Chapter 3

Cities as complex urban social systems in society
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3.1 Introduction
This chapter will first and foremost aim to create an understanding of the city as an interwoven complex system made up of various social systems. The discussion starts off by presenting a systematic approach to various contexts in which social systems are embedded: society, the social world and the urban environment. This is followed by an explanation of broad theories on urban social systems (ethnocentrism and cultural relativism) as underlying driving forces of social dynamics in the urban environment. The chapter will conclude with a brief discussion on urban social systems as building blocks to create more sustainable cities.

The question whether cities are indeed social systems have been asked by urban planners for centuries and this seems to be an appropriate starting point (Marcus, 1985:2, & Forrester, 1969:26). Newman (2010:1) considers cities as the most complex of all human systems. Due to urbanisation nearly two thirds of the world’s population will be living in urban areas by the year 2030 (European Union, 2005). As a result cities are becoming increasingly complex phenomena to study because they are “melting pots” of cultures and systems that share the same spatial environment (Carnevale, 2007:3). Rosada (1994:2) states that the rapidly changing society we live in increasingly brings people of various cultures into closer contact with each other. One of the important dimensions of cities is the social dimension in which social interaction and social behaviour can either be positive (supportive) or negative (disruptive), depending much on the level of sensitivity and respect people have for other cultural groups (Carnevale, 2007:3). One example of supportive interaction is for example cultural relativism (Carnevale, 2007:4). Negative interaction relates to social disruption, for example crime (Carnevale, 2007:4).

The physical (and therefore spatial environment) can contribute to supportive social dynamics in cities (Forrester, 1969:26). Social dynamics are important underlying driving factors in cities (Marcus, 1985:2) and should be taken into account when physical interventions take place, for example urban renewal. Urban renewal initiatives in South Africa seem to underestimate these dynamics, perhaps because limited research is available in South Africa on urban social systems in cities. Understanding the context of these social systems (the city) and the dynamics between social systems are therefore important starting points for urban planners working with urban renewal initiatives.

3.2 What is a system?
Mitchell and Newman (2002:3) states that a system is a set of interacting or interdependent components that form an integrated whole. Some systems share common characteristics such as that a system always has structure; it contains parts (or components) that are directly or indirectly related to each other; a system has behaviour, it contains processes that transform inputs into outputs (material, energy or data); a system has interconnectivity: the parts and
processes are connected by structural or behavioural relationships (Newman, 2010:4). The term system may also refer to a set of rules that governs a structure such as society or civilisation. Alternatively, and usually in the context of complex social systems, the term institution is used to describe the set of rules that govern structural behaviour. A system can either be simple or complex, depending on its characteristics. The distinction between these will now be explained briefly.

3.2.1 Simple systems
The concept of a simple system refers to a low-maintenance, singular linear structure that enhances the understanding of systems (Bejan & Merkx, 2006:2). These types of systems are not usually associated with more intense and complicated systems, but can be generally observed in contemporary society (Mitchell & Newman, 2002:2). An example of simple systems according to Mitchell and Newman (2002:23) is a conversation between two people, two points with one flow line. Simple systems are generally used when referring to computer programs and managing people (Bejan & Merkx, 2006:2).

3.2.2 Complex systems
The phrase complex system refers to a high-order, multiple loop and non-linear feedback structure (Mitchell & Newman, 2002:2). According to Mitchell and Newman (2002:1) a complex system can be described as: “a group or organisation which is made up of many interacting parts.” Complex systems have special responses that cause many of the failures and frustrations experienced in trying to improve social behaviour within the urban environment (Mitchell & Newman, 2002:2). Society is one of the most complex human systems (Newman, 2010:6).

