 2013).

However, there are minimal barriers between

playable environments and workplaces:

Though this works well for engineers and creative workers, it may not be appropriate for those who work in law or financial services as the sense of formality is rooted in the work culture.

LESSONS LEARNT

This case study shows us that a risk-free stimulating fun atmosphere maintains the mental well-being of employees, which in turn benefits the organisation. By giving ownership to the employees by flexible meeting spaces and customizable office spaces, it inculcates a sense of belonging amongst them. While facilitating cross-departmental innovation through play is an appropriate method for Google, which requires creativity in design and technology, other fields are inherently very formal and may resist such concepts.



Fig. 23: Google office space (Google Careers, 2014)



Fig. 24: Playable elements in Google's offices (Fiser, 2013)

4.3 CASE STUDIES: PLAYABLE INSTALLATIONS

STREET TRAMPOLINES, COPENHAGEN

With its focus on increasing human activity, Copenhagen is dubbed as an exemplar of best practice in urban planning especially due to the careful re-planning in the second half of the 20th century. One of the features of this overhaul of the public realm are trampolines which are built into the waterfront promenade, which lend to a relaxed atmosphere while encouraging playful acts in the public realm. While the design is fixed, and cannot easily be adapted or modified based on changing user needs, people can appropriate the space by creating their own physical or emotional narrative for the space with direct interaction. For this reason, it has become an iconic landmark in Copenhagen and is loved by tourists and residents alike.

LESSONS LEARNT

The trampolines provide opportunity whereby streetscapes can actively engage with the built environment and appeal to a wide variety of people. The elements of play fulfil their desire for unexpected experiences, create alterations in their routine and afford new opportunities from traditional pavements.

140 BOOMERANGS, CITY OF LONDON

140 Boomerangs, an installation by Studio Weave (2006), was created for London Architecture Biennale in 2006 and was hailed for its amalgamation of social entrepreneurship with successful physical design. The project was based on the use of modular timber components which could be configured to create helical structures specific to the needs of the site and its users. The boomerang-shaped components could be reassembled in different combinations to allow creative and playful forms, enabling them to be used for seating as well as for active play, allowing for user empowerment while simultaneously creating an attractive environment.

LESSONS LEARNT

Modular furniture allows for comfortable seating and relaxation with passive engagement with or without playful themes. Adaptability of the modular elements allowed a variety of new configurations for the furniture without expensive modifications in response to public feedback. The modular timber components fitted together to provide varied tactile experiences.



Fig. 25: Street trampolines in Copenhagen (Montemayor, 2017)



Fig. 26: 140 Boomerangs installation by Studio Weave (2006) (1)



Fig. 27: 140 Boomerangs installation by Studio Weave (2006) (2)

STREET PIANOS

Street Pianos is an organisation which places pianos in public spaces. This organisation has put over 1500 pianos in 50 cities globally, and at least 10 million people have actively or passively interacted with them (Street Pianos, 2016). Founded in 2008, their objective is to catalyse conversation and change the dynamics of space by disruption of individuals' negotiation of the city. A large number of people will play the piano bring out their hidden talent and stimulate the senses. It is designed to encourage people to interact and claim ownership of their urban landscapes.

LESSONS LEARNT

A simple tool such as the piano can be sufficient to break the silence and promote triangulation between observers. It provides a range of affordances, encouraging people to become involved in playing, listening and discussing.

PING! ENGLAND

Ping! England is a not-for-profit organisation which installs table tennis pop-ups in public spaces across England (Ping! England, 2016). This is done with the intention of lifting people's spirits and encouraging them to socialise through casual sport. Once the project is over, the tables are either left in place and maintained by the host site or are given to community groups. This means that the longevity of the project is dependent on sustained funding.

LESSONS LEARNT

Though table tennis is a casual sport, it interests people and helps them to connect with each other. But these installations have to be tended for and supported through sustained funding.



Fig. 28: Street Piano in St. Pancras Station, London (NickDM, 2012)



Fig. 29: Table Tennis at Broadgate in London (Broadgate Estates, n.d.)

4.4 CASE STUDIES: RECLAIMING SPACE FOR PLAY

MOOR HOUSE PUBLIC REALM, LONDON

Studio Weave (2017) created this public realm design for the City of London Corporation. The objective of this project by Studio Weave was to transform a reclaimed junction by segmenting it with hard and soft landscaping while permitting the flow of people. The lines, which follow an embroidered pattern followed the landmarks and lawns and provided visual treat while maintaining service elements and minimising other site constraints.

LESSONS LEARNT

A simple design incorporating loose space lets users create their own narratives for the site. The different sites are woven together but allow for versatility and flexibility. Encouraging loose space through playful designs, while retaining the flow of pedestrians using nonlinear routes create an interesting corner which creates opportunities for users.



Fig. 30: Moor House public realm proposal by Studio Weave (2017)

PLAYABLE CITY INITIATIVE

Through the playable City initiative, outdated street furniture is reclaimed and converted to interactive installations in cities across the world. Multiple pieces of archived street furniture such as redundant phone booths, post boxes, parking meters and public toilets have been redesigned and converted into playful installations. Several examples of such use have been widely applauded due to their functional relevance. The Playable City interventions in Bristol, such as the speaking post box, which converses with users through their smartphone, and the phone booth disco have helped to support otherwise dreary physiological experiences (Playable City, 2017).

LESSONS LEARNT

These street installations challenge the formality of public space. Interactive art installations in the public realm attract users, facilitating vitality. These promote participation of a variety of people to play games. Major city interventions encourage a sense of belonging among members of the society.



