

# The Substantive Urban Design Considerations: Priorities for Creating Successful Places

## หลักการสำคัญที่ใช้ในการออกแบบชุมชนเมืองประสบความสำเร็จ

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### Abstract

Although urban design, as opposed to urban design theories, is an ancient profession, that has shaped towns and cities over the centuries in many different cultures and continents, the agenda of urban design is new and different relative to other more established theories of late-twentieth-century town planning [1]. Whilst urban design theory as well as its practice still faces a number of challenges, in recent years many urban designers and planners seemingly agree that there is no single traditional urban design approach which could offer an absolute answer to successful urban design. Indeed, ‘successful urban design’ should not be employed as a fixed theoretical model but as the principles that underlie those successes, have value in empirical settings, and draw its intellectual roots from the past. In light of this concern, this paper is devoted to a discussion of the principles underlining successful urban design. Based on a review of both academic and professional works, five main substantive urban design considerations are proposed in this paper. These include physical function, visual perception, urban environment, heritage conservation, and social demand and development. Through the discussion, this paper shows that these substantive considerations play their important roles in urban design and help to generate successful urban design.

### บทคัดย่อ

ถึงแม่ว่าการทำางานด้านการออกแบบชุมชนเมืองจะเป็นที่รู้จักกันมานานแห่งปี แต่ศาสตร์ของสาขานี้ยังน่าจะเป็นเรื่องที่ค่อนข้างใหม่ โดยเฉพาะเมื่อเทียบกับศาสตร์ที่เกี่ยวข้องกับการผังเมืองด้านอื่น ๆ การศึกษาวิจัยรวมทั้งทฤษฎีที่เกี่ยวข้องกับการออกแบบชุมชนเมืองแสดงให้เห็นถึงความหลากหลายของแนวคิดและวิธีการออกแบบชุมชนเมือง อย่างไรก็ตาม นักออกแบบชุมชนเมืองและนักผังเมืองในปัจจุบันส่วนใหญ่เชื่อว่า ความสำเร็จของการออกแบบชุมชนเมืองไม่ได้ขึ้นอยู่กับวิธีการหรือแนวทางใดแนวทางหนึ่งโดยเฉพาะ แต่ขึ้นอยู่กับหลักการสำคัญที่เป็นพื้นฐานในการออกแบบชุมชนเมือง ซึ่งเป็นองค์ประกอบรวมของแนวคิดและวิธีการออกแบบชุมชนเมืองหลาย ๆ วิธี การศึกษาครั้งนี้จึงมีวัตถุประสงค์เพื่อร่วมรวมข้อมูล แนวความคิด และผลงานของ

นักออกแบบชุมชนเมืองและนักผังเมืองที่สำคัญมากในเคราะห์ อภิปราย เพื่อเสนอแนวคิดเกี่ยวกับหลักการสำคัญของการออกแบบชุมชนเมืองในปัจจุบัน ผลการศึกษาแสดงให้เห็นว่า หลักการสำคัญซึ่งทำให้การออกแบบชุมชนเมืองประสบความสำเร็จประกอบไปด้วย 5 ประเด็นใหญ่ ๆ ได้แก่ ประโยชน์ใช้สอยทางกายภาพ การรับรู้โดยการมองเห็น สิ่งแวดล้อม การอนุรักษ์ และความต้องการ และการพัฒนาลังค์ ซึ่งหลักการสำคัญทั้ง 5 ประเด็นนี้ครอบคลุมเนนความคิดที่สำคัญของการออกแบบชุมชนเมืองที่ประสบความสำเร็จ เป็นหลักการพื้นฐานที่ทำให้เกิดการพัฒนาพื้นที่ชุมชนเมืองอย่างมีประสิทธิภาพ ทำให้เมืองมีสภาพแวดล้อมที่ดี มีความสวยงาม สะดวกสบาย และปลอดภัย ในขณะเดียวกันก็มุ่งเน้นการพัฒนาที่ตอบสนองต่อความต้องการของผู้ใช้พื้นที่ สร้างเสริมให้เกิดการพัฒนาทั้งด้านลังค์และกายภาพอย่างยั่งยืน อันเป็นเป้าหมายสำคัญของการออกแบบชุมชนเมืองในปัจจุบัน

### **Keywords (คำสำคัญ)**

- Urban Design (การออกแบบชุมชนเมือง)
- Urban Design Theory (ทฤษฎีการออกแบบชุมชนเมือง)
- Urban Design Principle (หลักการออกแบบชุมชนเมือง)
- Successful Urban Design (การออกแบบชุมชนเมืองที่ประสบความสำเร็จ)
- Physical Function (ประโยชน์ใช้สอยทางกายภาพ)
- Visual Perception (การรับรู้โดยการมองเห็น)

## 1. Introduction

‘It is a relatively simple task to think of a successful place, to go there and know that this is a good place. We all have our favourites. But it is much more difficult to know why a place is successful, and importantly, whether and how this success can be generated by setting the right condition’ [2].

