

# A Comparative Study of Contextual Urban Design Approaches in the UK and DK

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**Abstract:** During the last century urban planning has changed dramatically, due in part to vehicular development, a modernist design culture, rapid urbanisation and new computer technologies. This planning strategy has resulted in newly-implemented areas that look incredible from a helicopter, but the human scale has, as a consequence, often been completely shattered. The existing context has predominantly not been preserved, or adequately considered; the shape of buildings has been the most significant focus in the planning process. A more contextual approach to both comprehensive development and cellular renewal will be introduced as a different way of accommodating more contextual urban renewal. In this paper, four different case studies in two different cities, Winchester in the United Kingdom and Copenhagen in Denmark, are examined in regard to their urban planning and their use of the two above-mentioned approaches. A number of different Key Performance Indicators (KPIs) have been selected, analysed and evaluated in a spider web, to clarify where in the process the planning could have been better or improved with regard to future similar planning processes and urban developments. The two cities, Winchester and Copenhagen, and the four case studies, selected in the beginning of this paper, turned out to be more dissimilar than anticipated. This was due to cultural traditions and different construction methods in the two countries. In spite of this, clear improvements in the process of using comprehensive development and cellular renewal have been identified. Both case studies approached by cellular renewal turned out to be the most contextual urban design, where the focus on social- and physical contextualism was introduced early in the process. With that said comprehensive can still be considered and approached using contextualism.

**Keywords:** Cellular Renewal, Comprehensive Development, Urbanisation, Key Performance Indicators.

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## Introduction

When there is an urban development, new buildings are placed within historical established areas. This creates a desire for buildings with a high standard of design to fit in with the already established city area, the established context (Golding 2001). The increased inflow to the cities has awoken a fresh focus on urban growth (Statistik 2011; BBC 2014; Castberg 2013) and in particular how to accommodate urban population growth and improved life quality by increased living space. This implies that councils are forced to consider and develop strategies in order to meet the need for new buildings. Within these strategies it is necessary to consider the allocation of land parcels and new places around the city (Walton *et al.* 2000).

## Background

City councils all over the world are forced to consider urban development, regardless of size and culture. It is essential to have a clear strategy to follow (DETR 2000). Contextual urban design must balance a concern for both the physical and social aspects, as the former

urbanist Jane Jacobs said, “*New ideas really do require old buildings*” (Jacobs 1961). Jane Jacobs was focused on making recreational areas without making them boring for the citizens. Jan Gehl (2010) mentioned in the book “*Cities for people*”, that cities have to be designed for people on “the human scale”. According to the two urbanists it is necessary not only to involve the public in the overall development concept, but also to place them as a main priority in the townscape, and due to this fact, cities have to be planned and developed for the people.

## Different Urban Development Approaches

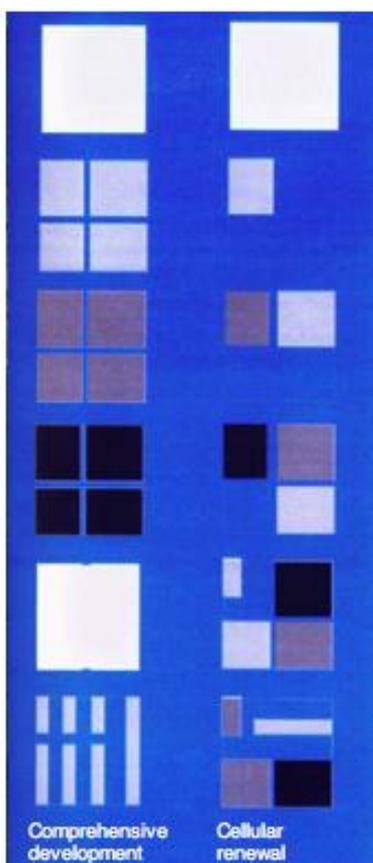
Jan Gehl (2010) supports Newman (1996) who believes that the modern city is a product of the industrial city, where it is rather complex to grant all desires and requests because of the many different approaches to plan and incorporate new city areas (Newman 1996). To address this complexity, this paper is aiming to define relevant approaches and the impact of their implementation on contextual urban design.