Fig. 31: Hello post box in Bristol (Culture24, 2013)



Fig. 32: Teledisko phonebooth, Berlin (Inhabitat, 2016)

4.5 TOWARDS A PRACTICAL TOOLKIT

Based on the findings from the literature review, as well as the lessons learnt from the case studies, a draft practical toolkit is developed. These principles can be broadly defined by two categories: Physical design considerations and management approaches. Though these are visually represented as separate entities, they both inform each other, as both management, as well as designers, need to work in tandem not only to implement projects but also maintain the longevity of public spaces. This toolkit will now be tested on a site which attempts to create sociable public spaces through playable interventions.



Fig. 33: Relationship between physical design and management approaches in determining successful public spaces.

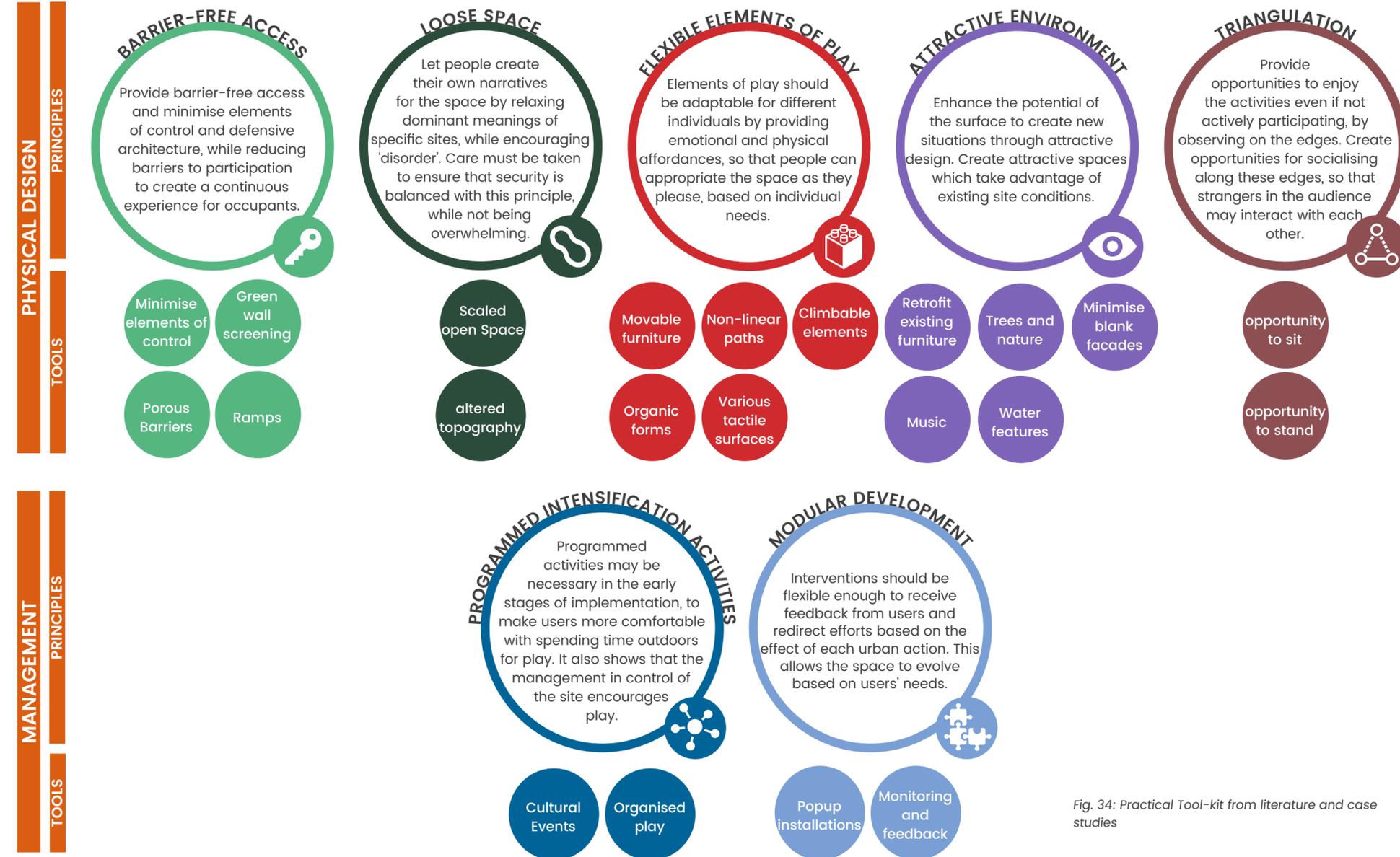


Fig. 34: Practical Tool-kit from literature and case studies

4.6 PILOT STUDY: FINSBURY AVENUE SQUARE

OVERVIEW

The toolkit is tested on a site which appears to be successful in creating sociable spaces which balance formality with opportunities to unwind. The findings from this study will then be applied to the toolkit, creating a feedback loop for the practical toolkit and identifying gaps. This process also the site itself, in addition to the practical considerations of the toolkit. The site chosen for this study is Finsbury Avenue Square, which is one public space in a network of spaces in the Broadgate development, in the City of London. Broadgate Estates, who manage the site, emphasise creating socially flexible spaces, primarily for the inhabitants of the office buildings on-site. Following site visits and analysis, the findings from the pilot study are presented in figures 36 to 42. The findings from this pilot study will now be used to update the practical toolkit.