The twentieth century has witnessed different directions in the urban design movement, and urban design theories remain a principally considered diverse set of ideas about what makes a good life and good environment. As Brown [3] notes ‘there are many streams of thinking about urban design today, and urban design pulls together many lines of thought,’ which can be distinguished from other contemporary efforts and from its predecessors by its self-conscious concern with its knowledge base—both substantive and procedural [4].

Whilst urban design theory as well as its practice still faces a number of challenges, in recent years many urban designers and planners seemingly agree that there is no single traditional urban design approach which could offer an absolute answer to successful urban design. As Sternberg [5] states ‘contemporary urban design should not simply advocate one set of design approaches but should rather reveal the principles that underlie them’ as substantial considerations. Experience through both theory and practice, a number of urban design theorists and practitioners offer their ideas of what might constitute fundamental principles for contemporary urban design. At this stage, the traditional urban design approaches have moved into a wider context, continually developing and modifying as times and needs change. They have been interpreted and transformed through a wider range of new pragmatism in contemporary urban design

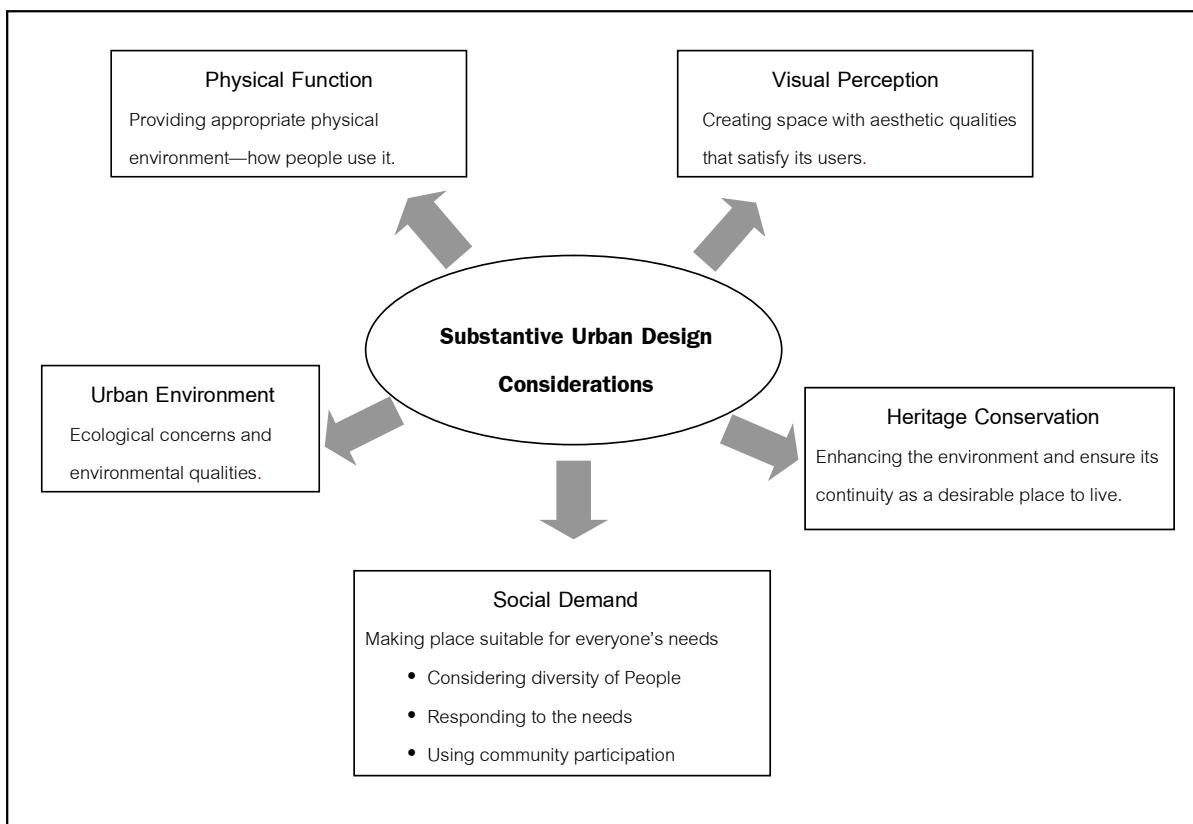
such as New Urbanism, Urban Regeneration, Responsive Urban Design, Smart Growth, Place Making, Urban Village, and Sustainable Urban Design. To pursue their goal and objectives, these contemporary practices have access to various kinds of techniques and methods. However, the principles which underpin these practices still reflect intellectual roots from the past.

In light of this concern, this paper will be devoted to a discussion of the principles underlining successful urban design, proposed in this paper as substantive urban design considerations. These include physical function, visual perception, urban environment, urban conservation, and social demand as shown in Figure 1. Specifically, based on a review of both academic and professional works, the discussion is mainly focused on how these substantive considerations play their important roles in urban design and how they can help to generate successful urban design.