3.3 Society as a complex system
According to Bejan and Merkx (2006:2) society as a “live” flow system is perhaps the most complex and puzzling system known to humankind. It is a jungle of flow systems and a multi-scale system of systems with organisation, patterns and hierarchies (Bejan & Merkx, 2006:2). The city is regarded here as embedded within this complex societal system. Understanding this may be a useful point of departure to contextualise the complexity of the city as social system within society. Bejan and Merkx (2006:2) describes society as the main form of social understanding in the urban environment. Therefore society is described as a “live” flow system - a life containing system that is mostly organic in nature (Dahms, 1998:11). It is difficult to comprehend because individuals who try to make sense of it are not objective, but inside and part of this system. However, society has shape, structure, configuration, pattern, rhythm and similarity and can be systematically approached in order to understand it better (Bejan & Merkx, 2006:2, & Dahms, 1998:22).
A society is a group of people related to each other through persistent relations, or a large social group sharing geographic or virtual territory, subject to the same political authority and dominant cultural expectations (Nakagawa & Suwa, 2010:5). Bejan and Merkx (2006:8) state that as society is collaborative, it can enable its members to benefit in ways that would not otherwise be possible on an individual basis. Both individual and social (common) benefits can thus be distinguished, or in many cases found to overlap (Bejan & Merkx, 2006:5). Bejan and Merkx (2006:5) and Dahms (1998:4) more broadly state that a society may be described as an economic, social, or physical infrastructure, made up of a varied collection of individuals (Bejan & Merkx, 2006:5 & Dahms, 1998:4). The word society may also refer to an organised voluntary association of people for religious, benevolent, cultural, scientific, political, patriotic, or other purposes (Bejan & Merkx, 2006:5).

People of many nations united by common political and cultural traditions, beliefs, or values are sometimes also said to form a society (Jenkins, 2002:210). In the context within which Jenkins (2002:210) used this term, it is employed as a means of understanding a society with members who represent alternative conflicting and competing worldviews.

Dahms (1998:4) declares that human societies are characterised by patterns of relationships (social relations) between individuals who share a distinctive culture and or institutions. A given society may be described as the sum total of such relationships among its constituent members. In the social dimension, a larger society often evinces stratification or dominance patterns for sub-groups (Dahms, 1998:5). Sub-groups are like-minded people governed by their own norms and values within a dominant, larger society (Dahms, 1998:5). Civilisation is defined as a sub-system within society (Mega, 2000:5).

3.3.1 Civilisation as a sub-system in society.

Society is most often organised according to people’s primary means of subsistence and existence, hence the sub-system civilisation. Civilisation is a term used for human cultures, usually hierarchical and urbanised. According to Mega (2000:5), cities are urbanised civilisations and therefore sub-systems of society.

Civilisation, and therefore cities, do not operate in isolation and occurs within various sub-spheres such as the political sphere and sociological sphere. These spheres influence the civilisation, as the subsequent discussion will show (Lenski, 1974:26).
3.3.2 Spheres of influence in civilisation

3.3.2.1 The political sphere

According to Lenski (1974:25) a society may also be organised according to its political structure. Within South Africa any city is under the law of the political structure that forms the governing body. In order of increasing size and complexity, there are bands, tribes, chiefdoms, and state societies (Lenski, 1974:55). These structures may have varying degrees of political power, depending on the cultural, geographical, and historical environments that these societies must contend with (Effland, 1998:5).

Thus, a more isolated society with the same level of technology and culture as other societies is more likely to survive than one in closer proximity to others that may encroach on their resources (Effland, 1998:5). A society that is unable to offer an effective response to the other societies it competes with will usually be subsumed into the culture of the competing society (Lenski, 1974:45). Effland (1998:5) argues that the culture of a competing society is a result of the political governing found within that society. Political governing implies management of people and that emphasises the sociological sphere in civilisation. The governing body of civilisation influences the manner in which decisions are made.

3.3.2.3 The sociological sphere

As this study focuses on social systems in the urban environment, it is important to understand society within the sociological sphere. According to Lenski (1974:5) societies could be based in groups according to their levels of technology and communication. This creates the platform for understanding societies within a sociological sphere. Humanity could be described as an element of society, including the society’s beliefs that contribute to a social system (Bejan & Merkx, 2006:8). The sociological sphere influences civilisation on a social level, this enhances the understanding and dynamics of the sociological world that contributes to society as a system (Lenski, 1974:5).