FINDINGS

Finsbury Avenue Square makes use of extensive public art which is interactive, in efforts to encourage use of the space, while also allowing for creative possibilities while challenge existing perceptions of the space. Providing services for seated inhabitants

affords them opportunities to eat lunch (when the space is most vibrant). This must be regulated to ensure that the space does not become a consumption space, by encouraging independent food outlets to occupy these areas through subsidised pricing. As the site sits within a network of publicly accessible spaces, intensification activities are not present in every open space, and are evaluated frequently based on usage patterns. These acupuncture interventions allow management to encourage use in underutilised areas of the site and facilitate urban vitality. In spite of all of the successful implementation of the physical design of the study site, it was seen that the overt security presence limited playful behaviour. To create more sociable spaces, excessive security presence should be minimised, but this may conflict with the need to create a safe atmosphere for office inhabitants.

NUMBER	PROCESS	TOOL(S)
1	ACCESS Direct access to site through legible routes, but heavily monitored and has noticeable security presence.	
2	FLOOR LIGHTING Alterations to surface creates opportunities for play while relaxing dominant narratives of the space.	
3	SEATING INSTALLATION Modular popup element affords opportunities for sitting and climbing, and is changed every few months.	
4	TREES These shield users from the elements, and lend to an attractive environment.	
5	EDGE SEATING This allows non-participants to observe playful acts, and creates the potential for triangulation.	
6	POPUP EATERIES This activates frontages along the unoccupied building, while providing opportunities for seated inhabitants.	
7	INTERACTIVE GORILLA SCULPTURE Part of a public art festival organised by Broadgate. Can be interacted with through a smartphone app.	
8	TABLE TENNIS POPUP This encourages users to spend time in the space and make them more comfortable spending time outdoors.	