## 2. Physical Function

*‘There are two tasks in redefining functionalism in architecture and urban design. The first involves coming to an understanding of human motivations and needs, and the second coming to an understanding of those aspects of the processes of needs fulfilment that might possibly be met or affected by the structure and materials of the built environment’ [4].*

Although functional considerations are more or less seen as another traditional area of concern and include matters such as road layout and capacity, pedestrian connection, facility provision and climate control; nevertheless their approach in contemporary urban design responds to a much broader range of human needs. In other words, they concern the function of the environment in terms of how people use it. Spaces need to be



**Figure 1.** Five main substantive urban design considerations proposed in this study.

arranged and furnished to support the most likely or desirable activities. According to Carmona et al. [6], the functional dimension of contemporary urban design involves how places work and how urban designers can make better places by providing the appropriate physical environment. In this sense, the functional dimension of urban design is responding to both social and visual dimensions.

Today, it is agreed that urban design must come to terms with this evolution as 'it is traditionally more used to dealing with zones rather than flows, with proximity rather than accessibility' [7]. Though the recognition of social importance in contemporary urban design has continually increased, it does not mean that the design of physical urban places should be abandoned. In fact, urban areas are undergoing major social, economic, and environmental transitions as their

structures and functions change. Mitchell [8], supported this idea as he argued; 'the forms that cities take, the ways they function, and the mixes and distributions of activities within them have always been influenced very strongly by the capabilities of their underlying network infrastructures. He also noted that cities have often been transformed by the introduction of new infrastructures. Evidence has shown that the shifting roles of basic urban infrastructure, such as telecommunications and transportation, have impacted on human activities. According to Brown [9], many human activities are becoming more 'person-based' rather than 'place-based,' as they follow increasingly mobile citizens. Mitchell [10], in his book, 'Me++,' reaffirmed the interconnection between urban facility and human activity. He showed that there are effects of a communication infrastructure and technology on people

lifestyles—the way they deal with their bodies, architectures, cities, and importantly the uses of space and time [10]. In this sense, the physical function of urban design remains its important role in human society. Indeed, the good design of the physical urban area can not only facilitate urban activities but also fulfills social needs.

The works of other prominent scholars in this field provide evidence supporting the relationship between the physical environment and the social interaction within the urban area. In his paper—‘The Urban Place and Nonplace Urban Realm’—Melvin Webber [11] emphasised the relationship among the physical patterns, the spatial activity patterns, and the spatial interaction patterns that are the expression of economic and social behaviour. In his view, most traditional urban planning was unsuccessful because it has failed to recognise the conception of the city as a social system in action in which the physical city and the spatial arrangement of activity are related with social behaviour. Webber noted: ‘Our traditional emphasis has been upon the physical city, conceived as artifact; upon the spatial arrangement of activity locations, conceived as land-use pattern; and upon the urban settlement, conceived as a unitary place. We have sought to influence the forms of each of these, with the purpose of improving certain behavioural aspects of the society. Yet we have neglected the conception of the city as a social system in action.’

Likewise, the work of Whyte [12], ‘Street Life Project,’ asserted the role of the physical environment in facilitating social activities. Whyte promotes his idea that the physical conditions of the urban area have an impact on the use of public space and social activity. The work of Bentley, et al., [13] regarding responsive environments, likewise emphasises the role of physical environments through the humanist perspective. It is concerned with the function of the environment in

terms of how people use it and how to design that environment to suit people’s needs. The key functional considerations in contemporary design, such as linkages and easy movement for pedestrians, attractive pedestrian environments, compactness and appropriate intensity of land use, and mixed use; reflect the work of major humanists especially Jane Jacobs [14]. In this sense, it can be seen that functional considerations in the contemporary urban design perspective are also responding to a function of the subjective experience—responding to users.

Reflecting the traditional considerations of functionalism, the functional dimensions in contemporary urban design have led to an increase in the understanding of how environments are used as well as the diversity of users. Whilst built environment plays its role as a determinant factor in the quality of people’s lives, it is important to recognise that the built environment is not an independent variable of the relationship between physical and social worlds [4]. A well functioning urban design should be created by incorporating the understanding of how environments are used [15] as well as the diversity of users and their differing needs regarding the functional and physical objectives. In order to create an urban space that functions well, it is also suggested that five physical urban design aspects: the use of public spaces; transport and mobility systems; mixed use, density and compactness; public facility; security and safety, should be seriously considered.

### 3. Visual Perception

Visual perception has been the traditional preoccupation of urban design, as clearly presented in the works of Gordon Cullen [16] by the townscape tradition. This has been viewed largely as a matter of aesthetics, in which the city is seen as a dramatic event in the environment. According to Bacon [17]



**Figure 2.** A well functioning urban design successfully balances the needs of pedestrian, shops, offices, apartments and vehicles [15].