3.4 Social systems within society

In order to understand social systems within society, one first has to understand the difference between simple and complex social systems as they derive from the broader concepts of simple and complex systems as discussed in paragraphs 3.2.1 and 3.2.2 (Zhang et al., 2011:14). The fundamental difference between these is not easy and depends on how researchers choose to subdivide the research objects into components (Gallagher & Appenzeller, 1999:4).

3.4.1 Simple social systems

Zhang et al. (2011:14) explains that if a social system has relatively few components or factors and few pathways interconnecting them, it is considered to be a simple social system. An
example of a simple social system could be the interaction of two smaller systems that create a communication channel (Zhang et al., 2011:14). Any social system is relative and therefore contributes to many more factors and components that should be taken into account. A definitive approach is not possible, since simple social systems often relate more to complex social systems (Gallagher & Appenzeller, 1999:4).

3.4.2 Complex social systems

Complex social systems are important to study in order to understand the concept of social awareness, in particular urban renewal (Mitchell & Newman, 2002:1). In contrast to a simple social system, a social system with a relatively large number of different social components and factors and a high number of pathways interconnecting them is considered to be complex (Zhang et al., 2011:14).

Human interactions emerge as a complex social phenomenon and could be used in any group orientated environment as an identity giving factor (Situngkir & Khanafiah, 2005:1). In every sphere of civilisation one could easily see the need for the spontaneous incorporation of group understanding, group dynamics and hierarchy. Mitchell and Newman (2002:1) for instance refer to numerous interacting parts in complex social systems that contribute to group cohesion, could also be called “components” or “agents”. The interactions between these often lead to behavioural patterns that are not easily predicted (Situngkir & Khanafiah, 2005:3). In order to understand urban systems as complex social systems, one should understand the structure of complex social systems and metabolism as the link between simple and complex systems.

3.4.3 Metabolism as the link between simple and complex social systems

According to Situngkir and Khanafiah (2005:1) the link between simple and complex systems can be described as its metabolism. The interaction between different social systems has a certain metabolism that contributes to the interactions (Cheng et al., 2008:2). The interaction between two systems enhances the understanding of communication that could be used in understanding the city as a social system (Situngkir, & Khanafiah, 2005:2). Interaction can be verbal or non-verbal and can enhance the understanding of both simple and complex systems (Cheng et al., 2008:2).

The metabolism or interaction of complex social systems depends on the following social structures: norms (interaction pattern based on the norms of society), values (interaction pattern based on the values of society) and physical behaviour (pattern of social interaction).

3.4.4 Structure in complex social systems

Structure is what gives form and shape to social life, but it is not itself the form and shape. It exists only in and through the activities of human agents (Giddens, 1989:256). Situngkir and Khanafiah (2005:20) departed from the idea of agency as something ‘contained’ within the
individual. Agency does not refer to people’s intentions in doing things, but rather to the flow or pattern of people’s actions, which in turn gives form and structure to social systems.

Complex social systems are readily found in the urban context as this is the primary space where social interaction occurs (Situngkir & Khanafiah, 2005:20). The urban system will be explored as a primary context in which social systems operate in society.

3.4.5 Understanding complex social systems through sociology

Sociology can be defined as the scientific study of complex societies (Hobs & Sage, 2011:4). Therefore it is a way of investigating and understanding systems within society. Authors such as Hobbs & Sagae (2011:4) and Nielsen (2005:2) distinguish between the terms micro- and macrosociology.

3.4.5.1 Microsociology

Microsociology is one of the main focuses of sociology. It concerns the nature of everyday human social interactions and organisations on a small scale, for example face to face interactions (Hobbs & Sagae, 2011:3). Microsociology tries to understand social dynamics by capturing daily interactions in urban societies.

3.4.5.2 Macrosociology

This term emphasises the analysis of social systems and populations on a large scale at the level of social structure. This often occurs at a high level of theoretical abstraction, as Hobbs and Sagae (2011:11) describes.

According to Hobbs and Sagae (2011:11) macrosociology concerns individuals, families and other constituent aspects of a society, but always does so in relation to larger social system of which they are a part. Nielsen (2005:4) describes macrosociology as the analysis of large societies (e.g. the Central Business District). Human populations are considered a society to the degree that is politically autonomous and its members engage in a broad range of cooperative activities (Nielsen, 2005:4).