Fig. 35: Finsbury Avenue Square evaluation

Learnt from pilot study



Fig. 36: Pop-up restaurants



Fig. 37: Edge seating



Fig. 38: Seating installation

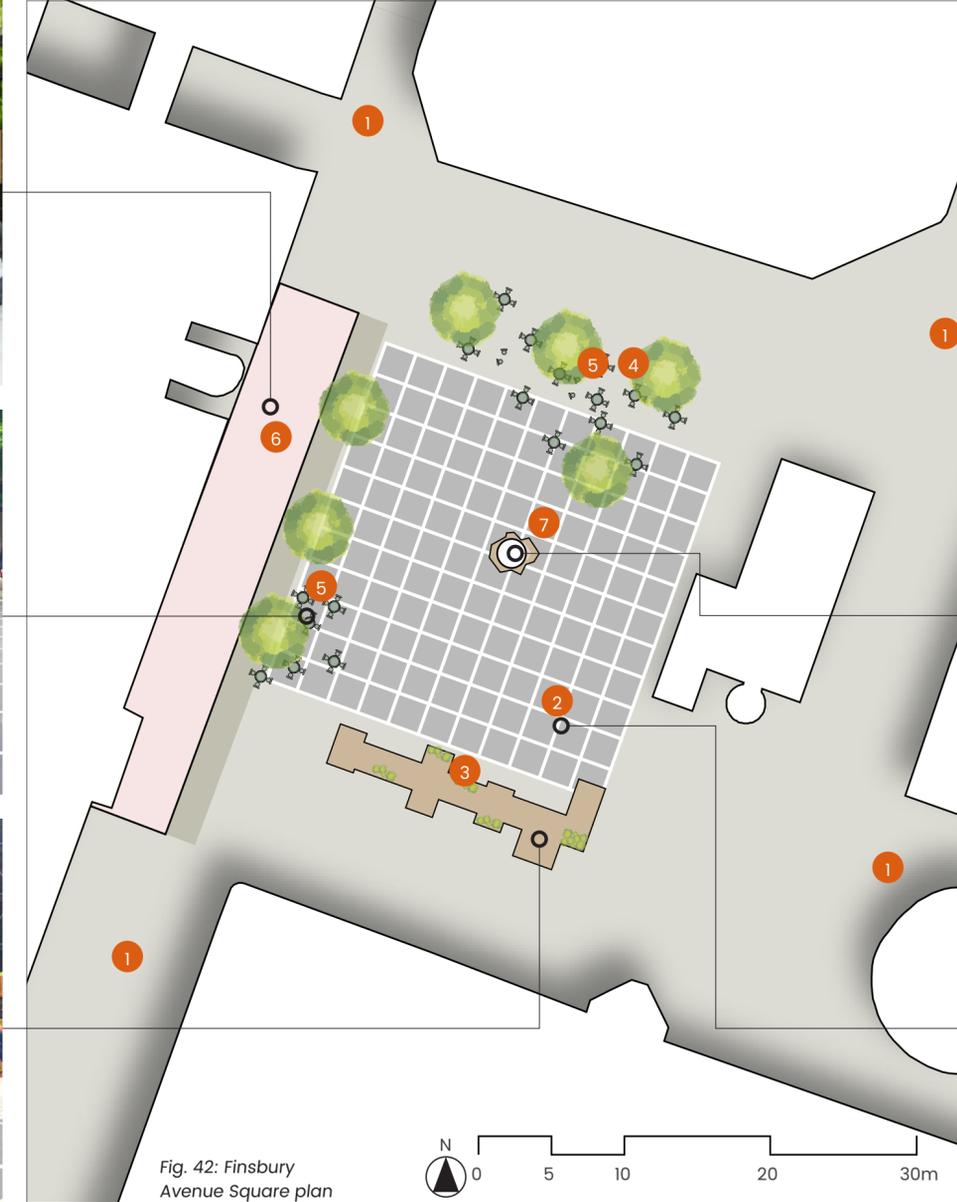


Fig. 42: Finsbury Avenue Square plan



Fig. 39: Intensification activity



Fig. 40: Interactive Art installation

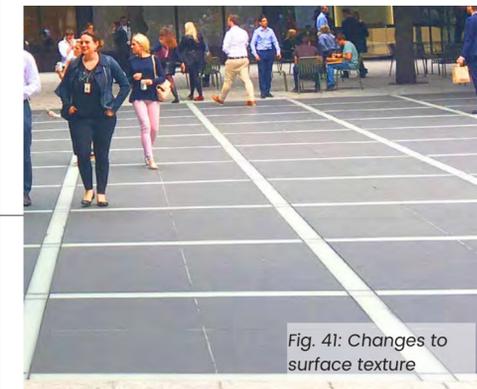


Fig. 41: Changes to surface texture

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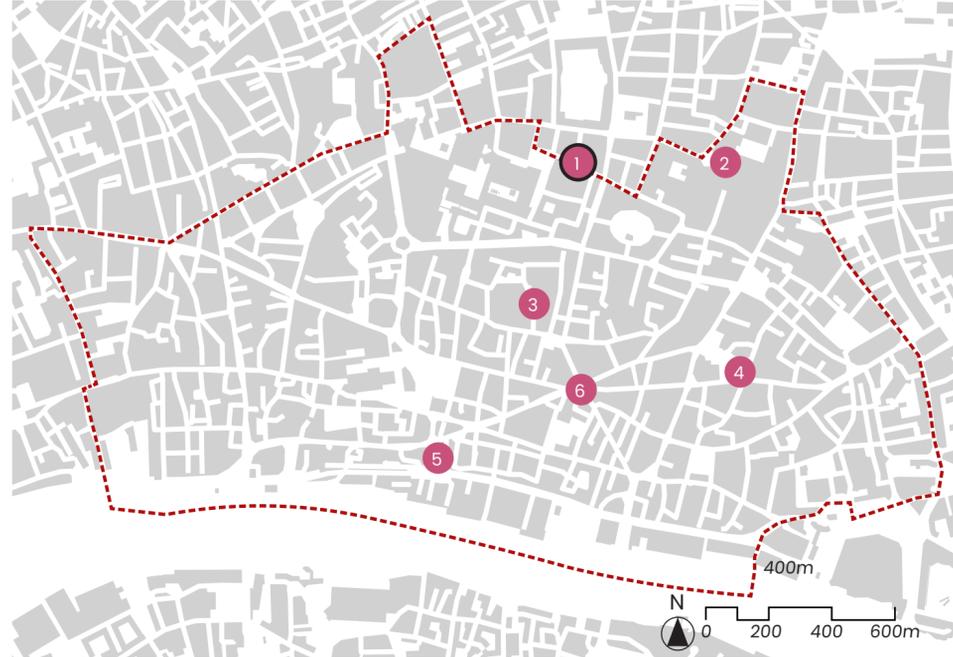
APPLICATION

Following the development of a practical toolkit, a site is selected to apply this toolkit to practice. Following a site analysis, the toolkit and site specific considerations are brought together in the design concept, which follows on to the design itself, and finally an evaluation process and critical reflection on the application, barriers to success and possible limitations.

5.1 SITE SELECTION

The City of London was selected as the broad area of study as it has a unique history as the world's earliest financial centre, to its evolution to a multifaceted business district characterised by its office space and white-collar industry. Within this, several sites were identified to apply to the parameters of the research: being privately owned, of appropriate scale, and with limited opportunities for sociable interaction.

CityPoint Plaza on Ropemaker Street, which is at the base of Citypoint Tower, was chosen as it best fits the criteria for this toolkit. While most of the other sites also have a large, undefined open space which could be repurposed, a site with relatively less site-specific physical characteristics was chosen, as it allows for more meaningful conclusions to be drawn from the application process.



SITE SELECTION

- 1 CityPoint Plaza, Ropemaker Street
- 2 Base of Broadgate Tower
- 3 Guildhall, Basinghall street
- 4 Base of St. Helen's, Leadenhall Street
- 5 Old Change Court, Distaff Lane
- 6 Bank Junction

(from top left to bottom right) Fig. 44: Citypoint Plaza, Ropemaker Street; Fig. 45: Site selection map; Fig. 46: Base of Broadgate Tower (Leeney, 2016); Fig. 47: Guildhall (Boyd, 2014); Fig. 48: Base of St. Helen's, Leadenhall Street (Property Week, 2007); Fig. 49: Old Change Court, Distaff Lane (Google Maps, 2015); Fig. 50: Bank junction (Property Week, 2016)