Two different methods are introduced to approach urban design developments: comprehensive

development and cellular renewal. How comprehensive development and cellular renewal can be approached is described in table 1 and illustrated in figure 1, where the differences in the two approaches are underpinned. Comprehensive development is characterised by the wholesale planning, design and delivery of large scale, often isolated pieces of a city whilst cellular renewal is often focused on smaller pieces and involves the replacement of an existing cell through a combination of retention, refurbishment, and replacement. Cellular renewal can be comprehensively planned. The result in cellular renewal is the rejuvenation and densification of an existing piece of the city whilst comprehensive development creates an extension or new piece of city.

**Table 1.** The Main Functions by Using the Approach

Approach	Main functions
<b>Comprehensive development</b>	Larger scale construction, limited constrain, often located on the periphery of existing cities
<b>Cellular renewal</b>	Smaller scale construction, often highly constrained, existing cells and densification



**Figure 1.** Gradual Renewal Program

An understanding of change management, for industrial use will be introduced to emphasise the requirement of basic knowledge in changing areas on behalf of the public. It is difficult to make any approaches work/fit without introducing theories about change management and without an understanding of the needs of cities to adopt constant change in the demographic development (Cummings & Worley 2014).

Public engagement is introduced to fulfil the citizens’ desires, expectations and requirements. When considering the mechanisms and relationship between the council and the public, it is essential to foster a supportive relation, especially with the contextual design in mind (Agger & Hofmann 2008).

**Cellular Renewal**

Cellular renewal is known by a number of different terms: partial development, urban regeneration, etc. In this paper it will be referred to as cellular renewal. Cellular renewal covers different aspects: urban planning, urban renewal, cellular development and area densification (García 2004). One has to consider how to replace and, renew and regenerate the already integrated parts of cities (Landry 2005; Carden 2014; Lange 2014). Cellular renewal seeks to deliver urban renewal on several sites across the whole city. Cellular renewal involves the redevelopment and densification of multiple sites within the existing city and may be planned comprehensively or through the creation of ad hoc implementation of available building sites, what is known as windfall (Landry 2005; García 2004).

Cellular renewal has a tendency to fit within a contextual approach, due to the fact that cellular renewal sites are already located in existing city areas. Under normal circumstances the public, specifically nearby communities, will be involved and their opinions will be taken into consideration in shaping the final development (Agger & Hoffmann 2008).

**Comprehensive Development**

Comprehensive development is an urban renewal with the primary focus to deliver city growth through the wholesale development of a virgin periphery of an existing urban area, green- or brownfield. It seeks to deliver city growth on the fewest number of sites (Carden 2014).

Comprehensive development is widely considered to be easier to deliver and implement regarding urban growth. Comprehensive development presents some challenges to build in context, due to the fact that the sites often are located in the periphery of cities and are perceived as a ‘blank canvas’. This also entails that there are no neighbours or if so, they are on the edge of the site (Golding 2001). In these kinds of cases a contextual analysis, regarding existing suburban areas,

should be carried out around the city and should influence the masterplan.

### Brownfield Development

Brownfield development can be approached by both cellular renewal and comprehensive development. If a brownfield development is approach by cellular renewal, it will often involve retention of existing buildings and new constructions. If comprehensive development is used to approach brownfield developments, all existing constructions will be demolished, except a few key buildings, and the area will be built with new constructions.

### Public Engagement

Public engagement has always been an issue when it comes to urban planning, because of public uncertainty, mistrust and resistance to change. There are differences in the way of including the public/citizens' regarding comprehensive development and cellular renewal. Public engagement has been improved during the last decade, but there is still space for improvement.

### Theory of Scope Selection

To generate and clarify the scope of this paper and the choice of the right focus in the analysis of the identified Key Performance Indicators (KPIs), some underlying considerations will be introduced to maintain a retrospective approach.