**Figure 3.** Townscape tradition: The city is seen as a dramatic event in the environment [16].

and Olsen [18], the city is a work of art, it fosters art and it is art [19]. In this sense, the city is seen as architectural, and therefore an artistic creation. According to Madanipour [20], this view: 'of design, as an elitist, artistic enterprise which has no relationship to the real, daily problems of large

sections of urban societies, has led to a reduction of urban design to a visual activity.' While being criticised for overstating the role of the physical aspect of the city, the visual tradition has been developed through time and become much more of a comprehensive design strategy. Creating a place with good visual quality could not be seen as a simple undertaking, as it requires the understanding of two fundamental issues—the aesthetic preferences of people and the aesthetic qualities of urban spaces and townscape, both considered to be of importance.

The issue of visual considerations, in general, ranges from the design and position of a single object in space or a concern for buildings seen in their immediate context, to a city-wide concern for skylines and the position of high buildings or other landmarks [21]. In many cases, they are therefore described as the only inescapable, public, art forms. Perceived in this way, many urban designers and researchers suggest that urban spaces, such as public places, should be designed in a way that responds to what people feel about their built environments. They also believe that the aesthetic appreciation of urban

environments is a product of perception. In this case perception concerns more than just seeing or sensing the urban environment. It refers to the more complex processing or understanding of environmental stimuli, generally through the human sensory system—vision, hearing, smell and touch. Linked to its original perceptual approach, proposed by Kevin Lynch [22], the perception and experience of place becomes an essential consideration for contemporary urban design. According to Nasar [23], whilst people can choose whether or not to experience some forms of arts or attend some particular events, urban design does not afford such a choice. In his view, people must pass through and experience the public parts of the city environment as part of their daily activities. Thus, it is important that: ‘city form and appearance must satisfy the broader public who regularly experiences it’ [23]. Likewise, Hubbard [24] emphasises the idea that: ‘understanding how people look at, make sense of, and generally feel about their built environment would appear to be a key requisite in the development of any such guidelines for aesthetic control.’

In light of this concern, it is essential to realise that the general public’s liking for particular environments is much broader than any aesthetic criteria and there is no certain model to put forward for every place. According to Greed [25] improving the function and aesthetic environment for its users is the ultimate goal of urban design. As such, it is important: ‘to translate utility into art and simultaneously respond to both public and private interests.’

The aesthetic qualities of urban spaces and townscapes involve two sets of elements—urban space and urban architecture. A number of authors including Sitte [26], Cullen [16] and Bentley [27] have made a great contribution to these issues. Their works have made a great influence on the aesthetic quality, study and practice up to

today. Drawing on more recent studies on the relationship between the visual quality of urban space and design, some key ideas regarding design strategies for aesthetic urban space have been revealed. Based on the concept of traditional urbanism, Chapman [28] highlights some common spatial qualities that affect how the urban landscape is perceived. These include progressions, surprise, contrast and scale. He also argues that it is difficult to explain what makes a good space: ‘spatial qualities can be hard to understand or describe, but we all appreciate them.’

The visual aesthetic character of the urban space arises not only from its spatial qualities, but also from the architecture it contains. Rasmussen [29] highlights the visual and sensual qualities of architecture that influence people’s appreciation, composing of form and mass, solids and cavities, proportion and scale, rhythm, textures and materials, light, colour, and hearing. Likewise, with its aims to identify good buildings, the Royal Fine Arts Commission in the U.K. proposes six design criteria [30]. These criteria are: order and unity, expression, integrity, plan and section, detail, and integration. However, along with these criteria, the RFAC have argued that a building might meet all criteria and still not be good. Like their traditional counterpart—the functional considerations, the visual and perceptual considerations in contemporary urban design have been developed and changed, especially over the past two decades. At present, the aesthetic and visual qualities of the urban environment and the organization of urban space are seen as qualities that are addressed by urban design, and importantly, reflect the circumstances of the people who produce and use it. The aesthetic appreciation and perception in this sense, are naturally attached to social and cultural experiences that go beyond simple expressions of individual taste [20].