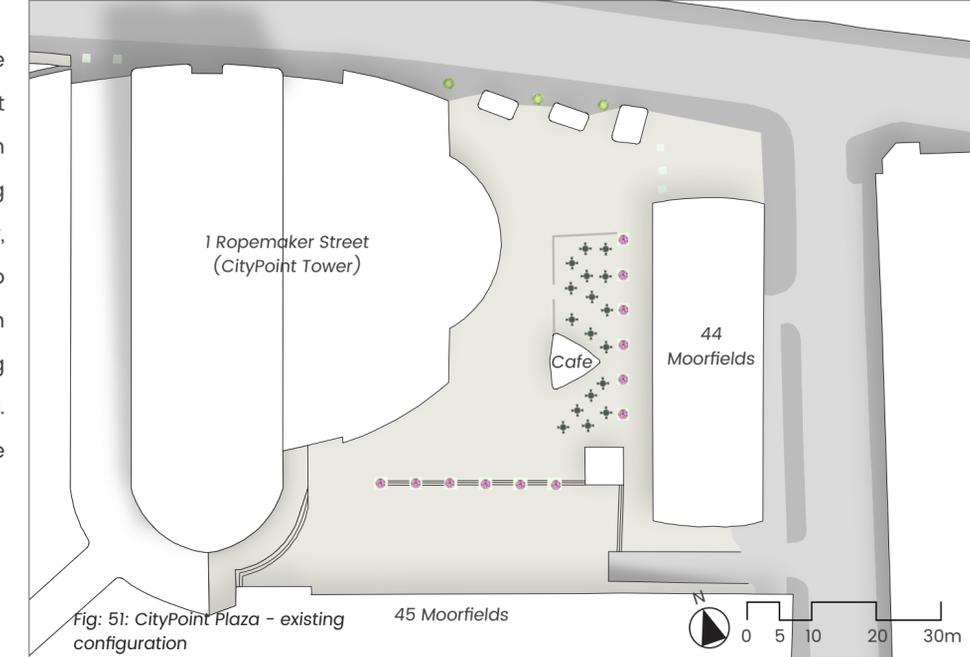
5.2 CITYPOINT PLAZA: SITE OVERVIEW

CityPoint Plaza is located on Ropemaker Street and is the pedestrian access point for CityPoint Tower, the first building in the City of London taller than St. Paul's Cathedral (Buildington, 2017). Following an extensive refurbishment by Sheppard Robson, this plaza caters primarily to office workers in its surrounding buildings. The space features a café in the centre of the site, and seating for visitors. While law and finance firms primarily occupy the surrounding buildings, 44 Moorfields also houses the British Red Cross Society Museum and Archives.

The public space in CityPoint leaves much to be desired, as it lacks not only several elements of Gehl's 12 quality criteria (Fig 3, page 19) but also has high levels of security and monitoring. Efforts from site management are limited to intensification activities such as food trucks, screens on which to watch sport, and swing dance lessons. However, without a quality public realm, these activities are not enough to sustain this public space's sociability.