### Underlying Considerations Regarding Urban Development

A decision model, as shown in figure 2, is created from the function below:

$$f(A,B,C)=E(U)$$

where:

A is resources available for the analyst

B is scope of the investigation

C is capability of the analyst

E(U) is the expected uncertainty of the statement

(Herrmann *et al.* 2014), B is further defined in Herrmann *et al.* (2014).

In figure 2 the y-axis gives the different KPIs used in the (given) study and the x-axis illustrate a time-line with the event horizon at present time. The four different paths shown “in the future” define:

1. The desired path outcome of the completed construction, where all the KPIs are at a maximum level (green).
2. A process/path where the final construction is true to the design phase/planned outcome, without any changes (blue).
3. An example of an actual outcome/path (pink).
4. A process/path where final construction is not true to the design phase, because of change(s) (red).

In figure 2, there is a “books and reference” block to indicate how the different KPIs for this study have been defined (by literature study) for what good urban design is. The case studies are integrated as well and are illustrated in the centre of figure 2; their individual timelines are different from each other, depending on the project start.

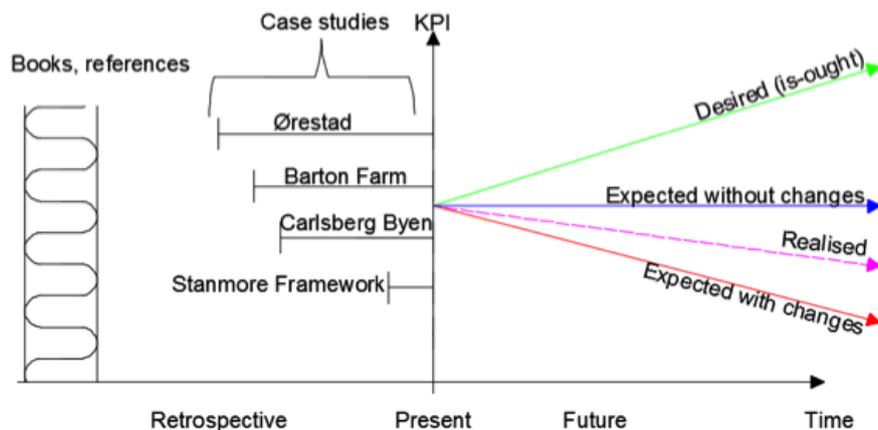


Figure 2. Decision Model

The desired outcome that is shown in figure 2 is related to the “is-ought” problem, which was addressed by David Hume, a Scottish philosopher, in 1888. The distinction between the four different paths, defined in figure 2 is important for the discussion and understanding of the results of this study. As an example of the is-ought problem, it is the authors who have defined the applied KPI’s in this study that is the authors have defined the KPI’s that ought to be used (although backed by plenty of distinctive urban design literature). Hence, the research method that has been applied in this study is to investigate past events, evaluate the outcomes of these events and then rank the different urban design approaches. However, some of the evaluated outcomes are to some extent expected outcomes. Since most of the cases in this study are in an early stage, the selected KPI’s are based on values defined by professional urban designers rather than the final users of the new urban areas. This can cause some risks of bias (assuming that it is the citizens that should evaluate the performance of the new urban area), it can be too theoretical, and non-user functional. Therefore, one has to be vigilant of these problems.

### Case Studies

#### **Barton Farm, Winchester (Comprehensive Development)**

Barton Farm is a comprehensive development of a virgin green field used for agriculture for decades. Barton Farm will be an integrated part of the city and the nearby neighbouring communities (Thompson 2012). John Thompson & Partners (JTP) has developed the design code for Barton Farm, which includes its investigation of the area and the contextual analysis.