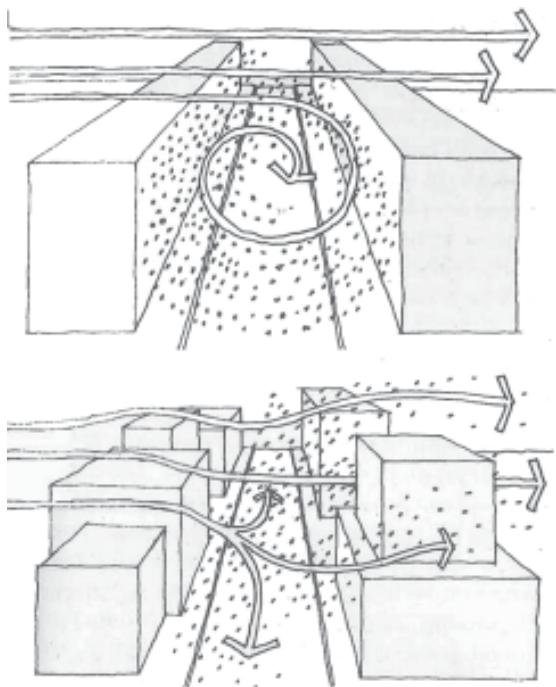
#### 4. Urban Environment

The urban environment has been a major concern for the city since the latter part of the twentieth century. At that time, it responded to the functionalist's idea: 'as a necessary outlet for the recreation of growing masses of urbanities' [31] and the townscape movement: 'as a romantic drive to bring nature into the exploding metropolis' [31]. Nevertheless, in the late 1960s, the growing interest in this urban aspect was shown in the realm of 'ecological planning' as presented in the work of Rachel Carson (1962)–'Silent Spring,' and E. F. Schumacher (1973)–'Small is Beautiful' [32]. According to Moudon [31], many works of the landscape architects have made a substantial contribution to this field. Ian McHarg's 'Design with Nature' [33], for example, is one of the showpieces of empirical work in this area.

By the 1980s, in accordance with the rapid increase of environmental problems in the cities, more attention was paid to these concerns in urban studies, evolving into either 'environmentalism' or planning for 'sustainability' [34–35]. This has led to serious concerns about excessive energy consumption in the urban environment. Urban ecology emerged across disciplinarian boundaries, introducing systematic methods of analysing and planning the city. By these methods, the holistic views of urban environment—geology, topography, climate, air pollution, water, soils, noise, flora and fauna—were considered. The connection between urban design and environment was emphasised by Cook [36]. He identified environmental quality as one of the four qualities that urban design, as a process, sought to achieve. The works of Michael Hough [37] and Ann Whiston Spirn [38] made the relationship between urban ecology and urban design more distinctive. In her book, Spirn states: '*One of the major urban design concerns is with the relationships between*

*built-up and open spaces, between manicured open space and wilderness areas, and between fragile and robust environments—and with all of these elements in relationship to each other.'*

These publications demonstrated how ecological concerns could benefit urban design. Unlike other urban design aspects, the environmental consideration is a somewhat new and thinly developed area of concern in urban design [21]. In some cases, it has been identified as one of the three disciplines of sustainable development—economic, social and environmental. Figure 4, Spirn [38] demonstrates the relationship between the design of urban space (built-up) and the environment (ventilation). Nevertheless, as mentioned, it has shown its roots in the old tradition of urban design since it reflects the principles of the functionalists—concerned with creating a better living environment. According to Cook [36] the environmental qualities affect how people will use the



**Figure 4.** Spirn [38] demonstrates the relationship between the design of urban space (built-up) and the environment (ventilation).

public realm. They are often a ‘function’ of building placement, height, mass, and a relationship to other buildings. Moughtin [39] supporting the idea in his book—‘*Urban Design: Green Dimensions*,’ also points out the relationship between post-modern urban design, the urban environment and the functionalists.

As in the age of contemporary urban design, there are strong arguments for believing that solving urban problems needs multifarious methods. While single-purpose solutions to problems tend to prove their inability to deal with contemporary urban problems along with other considerations, urban designers should be much more concerned with the nature of the urban ecology and environment in the future than they have been in the past [4]. So this heading encompasses both long-standing as well as emerging concerns and priorities. Based on the works of several authors and critics, the important environmental aspects that should be particularly concerned in urban design include four main issues: microclimate and human comfort; air and noise pollution, the roles of water, and vegetation.