Macrosociology deals with broad societal trends that can later be applied to the smaller features of a society (Nielsen, 2005:4). To differentiate, macrosociology deals with issues such as war, distress of Third World nations, poverty, and environmental and urban deprivation (which is the focus of this study), whereas microsociology analyses issues such as the role of women, the nature of the family, and immigration (Hobbs & Sagae, 2011:3; Nielsen, 2005:4).

This study has a micro- and macrosociological viewpoint as social interaction (microsociology) is studied within the context of urban deprivation (a macrosociological problem). Macrosociology offers various theories to understand the features that underlie social systems. This will form the focus of the following section.
3.4.5.3 Strategies of macrosociology

Sanderson (1988:110) and Sagae (2011:4) refer to the following theories as ways to understand macrosociology: (1) the idealist strategy, (2) the materialist strategy, (3) structural functionalism and (4) the conflict theory. These are theoretical strategies in social systems used for stratification and understanding of social phenomena (Sanderson, 1988:110).

- **The idealist strategy**

  This strategy attempts to explain the basic features of social life (Sanderson, 1988:41). “Idealists” believe that human uniqueness lies in the fact that humans attach symbolic meaning to their actions. This enhances the idea of social awareness in urban sectors, as is aptly illustrated by Forrester (1969:45) and Sanderson (1988:126). The concept of individual understanding in this case contributes to a macrosociological understanding.

- **The materialist strategy**

  According to Lenski (1974:32) the materialist strategy attempts to explain the basic features of social life in terms of the practical, material conditions of human existence. These conditions include things like the nature of the physical environment, in this case the urban environment, the level of technology, and the organisation of the economic or cultural system (Lenski, 1974:20).

- **Structural functionalism**

  Lenski (1974:36) shows that functionalism essentially states that societies are complex systems of interrelated and interdependent parts, and each part of a society significantly influences the others. Also, each part of society exists because it has a specific function to perform that contributes to the society as a whole. Finally, it states that societies tend toward a state of equilibrium or homeostasis, and if there is a disturbance in any part of the society the other parts will adjust to restore the stability of the society as a whole (Lenski, 1974:36).

- **The conflict strategy**

  The conflict theoretical strategy (Lenski, 1974:35) rejects the idea that societies tend toward some basic consensus of harmony in which the features of society work for everyone’s good (Lenski, 1974:48). It is based on the idea that the basic structure of society is determined by individuals and groups that acquire space and resources to satisfy their own personal needs and wants, thus creating conflict (Sanderson, 1988:126).

The above strategies are all used to understand societal trends on a broad scale (macro social systems) that can later be applied to the smaller features of a society (micro social systems). Links between micro- and macrosociology are highly developed integrated phenomena that
define social systems as both constraining and enabling of human activity. The physical environment could for instance constrain or enable the sociological usage of an area (Zhang et al., 2011:12).

3.5 Urban systems

3.5.1 Definition

According to Zhang et al. (2011:14) an urban system is essentially the human space that we create and construct for the interaction of daily life. Newman (2010:6) describes urban systems as interacting parts working together in a fluent manner. Newman (2010:5) declares that cities as sustainable urban systems are systems with interacting dimensions that cannot be separated.

3.5.2 Dimensions of urban systems

The integration of all dimensions of urban systems, economic, social and physical are important in the urban environment (see figure 3-1), especially in urban renewal initiatives. Since the social dimension is the dimension that forms the focus of the city as a social system, the other two dimensions will only briefly be referred to.

![Interacting dimensions of urban systems](Source: Compiled from Newman, 2010)
3.5.2.1 The physical dimension
Situngkir and Khanafiah (2005:20) declared that the most visible and easily understood dimension of urban systems is the physical dimension. The physical dimensions can be defined in terms of the transport, land uses and architecture dimensions of cities. Newman (2010:12) suggests that this dimension has always been the main focus of urban renewal and planning strategies. Cheng et al. (2008:2) suggests that because of the physical nature of urban environments the focus often lies with the physical structure of cities, while no acknowledgement is made of Zhang's (2011:14) focus on human space. According to Zhang et al. (2011:14), the design structure of human space as a social sphere unfolds in the arrangement of the city and social interaction and will have a large impact on the overall sustainability of the urban system (Zhang et al., 2011:14).