#### **Stanmore Planning Framework, Winchester (Cellular Renewal)**

The Stanmore Planning Framework is an urban renewal of Winchester (UK) approached by cellular renewal. The area of Stanmore was constructed in the post-war period as a comprehensive development. Stanmore is beginning to decay and there is a need for a general renovation and revival of the area (Broadway Malyan 2013). The framework covers a lot of different sites in one overall plan; in brief it is a comprehensive masterplan, which is provided by Broadway Malyan (2013).

#### **Ørestad, Copenhagen (Comprehensive Development)**

Ørestad is a new integrated part of Copenhagen (DK) which is constructed as a comprehensive development, with an overall none-contextual

design. The Finnish drawing office APRT and the Danish architect company KHR Arkitekter presented together a final masterplan in 1997, and the first office building was completed in 2001. The first phases were completed to accommodate city growth with a lot of prestigious buildings, which provides a very modern and interesting architectural expression (Faber 2010).

#### **Carlsberg Byen, Copenhagen (Cellular Renewal)**

Carlsberg Byen is a brownfield development. The building site is very similar to a cellular renewal with a comprehensive masterplan, located in Valby (DK). Several of the existing buildings will be preserved to maintain the originality and integrity of the area. The Danish architects Entasis created Carlsberg Byen the masterplan, which was launched in 2007, but suffered from the financial crisis (2007-2010), which has meant that the development is still ongoing.

### Definition of the KPIs

A set of KPIs has been identified to measure, examine and compare each case study’s level of contextualism. The KPIs are listed below, where they are divided into two main categories, *social contextualism* and *physical contextualism*. When the KPIs have been analysed, a pattern of the pros and cons in each case study will appear, thus giving an opportunity for discussion and conclusion. The KPIs are selected to achieve social- and physical contextualism.

#### **Social Contextualism**

There is no general or correct answer to how much, when or how public engagement should be performed in respect to urban development (Agger & Hoffmann 2008). This paper focuses on either established area densification or virgin area development. A certain level of public engagement will be considered necessary to gain information and support from the involved/interested community stakeholders in the area. Arnstein’s metaphor about an involvement ladder, see table 2 (Agger & Hoffmann 2008) will be introduced to illustrate the different levels of public engagement.

Each step on the ladder describes the different levels of involvement and influence. This paper will focus on the extent to which the public are involved and the dialogue between the council; comprising of the politician, developer, design team and civil service, and the public; comprising of the citizen, interested stakeholders in the community and local experts with professional knowledge. The social contextualism is subdivided into several sub-KPIs, to achieve a comparable base.

**Table 2.** Arnsteins Ladder on Tabular Form Rewritten by Niels Helberg (Agger & Hoffmann 2008)

Step	Method	Description
5	<b>Self-determination</b>	Delegating e.g. local councils
4	<b>Co-determination</b>	Participation e.g. joint working
3	<b>Dialogue</b>	Debate such as public meetings or via internet / e mail
2	<b>Information</b>	Household-distributed leaflets, information on websites, etc.
1	<b>No involvement</b>	None

#### *When was the Engagement Introduced*

To achieve a well-integrated urban development there has to be some engagement with the community. The earlier in the process this is done, the better because it encourages a democratic process (Agger & Hoffmann 2008). But this still must be done with a consideration of the right level of involvement to avoid the public taking over the leadership of the development and thereby become totally self-determined (table 2).

#### *Engagement of Local Community*

Engaging with the local community through workshops/exhibition is a relevant way to maintain a relationship and to inform the community during the development (Burd 2010). This can also introduce new initiatives, stages and progress solutions in an illustrative and engaging way, because it provides an opportunity for the developer to meet the community and get central local knowledge (Agger & Hoffmann 2008).

#### *Evidence of Engaging with Specialists*

Local specialists might be in possession of invaluable professional and historical knowledge. If a stable relationship can be maintained with such people it can be very beneficial for the process (Kitchin 2010).

#### *Evidence of Public Presentations*

Evidence of public presentation in the proposal is done to ensure that the final product has been introduced to the community and to maintain the democratic process with the public and encourage early adoption (Agger & Hoffmann 2008).