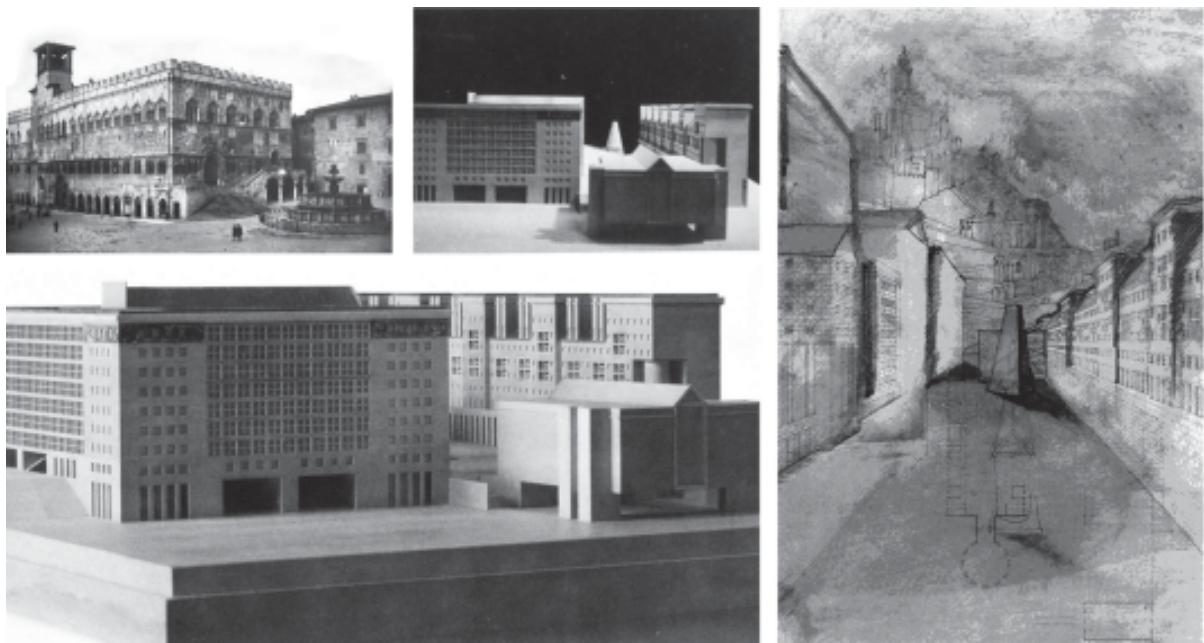
Besides these four environmental concerns, it is also important to consider the broader role of design and the urban environment. In recent decades, the issue of sustainability has influenced the environmental aspects of urban design. Indeed, the concern of the urban environment has been extended. Some strategic designs for environmental sustainable cities, discussed by many writers, include such key issues as energy renewal and conservation, environmentally friendly transportation, appropriate building technology, and recycle and reuse. Following the same vein, the concept of compact city, mixed use and green city seems to flourish dramatically under the theme of sustainable urban environment.

## 5. Heritage Conservation

Although the widespread argument that urban areas must change or else they will stagnate has long been continued, however at the same time concern regarding urban conservation has grown, from both the general public and from increasing elements of the design and planning professions [40]. In most cases, this concern is also associated with the fact that urban conservation has a national, historical and artistic value as well as a positive effect on tourist development plans. Conservation related to urban design can be dated back to the nineteenth century. Following the picturesque tradition of landscape visions, the townscape movement has led to popular concerns with the outward visual appearance of conserved urban areas. According to Larkham [40]: ‘the nineteenth century is portrayed as a period of gathering momentum, leading to a first phase of conservation legislation in a number of countries towards the end of the century.’

In addition, the conservation dimension of urban design also reflected the morphological approach of the neo-rationalists since they recognised the traditional form of the city as a satisfactory pattern for accommodating human needs. As shown in Figure 5, Aldo Rossi, the most influential of the Neo-Rationalists, considered an ancient form of the city, the relationship of street square, monument and residence, commerce and public education, as the idea model for development scheme of the lower city of Perugia, Italy in 1982 [41].

In the second half of the twentieth century, more works and studies on urban preservation and conservation issues have led to an increasing appreciation and understanding of historic urban settlements and their recognition as part of the region’s heritage. The historic townscape was recognised as the spirit of a society that repre-



**Figure 5.** Historic town and Development scheme of the lower city of Perugia, Italy in 1982 by Aldo Rossi [41].

sented not only the ambition and effort of the people occupying them at present, but also those of their predecessors. According to Conzen's view [42], 'townscape' demonstrated a structure whereby successive societies could work out their lives methodically. It embodied accumulated experience provided by the experiments of its predecessors, which could be seen as a precious asset. Along with the rise of this widespread consciousness of history, there was the realisation that urban tissue could be as important as the monuments surrounding them [43]; and this realisation resulted in a strong urban conservation movement in Western Europe as well as across the world. This phenomenon was stressed by the establishment of the conservation approach for historic monuments by the Charter of Venice signed in 1964, followed by the 1967 symposium in the Hague, and for the first-time introduction of the concept of cultural heritage in UNESCO's convention of 1972.

At present, with the accumulated experiences both in terms of theory and practice, it has become widely accepted that urban design,

planning, and conservation are not contradictory, but rather complementary terms. As Orbasli [43] states: 'The conservation of historic urban environments is not an isolated project, but a multitude of projects, not all of them physical, which are interlinked to take place over an extended period of time, embodying public desires and private vested interests.' This means that urban conservation cannot be limited to the preservation of single buildings: 'It views architecture as but one element of the overall urban setting, making it a complex and multifaceted discipline' [44]. Without taking a more comprehensive view of the urban environment, urban design and planning will remain incomplete.