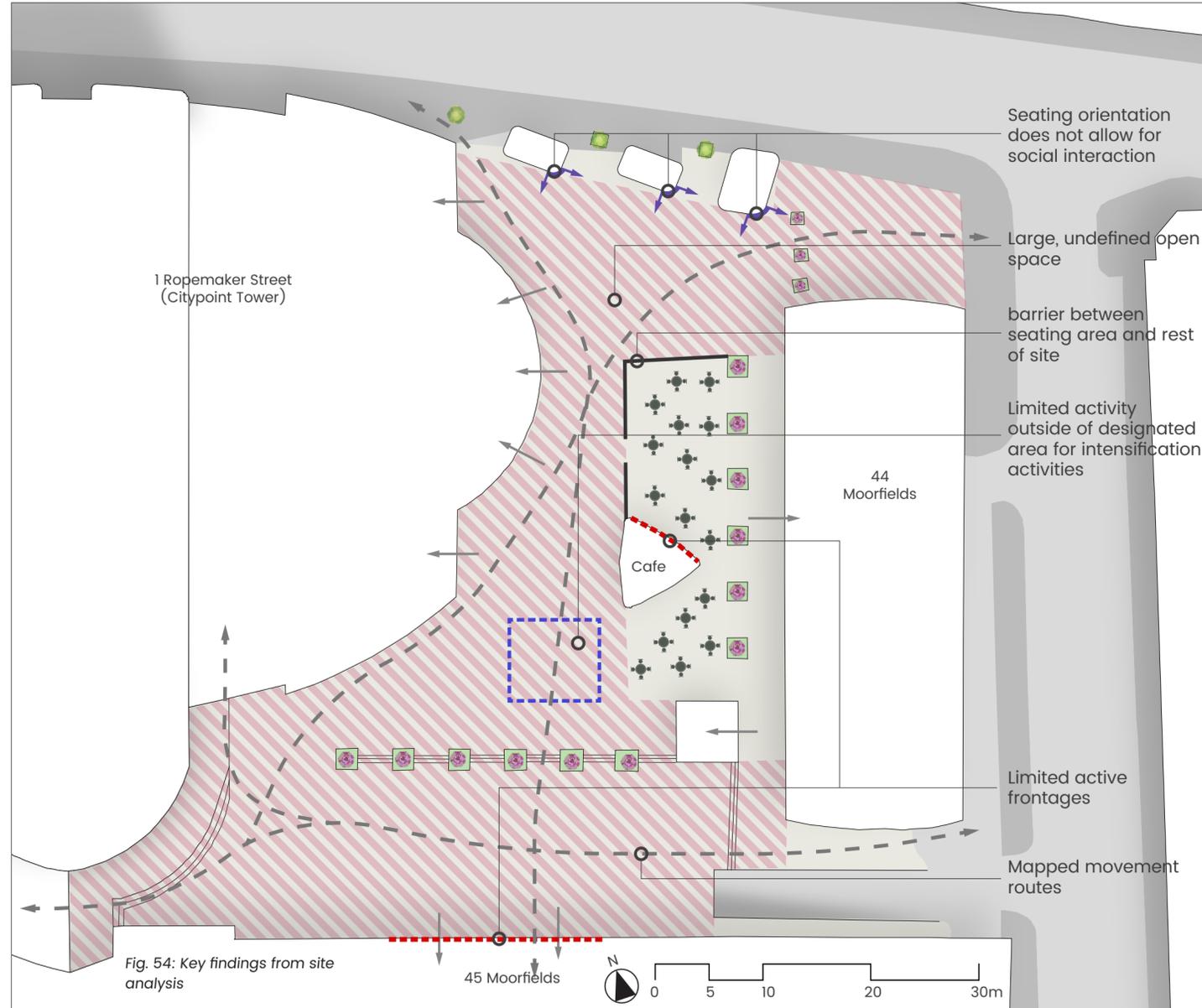
ON-SITE INTERVIEWS

Through interviews with inhabitants of the space during lunchtime, it was found that there is a lack of seating and visual interest in the space, with several inhabitants resorting to standing in the corners or sitting on the floor, only to be reprimanded by security. Users also stated that they preferred the public spaces in the Broadgate Estate, and often visited during breaks instead of remaining in CityPoint Plaza. This space also lacks definition, as there are limited activities within the plaza.



5.3 SITE ANALYSIS

It was found during the site analysis that the site offered few opportunities for interaction between users, and even less so for play. Retrofitted installations, such as the seating fitted onto the service buildings on the north of the site offer little for users, and there is a marked lack of greenery on the site, though efforts have been made to ameliorate this through the use of planters. Limited activity at the interface between the open space and its surrounding buildings create an unwelcoming atmosphere. While the site does not offer any immediately discernible routes, it was observed that certain routes were used more frequently than others, by mapping movement routes of different users (Gehl & Svarre, 2013). However, the large, undefined open space allows for a variety of opportunities and design interventions.



5.4 CONCEPT

The design concept brings together the practical toolkit and site-specific considerations to create a public space which encourages play and aims to result in a positive social experience for inhabitants. This concept enhances key routes through the site while ensuring barrier free access. It provides a variety of sensory experiences in different parts of the site, and for a range of different types of social interaction. This is supplemented by opportunities for active play as well as silent and introspective relaxation. Intensification activities throughout the delivery process which make users more comfortable with spending time outdoors.

EVALUATION

The scale of different sites may need to change based on user requirements. There will still need to be some element of control on the site to keep the development safe. Different zones seen in the figure may need to evolve in the long term based on user feedback.



5.5 DESIGN PROPOSAL

The design proposal follows on from the concept by detailing the various sections of the design. Design details outlined in Fig. 59 also show that the proposal is intended to be flexible and can be adapted easily. In this proposal, temporary installations are used which encourage play were selected to illustrate the proposal, such as the installation by Nathan Mabry (2016) seen in figure 56, and the Mi Casa, Your Casa and Los Trompos installations by Esrawe Studio seen in figure (2014; 2015).



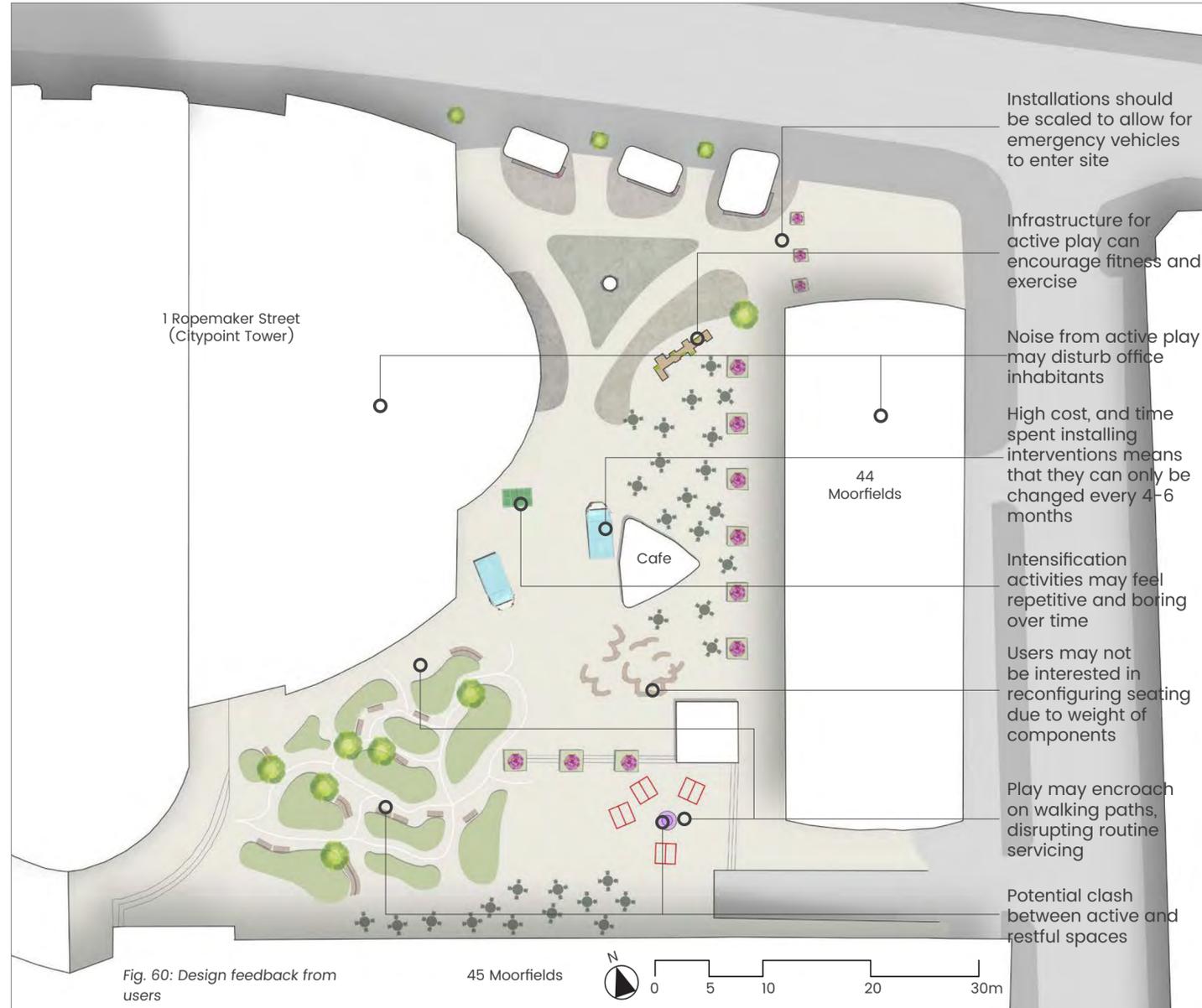
Fig. 56 (top): View from Ropemaker Street into CityPoint Plaza; Fig. 57 (bottom left): Intensification activities in the centre of the site; Fig. 58 (bottom right): Adaptable installations, flexible seating and altered topography along the south of the site