### **Physical Contextualism**

The physical contextualism is interesting to investigate, because it is in this process that urban planners make connections between the physical context and proposed development. The physical constraints and opportunities and prevailing character of an area form an objective basis for design decision-making. There is a complex

interrelationship between the social and physical dimensions of a place. While social contextualism has to be considered, it is the physical that the urban planner ultimately has control over.

#### *Density of the Buildings*

The density and scale of buildings should relate well to the density of buildings in the surrounding areas (Golding 2001).

#### *Pattern of Streets/Urban Blocks*

This is the prevailing layout and form of the physical infrastructure of the city and relates to historic patterns of construction, movement and land ownership.

#### *Pedestrian and Vehicular Connections to Surrounding Areas*

A development should be well connected to its immediate surroundings. Permeability will encourage physical and subsequently social connections between new and old pieces of a city. These connections are to be considered, even in small scheme developments. Cellular renewal sites will, from the starting-point, have existing points of access that have to be considered (Walton *et al.* 2000).

#### *Historical Layout and References/Exiting Landscape Features Integrated*

When new areas are constructed in cities, it will normally interfere with the existing city and thereby the historical layout (Golding 2001). This is particularly true when developments take place in a historically sensitive context. Is there evidence of these features in new designs?

#### *Topography and Landform Influencing Layout*

When urban developments are constructed, the current/actual topography and landform has to be investigated to ensure continuity in the area and a natural fit. Contextual development shows signs of having been moulded by its topography (Walton *et al.* 2000).

## Results

The KPI will be evaluated using a simple rating system, which will ensure a consistent review and interpretation of the case studies. The rating systems is divided into five steps from low to high where low is considered very little or none and high is very deliberate (table 3). The idea is that the rating in this way is consistent through the evaluation process (table 4, figures 3, figure 4 and table 4).

**Table 3.** Rating System for the KPIs

Low	1
Below average	2
Average	3
Above average	4
High	5

The consistent evaluation of the case studies is necessary, due to the fact that these different studies have to be comparable.

The following will focus on a comparison of the outcome of conducted spider webs. The spider webs are used as visualisation of the differences in the case studies and outline the different approaches of urban planning strategies seen in the different case studies.

Five KPIs from the two groups, social contextualism and physical contextualism, have been selected as the most central KPIs. One has to remember that all the KPIs creates a picture of how contextual a development can be. Table 4 is established to give an overview of the rated KPIs.

### Social Contextualism

The two KPIs for social contextualism (when engagement was introduced and the engagement of the local community) are chosen because of their two significant impacts on the design process. They enable the planners to have a direct impression of

what the public considers to be necessary in any given development and they give an indication of what would give the best outcome. According to Gehl (2010), the human scale is the most important factor, and is therefore needed to achieve a decent and liveable place. The ratings of the different KPIs regarding social contextualism, including the two chosen KPIs are visualised in figure 3.

### When was the Engagement Introduced

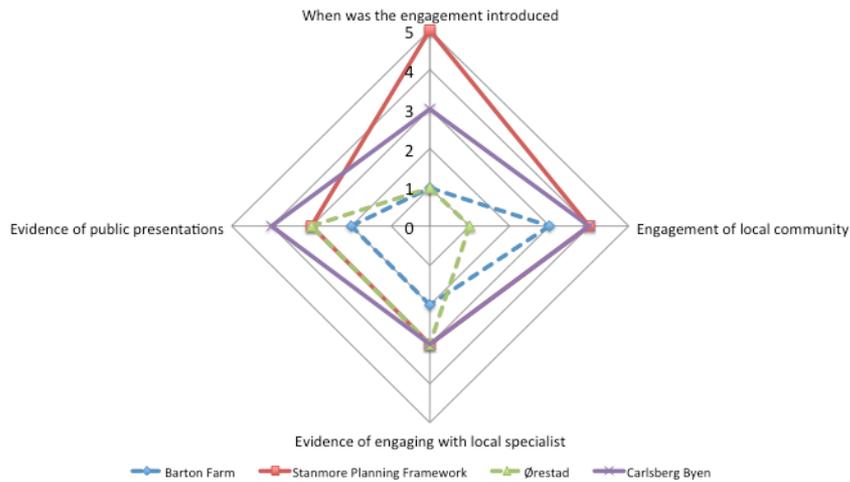
According to Agger & Hoffmann (2008) public engagement is a necessary part of the building process. This statement is supported by Howard & Gaborit (2007). The idea is to receive the public's attitudes and opinions as early as possible.