Furthermore, far beyond its beginnings, conservation today is not simply an architectural deliberation, but also an economic and social issue. The continued debate on main conservation issues, restoration or repair, has assisted the process of changing attitudes away from other conservation approaches in particular restoration in favour of conservative repair. At the moment,

enhancement that requires the clearing of whole districts of a city is no longer accepted by both the general public or, at least, an educated and vociferous minority [40], and by most urban designers and planners. Enhancing the environment and ensuring its continuity as a desirable place to live becomes the aim and imperative of urban conservation. Instead of limiting themselves with a purely pictorial view of architectural and historic interest, urban design policies in conservation areas need to widen their context [45]. Certainly, there is no single urban conservation approach that can be applied to all historic areas which have different contexts. However, it seems to be the consensus that in historic areas, there is a need for a sophisticated urban design approach which: '*embraces issues of character and use, the historic functions of the area and the remnants of these functions and land uses that maintain active social links with the past*' [45].

Reflecting on these urban conservation ideas, more and more urban renewal and redevelopment projects—particularly in historic downtowns at present take the form of a mixture of old and new with consideration of all the economic, social, and aesthetic reasons [46]. As Pressman [47] emphasises: '*The historic conservation movement is gaining momentum, the art of urban design is being re-discovered, and the city centre is again beginning to receive the attention it once commanded as the critical element breathing not only life but also vitality into the entire urban region.*'

## **6. Social Demand and Development**

In the last decade, there was growing evidence to suggest that urban design approaches have moved beyond a preoccupation with the control of external appearances in order to seek

a more fundamental role for urban design. This would be concerned with buildings and the space between the public and private realms, not just with the way things looked and the aesthetic experiences that they provided, but with aspects of human needs in the external built environment [46].

At present, it is generally agreed that there is a strong relationship between space and society. As Carmona et al [6] notes: '*it is difficult to conceive of space without social content and equally, to conceive of society without a spatial component.*' Likewise, Madanipour [20] argues that urban fabric is both a physical and a social artefact. The social dimension of urban form mainly deals with the spatial arrangement and inter-relationship of the characteristics of the people who build, use and value the urban fabric. Gehl [48] in his book '*Life between Buildings*' emphasised this very point. He argues that the design of public spaces can possibly influence the ways people use them, for instance in terms of 'how many' people use public spaces, 'how long' individual activities last, and 'which activity' might develop. In this way, urban design can be seen as a means of manipulating the probabilities of certain actions or behaviours occurring [6]. This is asserted by the work of Aldo Van Eyck who believed that the solution to fulfill the demands, promises and expectations for a human environment should derive from the actual behavioural patterns of people and form the realities of place and time [49]. Aldo Van Eyck created more than 700 playgrounds when he worked for the Public Works Department between 1947 and 1978. His works established new direction for urban development in post war planning, called in 1960s '*an incremental or infill strategy accommodating immediate user needs, and exploiting opportunities offered by the immediately available sites*' [50].



**Figure 6.** Aldo Van Eyck converted void space in Amsterdam to playground [50].

According to its evolution through both practice and research, the social considerations in contemporary urban design have been extended beyond their roots identified in the humanist stance. Compared to other contemporary urban design considerations, due to its intrinsic nature, the social perspective raises more issues concerning values and difficult choices with regard to the effects of design decisions on individuals and groups in society. The important social considerations in contemporary urban design consist of three main aspects: the diversity of people, meeting needs, and community participation.

#### 6.1 Considering Diversity of People

It is acknowledged that the built environment of the city is a complex system of public and private spaces. These include buildings, streets, infrastructures, parks and open spaces which together, make up the building blocks of a complex urban mosaic. Nevertheless, the physical structure of the urban area is the product of conscious decision-making and social relations, and therefore can never be neutral [51]. Associated

with this concept, diversity is significantly recognised as a crucial aspect in building urban spaces as Beall [51] argues: '*Creating inclusive urban spaces that welcome diversity and meet the contrasting needs of different social groups is central to the goal of building 'A city for all.'*

People of different race, age, gender and so on, have different needs and contributions to make and they experience and engage with the physical environment in different ways. This also suggests that the ways in which they participate and use the urban space will be diverse and it is important that these differences need to be recognised and accommodated. If cities are to be planned in celebration of difference and diversity, then planners and policy makers have a responsibility to recognise the needs and rights, especially with the neglected sectors of society [52–53].

Another important consideration when designing for diversity is that the recognition of contemporary culture has also been given more prominence. This perspective has increasingly found acceptance by anthropologists as well as urban design theorists who believe that there is a

strong interaction between space and social processes. According to Kostof [54] amalgams of the living and the built cities are repositories of cultural meaning. As Evans [55] states: '*The places where collective and public cultural activity occurs have an important and lasting influence—aesthetic, social, economic and symbolic—on the form and function of towns and cities.*' Considering other aspects, cultures contain mental constructs representing who they are, appropriate patterns of behaviour and appropriate tastes for people to hold.

## 6.2 Meeting the Needs

Designing the city is a process that leads to the improvement of the urban environment in ways that are acceptable to its users, and with which they are identified. In order to enrich city habitants physically as well as spiritually, urban design should respond to the two categories of people's needs: basic and aesthetic needs.