5.6 TESTING AND FEEDBACK

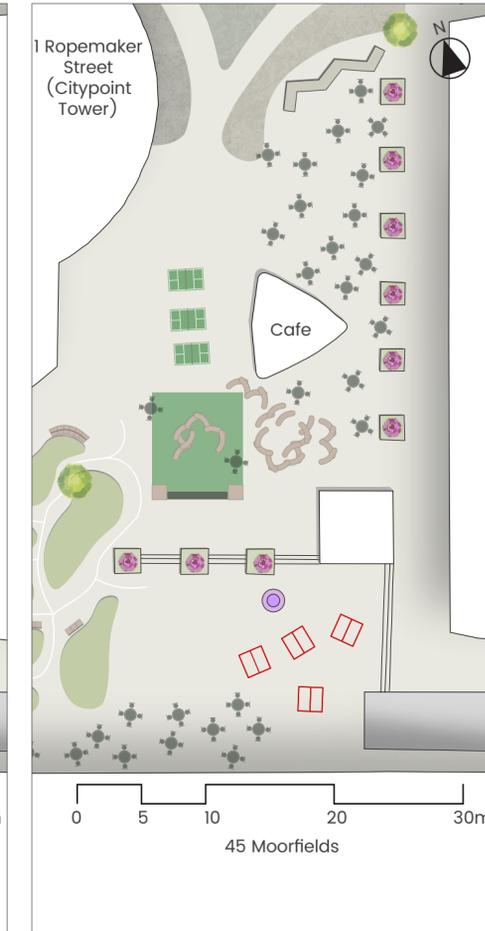
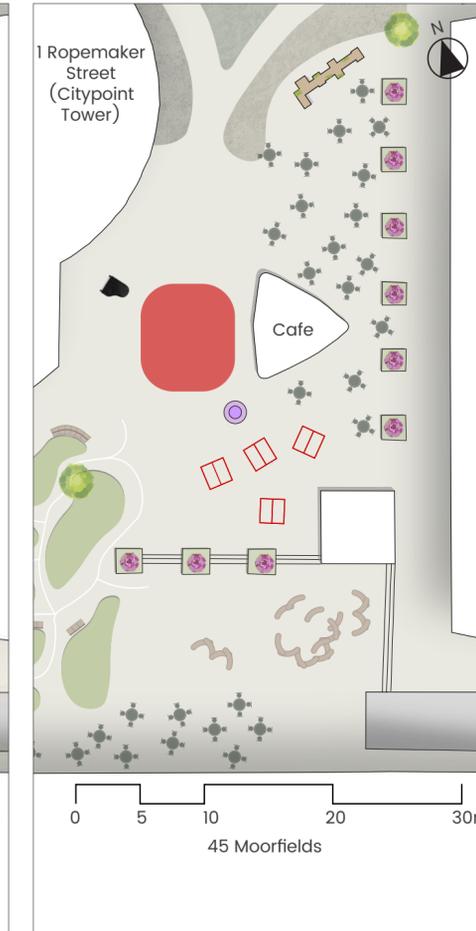
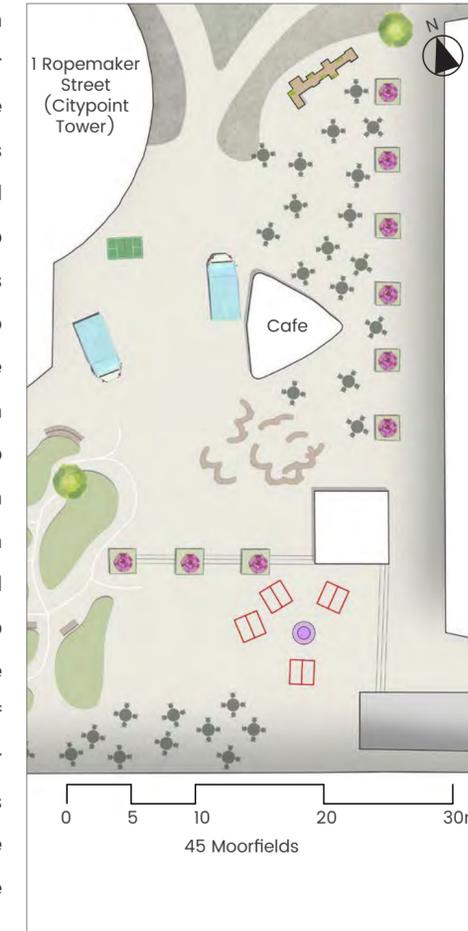
Due to time restrictions, a physical prototype could not be implemented and assessed. However, the design proposal was presented to inhabitants of the space to gain valuable user feedback on the design. Interviews were conducted on Thursday, 24th August between noon and 1 p.m. with the aim of identifying gaps from users. It should also be noted that definitions of play varied between individuals, with some understanding it to be more active, while others preferred calming spaces to unwind and take breaks from their offices. There were also queries about children's play facilities and family services. However, these were resolved by explaining the focus on employees as they are the primary users of this space.