There is a significant difference between the approaches of comprehensive development and cellular renewal. Cellular renewal, which includes two of the case studies (the Stanmore Planning Framework and Carlsberg Byen) is rated higher than comprehensive developments, which include Barton Farm and Ørestad. The differences between the case studies are as expected. Cellular renewal is per definition interacting with existing areas and often in existing cells and is thereby significant to interact and engage with the local community and the citizen. This interaction gives cellular renewal an advantage, because the council has to engage in an early stage to inform the citizen about the initiatives in the area. Comprehensive development is often located in peripheral regions, which are likely to generate less public objections, because the sites do not interfere with existing parts of the cities. This difference is clearly demonstrated in the subjective assessment of the case studies, when considering the case of Carlsberg Byen.

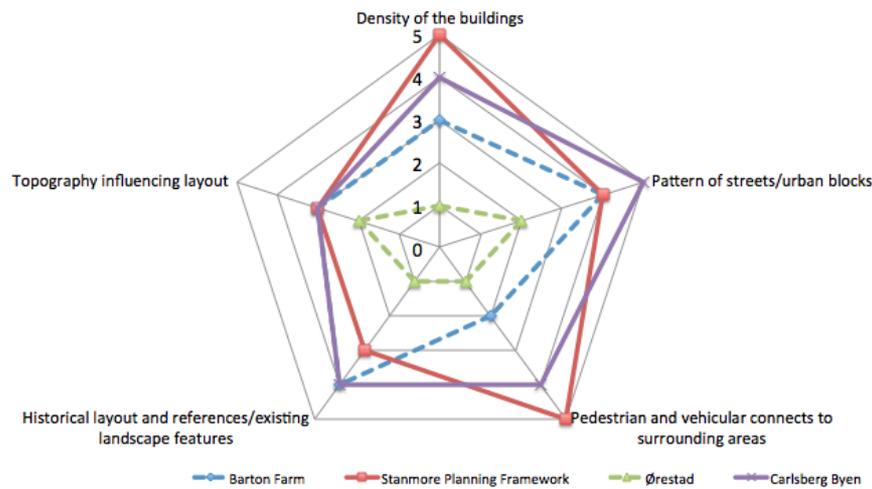
Carlsberg Byen is developed on brownfield ground, but it is not interacting in the same way as a traditional cellular renewal, because it is from the starting point located in an area with no existing liveable residents. In spite of this, urban planners are still striving towards the brownfield area as traditional cellular renewal (Entasis 2007).

**Table 4.** Summarised KPIs

Case study	Selected KPIs (max 25)	All KPI (max 45)	Social KPIs (max 20)	Physical KPIs (max 25)
<i>Barton Farm</i>	12	24	8	16
<i>Stanmore Planning Framework</i>	22	35	15	20
<i>Ørestad</i>	6	15	8	7
<i>Carlsberg Byen</i>	18	34	14	20



**Figure 3.** Social Contextualism (The dotted lines represent comprehensive development and solid lines represent cellular renewal.)



**Figure 4.** Physical Contextualism (The dotted lines is comprehensive development and solid lines is cellular renewal.)