### 6.2.1 The Basic Needs

The concept of meeting basic needs can be dated back to an ideology of modernist architects. Reflecting the functionalist approach, modernists pointed out that people should be provided with not only a living unit that was uncrowded, sunlit, and well ventilated; but also access to an unpolluted, sunlit public realm. Nevertheless today, the most basic concern of contemporary urban designers, in terms of meeting people's needs, is with the creation of a salubrious environment. Beyond this level is to ensure that the built environment affords the basic activities, the basic behavioural programme of people as they go about their lives [45]. It is important to recognise that the task of today's designers is really to ensure that the built environment does more than simply including human physiological needs. It is to aid comfort and satisfaction. Emanating from social per-

spectives, urban design should be concerned with such issues as the creation of safe and comfortable streets and attractive public and semi-public spaces. For example, it is argued that accessibility should not be seen as a purely technical matter related to the limited requirements of the building regulations, but also as a wider agenda which affects all aspects of town planning and urban design whilst challenging the very culture of the built environment professions [56].

### 6.2.2 The Aesthetic Needs

To fulfil their aesthetic needs, people need the opportunity to contemplate beauty to include an appreciation of the characteristics of the world for their own benefit. Nevertheless, there have been a number of problems in meeting people's aesthetic needs in self-consciously designed environments. Much of what is admired by architects is regarded as soulless by laypeople. There is thus a need to reconcile the gap between professional and lay taste culture by coming to an understanding of these differences and why they exist [4]. 'Beauty or ugliness of the environment simply lies in the eye of the beholder' [57] may be true but it is not an observation that provides much guidance to the designer.

Since the definition of 'beautiful' is very much culture dependent and often highly individual, we seldom talk about designing 'beautiful cities' anymore. In order to meet aesthetic needs, urban designers and planners need to cope with the difficulty of aesthetic judgement. Madanipour [20] suggests that an aesthetic judgement can be found when people attempt to share the individual experience with others. This attempt gives the aesthetic judgement an objectivity that is beyond the subjectivity of individual experience. The work of Anton Nelissen [58] and Jack Narsa [59] shows that there is common means of desirable and

attractive environment in the broader public. However, several studies of perceptions, attitudes and preferences reveal that strong generalisations can be made on a group basis [60]. Generally, aesthetic guidelines can be achieved through raising public interest and awareness.

### **6.3 Considering the Community Participation**

Community participation is becoming a widely used term and hence defining its precise meaning is problematic. As with any concept holding strong social and political implications, it is often convenient for those who interact with the process to interpret it in a way that meets their own interests, as well as their own particular perception [61]. As Sanoff [62], states: '*Community participation means different things to different people and even a different meaning for the same people depending on the situation.*'

In terms of planning and urban design, community participation usually refers to involving people in formulating ideas and plans, as part of a creative process of planning or design. It is 'the process by which professionals, families, community groups, government officials, and others get together to work something out, preferably in a formal or informal partnership' [63]. The ultimate aim of community participation is to ensure that everyone involved has a stake in the outcome and therefore have some degree of control over it.

The emergence of community participation in planning and urban design dates back to the late 1950s when there was an increasing demand for openness in urban planning and designs. According to this situation, planners and planning committees both in the United States and Western Europe began to address some participatory concepts in planning and design processes. More than thirty years since its initiation, the role of community participation in urban design is much more relevant. In some ways, it has been adopted

as standard urban design practice and has become one of the important criteria in achieving successful urban design as Cowan [64] highlights '*...it is becoming recognised increasingly that successful planning, urban design and regeneration depend on creative collaboration between people with common interests.*'

## **7. Conclusion**

Urban design is a joined-up and complex activity that is overlapping and interrelated. In both the theoretical and empirical literature, different perceptions and occasionally ideological pre-occupations tend to form the essential meaning and implication of good urban design. In general, it is agreed that 'successful urban design' should not be employed as a fixed theoretical model but as a protean idea, which has value in empirical settings. This paper has demonstrated a set of considerations and evolving principles concerned with satisfying social and emotional needs as well as the more prosaic requirements of a convenient, safe, healthy and efficient public realm. Although this set of considerations cannot be simply seen as one set of an appropriate urban design approach, it reveals the principles that underlie several of them. In short, the functional considerations reinforce the notion of urban design as a process since it concerns the functioning of the environment in terms of how people use it. Likewise, the issue of visual perception stresses the fact that urban design is not a question of architectural style and beauty, but a matter of creating space with aesthetic qualities that satisfy its users in a variety of ways. The environmental considerations emphasise the importance of ecological concerns. The environmental qualities of the city and the urban conservation interests are not only the concern of architectural deliber-

ation, but also the urban economy and society. Finally, the social considerations emphasise a strong relationship between space and society and also the role of urban design in making places suitable for everyone's needs. Whilst these five

substantive urban design considerations can provide a framework for urban design action, it should be noted that each urban design project is inevitably subject to its own unique locality—its people and places.

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