Broadly, user feedback on the design was positive, although there was some apprehension as to whether or not the estate management would support such a project, due to high costs of management and safety concerns.



5.7 FLEXIBILITY

It is necessary to programme intensification activities in the site and continually monitor usage patterns of the space so as to evolve the design. The intensification activities CityPoint plaza currently undertakes are food trucks, swing dance classes and a popup screen for sporting events. These activities will encourage use of the site but are also valuable tools for assessing interest in the space. In order to minimise construction periods, these installations should be easy to move and alter. More fixed installations such as the Los Trompos and Mi Casa Su Casa can be rotated every 3-6 months. There should also be mechanisms to allow users to develop their own activities on site so that there is more freedom to undertake collective activities. If these activities are found to be insufficient or lacking, they can be moved to different parts of the site or altered. This modular, iterative approach supports a more successful space which better caters to its users.



5.8 MONITORING AND IMPLEMENTATION

MANAGEMENT

The success of this proposal ultimately rests in the management of the site. As the management decides the character and design brief, they must be on board with the changes which will take place, and facilitate the evolution of this space to its final stages. With that in mind, it is necessary to make the management as well as occupant companies aware of the benefits of playable space on sociability, well-being and added value of improved design and management. As inhabitant companies will be aware of the benefits of employee well-being on productivity, they will be able to assert their position against site management and may be willing to sponsor some activities. The added risk of a loss of market share to more trendy places like Shoreditch and Hackney will incentivise them further to favour this design approach, as it minimises long-term risk and maintains the longevity of this public space. Increased costs can also be offset by providing pop up retail outlets, though this must be carefully balanced so that the public space does not fall prey to becoming a consumption space.

PHYSICAL DESIGN

The physical design can be tested against public space quality assessment criteria by Gehl Architects (as seen in Fig. 3, page 19) but also against the value of each tool in creating spaces conducive to play. While outcomes such as sociability are less tangible, and therefore harder to quantify, the more quantifiable metrics such as the number of users and types of user activities will allow management to assess whether or not the space is successful. While the Varna & Tiesdell Model (2010) primarily deals with the perception of the public space, it can also provide an insight into the quality of these spaces and can be used to inform the evaluation of the site proposal. Tracking people's usage of different parts of the site can also be a valuable method for assessing the success of various installations in the project.

LIMITATIONS

- Site management may not be willing to undertake this design approach due to attached costs: Sustained funding is required over several years to engage users in participating in different processes.
- The success of the physical design hinges on intensification activities. If these activities are not provided, the resultant design may still suffer from a lack of use.
- Minimising elements of control may not be feasible due to added security risk.
- Difficulty in measuring sociability quantitatively.
- Applicability to other sites will require different design considerations such as traffic routes, structural elements and defensive architecture, which are sometimes necessary security measures at the base of towers.
- Reliance in collective action from users from surrounding buildings: Tourists and other visitors may not be as invested or willing to participate in long-term activities.

6

CONCLUSION

CONCLUSION

This project aimed to develop a practical toolkit for the design and management of privately owned public spaces, using play to ameliorate the current issues with these spaces. Though there are several problems with the nature of public spaces in international CBDs, it is seen that social, political and economic drivers often manifest themselves through physical design. For this reason, public realm design was selected as the scale of intervention for this research. This project adopted an iterative methodology, which developed the toolkit through a pilot study and application to a site, following a literature and case study review. The practical toolkit was separated into two sections: design and management. Design principles included barrier-free access, including relaxed elements of control, the provision of loose space, the installation of flexible elements of play, facilitating triangulation by providing opportunities to observe playful acts and an attractive environment. Management principles included the nature of programmed intensification activities, as

well as the need for a modular methodology when implementing the toolkit. There is some overlap in these sections, as good design must be underpinned by like-minded management, while good management alone cannot create a thriving place. These were identified not only through literature but were also found to be used in practice in case studies and the pilot study. During the application of the toolkit, the importance of appropriate levels of management and control were reiterated and corroborated the findings from case studies; it is essential for improving the perception of privately owned public spaces. Mediating play and the instrumental rationality of work through physical interventions require a paradigm shift for employees as well, as was seen during feedback interviews. Though some feedback suggested the use of children's play equipment as a means of facilitating inter-generational play, this was not deemed appropriate to the context of international business districts, which typically have a low

population of children. For instance, the City of London has a very low youth population, as it has a limited residential offer. In different contexts, however, such as suburban and residential developments, this has been documented to be beneficial for both parties (Spencer, 2013). This research proposes a new approach to public space design and management which uses spontaneity and informality to resolve some of the issues which currently plague privately owned public spaces. Conceptually, it provides a basis for research into incorporating play into formalised environments and is a foundation for further research both in the social sciences as well as in urban design academia, by bridging the gap between sociability and play, and more broadly on the effect of urban design on employee productivity in business districts. Further research may quantify this relationship, as well as with sociability in public space and employee well-being.

7

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