#### *Engagement of the Local Community*

The engagement of the local community considers how, and on what level, the community has been engaged in design workshops during the building phases. Design workshops are an appropriate opportunity to engage actively with the public (Momirski & Andrews 1997). The Stanmore Planning Framework, Barton Farm and Carlsberg Byen are all rated fairly high, because of the focus in the design- and planning process. This collaborative engagement by using workshops, gives the planners an understanding and an opportunity to notify and involve the impacted communities/citizens (Thompson 2012). The public engagement in Ørestad was on a very low standard regarding. This was due to the fact that Ørestad was the first larger urban expansion in Copenhagen in decades (Boserup 2014). Because of this, the process became more policy-oriented rather than public-oriented. This is the reason that Ørestad has achieved the lowest rating: public engagement has

been given low priority and this is reflected throughout this process.

#### **Physical Contextualism**

Three out of five KPIs (density of the buildings, pedestrian and vehicular connections to the surrounding areas, and topography and landform influencing the layout) and have been selected to consider the level of contextualism and ability to respond and understand to the surroundings (Golding 2001). The ratings of the different KPIs regarding physical contextualism, including the three chosen KPIs, are visualised in figure 4.

#### *Density of the Buildings*

The density has to be appropriate to the surrounding areas, to correspond to the existing context whilst balancing the need for densification and a requirement for more efficient use of land. There is a fundamental variation in the urban planning systems of the UK compared to DK; the

UK is more traditional and strict in their approach to planning within the same density. A capital requires more visionary architectural expression; establishing new and attractive places, while retaining historic areas. In comparison, the provincial cities are arguably more traditional in their interpretation of architecture (Hein 2000).

Barton Farm is planned to be a new contextual suburb in Winchester. The site was developed on the basis of exhaustive research of the existing suburbs in Winchester. This process has given the urban planners an extensive knowledge of the structure and values of Winchester, but might also give an old-fashioned interpretation of the opportunities (Carden 2014). Barton Farm is rated with a medium ranking, because of its response to the current density in the city's other suburbs. The density of Barton Farm could also have been achieved by either developing a large number of houses to increasing the density and simply by using less land to accommodate the current number of houses. The density and scale in Ørestad was not a topic that was considered during the design process because Ørestad was seen as a new part of the city where the focus was to create modern and extravagant buildings (Boserup 2014). The focus was elsewhere which, as the low rating indicates, is regarded as poor practice from an approach of contextual perspective and corresponded with the surroundings areas.

Carlsberg Byen has chosen to accommodate the current density, and maintain a lot of the existing, and in some cases, preserved buildings (Entasis 2007). This way of approaching the contextual design corresponds well with the understanding of designing in context, where the buildings are in scale.

The Stanmore Planning Framework corresponds well to the current scale of existing buildings and has chosen to create only 2 storey building to keep the scale.

#### *Pedestrian and Vehicular Connections to Surrounding Areas*

Pedestrian and vehicular connections create/provide the area with the primary connection with the surrounding areas. Carlsberg Byen has been focusing a lot on the urban space, where the street pattern of connections has a central place (Entasis 2007). Due to the status as a former industrial field, the area is supplied with several connections to primary routes. This gives advantages before the construction phase begins.

One of the main problems with the connections in Ørestad is that the site is formed like a necktie; this creates long distances for pedestrians and with few primary connections to the existing

areas. This is mitigated by the introduction of the local metro station, but the area has failed in connections and permeability to its neighbour areas.

The Stanmore Planning Framework is an example of cellular renewal that has been comprehensively planned, but new infrastructure has been a main focus from the start. Pedestrians and vehicles have been considered and a new entrance and exit will be implemented to accommodate the necessary transportation into and out of the area (Broadway Malyan 2013).

Barton Farm is located close to the roman road, Andover Road, which in the future will be converted to a pedestrian and bicycle path. This main access road to the city will be brought through the site and will serve the site during the different phases of development. Apart from this, the connection to the surroundings are limited and this lack of permeability might create issues with connections in the future.

#### *Topography and Landform Influencing Layout*

According to Golding (2001) an avant-garde high-rise construction can lead to dissatisfaction in the area due to the change in topography. This change can lead to a lack in continuity and recognisability to the people who are intended to live in the area, which according to Gehl (2010) is critical to create an urban development where people would like to live. The DETR (2000) supports both the view of Golding (2001) and Gehl (2011; 2010) and mentions further, the significance of including, graining, climatic and ecological, etc., information which can have a beneficial and strengthening impact on the outcome of the development (Walton *et al.* 2000). This way of considering the surroundings gives an opportunity to create building profiles that rises of the ground/surroundings (Walton *et al.* 2000).

In all of the case studies the topography has been considered in the layout, but it has not been given any significant influence/part in the planning process from the urban planners. For example, Carlsberg Byen has tried to create the area as a whole by placing trees between the streets and corners (Entasis 9). The two case studies from the UK, has similar considerations of using the topography. Ørestad is rated lower compared to the other case studies, which is caused by different considerations regarding the architecture and appurtenant topography in Ørestad. One of these differences is the missing strategy for developing the subdivide fields. As a result, the spaces between the buildings have not been implemented and this has caused issues regarding especially the recreational spaces and also the topography (Faber 2010).

## The Sum of the KPIs

To complete the assessment and to give a thorough understanding of the most important KPIs, 5 KPIs out of 9 have been selected to create a simple outline. It cannot be assumed that a case study with a low summarised KPI-rating would not function as intended. The outcome of the KPIs is on a tabular form in table 4. Both the Stanmore Planning Framework and Carlsberg Byen have turned out to be well functioning, in respect to the investigated KPIs. These two case studies have in an early phase focused public engagement to respond in an appropriate way to the physical context and have been consistent with the public engagement throughout the whole design process. This has resulted in a high rating of the approaches,

The rating of Ørestad is rated relatively low. This was expected because Ørestad has not been built in context, but with the intention of creating and accommodating the need for city growth in Copenhagen.

On this basis, the analysis of Ørestad's approach to a contextual design has been, to some degree, unreasonable, but this is one of the differences in culture and urban planning style between Winchester and Copenhagen. In addition, the lack of public engagement has also influenced its low rating. All things considered, Ørestad has failed on most KPIs.

In the case of Barton Farm, the physical contextualism has been on a respectable level, but the absence of early public engagement has meant that the rating is lower than what had been initially expected, due to the wanted level of contextualism from the City of Winchester. If Barton Farm were rated on behalf of the last years work the outcome would definitely be different.

## Discussion

Ørestad has failed on social and physical contextualism, which in this case has been the source of significant criticism after the construction of the first phase, because people simply were not integrated in the process. Regarding the physical context Ørestad scores the lowest possible rating in 3 out of 5 KPIs. An example is the "Pedestrian and vehicular connects to surrounding areas" KPI where the connections to its surrounding areas are very limited. Despite this, the vehicular infrastructure is well integrated into the city centre and highway, but in this case it is the nearby context that is being rated.

Comprehensive development has turned out to be less contextual on all KPIs compared to cellular renewal. One of the reasons could be that the chosen case studies, Barton Farm and Ørestad, were launched in the early nineties and the cellular

renewal case studies, the Stanmore Planning Framework and Carlsberg Byen, were launched within the last ten years.

This research suggests that the public engagement has improved over the last ten years, which has caused an improvement of the social contextualism in the developments in this period. If this improvement had been implemented before the planning of Barton Farm it might have been rated similar to the cellular renewal developments and thereby been more comparable and more contextual.

## Conclusion

The Stanmore Planning Framework has turned out to be the case study with the highest score overall and the highest score regarding the selected KPIs. Both the Stanmore Planning Framework and Carlsberg Byen have the highest overall scores. This suggests that cellular renewal is more likely to generate both social contextualism and physical contextualism. This is not to say that if a development is approached as comprehensive development it cannot be contextual. It does however suggest that it will be less likely. It is of note that both the Stanmore Planning Framework and Carlsberg Byen are pieces of urban design that have been carried out more recently, which suggests an growing emphasis on contextualism in urban planning.

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