3.5.2.2 The Economic dimension
Newman (2010:2) and Cheng et al. (2008:30) consider the economic dimension within urban systems as foundational for the well-being within the urban environment. The focus in cities is mostly to develop on an economic level first, from where the social and physical dimensions would follow (Cheng et al., 2008:30). The economic dimension within urban renewal projects enjoys too much priority, creating little to no social understanding (Zhang, 2011:37). In contrast to this viewpoint Zhang et al. (2011:36) declares that these three dimensions within urban systems should be studied together.

3.5.2.3 The social dimension
According to Newman (2010:15) two social dimensions exists in urban systems: fear and hope. Fear relates to panic and survival, while hope relates to freedom and joy.

Each of these social dimensions has different characteristics, as summed up in the following table.

<table>
<thead>
<tr>
<th>Characteristics of social dimensions of cities</th>
<th>Fear</th>
<th>Hope</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short term only (Panic for survival)</td>
<td>Long term (Focus on children)</td>
<td></td>
</tr>
<tr>
<td>Must win at all costs (Survival)</td>
<td>Co-operation and partnership</td>
<td></td>
</tr>
<tr>
<td>Sees threats everywhere</td>
<td>Sees opportunities to improve environment</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Compiled from Newman, 2010)

In cities fear is a threatening concept that creates an inhospitable environment. It causes social decline and brings social problems to the area (Newman, 2010:6). Hope enhances the urban environment and creates a city built for a future and social strive is propagated (Newman,
The latter dimension is propagated as more likely to create sustainable social environments in cities. Newman (2010:5) emphasises that society as an urban system should strive towards a socially secure environment and should produce long term hope through co-operation and partnership within the community. Newman (2010:6) further explains his reference to hope as an important part of the social dimension within urban environments and as the ability to identify opportunities to improve it. These characteristics summarised in table 3-1 can become a framework for addressing social systems in the urban renewal process in a more sustainable way. Urban planners and designers should focus on planning cities for hope and not fear in order to support positive social interaction in cities (Newman, 2010:21).

Cities are made up of economic, physical and social dimensions that are interrelated and that influence one another in a shared spatial context. Within these spaces, cities function as complex urban systems. In Newman’s words the city is one of the “highest forms of social organisation” (Newman, 2010:17). It therefore seems to be the most complex urban system in society.

3.6 Urban social systems

3.6.1 Definition

Urban social systems are the sociological study of life and human interaction in metropolitan areas (Cheng et al., 2007:14). It is a normative discipline of sociology seeking to study the structures, processes, changes and problems of an urban area and by doing so provide input for planning and policy making. In other words it is the sociological study of cities and their role in the development of society (Cheng et al., 2007:14). According to Rosada (1994:12) the sociological study of cities involves different theories of urban social systems.

3.6.2 Theories of urban social systems

Two theories that propose ways in which urban social systems can be examined and tested are ethnocentrism and cultural relativism (Rosada, 1994:12). These theories contribute to the degree of sensitivity towards social inequality and to social understanding. A thorough comprehension of these two concepts could result in a better understanding of urban social systems (Rachels, 1999:15). Rosada (1994: 13) declares that urban social systems need a new understanding of the different social systems that contribute in urban renewal strategies.

3.6.2.1 Ethnocentrism

Ethnocentrism, according to Rosada (1994:15), is the tendency to look at the world primarily from the perspective of one’s own culture. It is defined as the viewpoint that one’s own group is the centre of everything and the standard according to which all other groups are judged (Rosada, 1994:12). Ethnocentrism often entails the belief that one’s own race or ethnic group is the most important and that some or all aspects of its culture are superior to those of other
groups (Rachels, 1999:6). It is a very exclusive view of urban social systems (Rachels, 1999:6). Ethnocentrism could easily be perceived as negative, although ethnocentrism is that which gives people their sense of peoplehood, group identity, and place in history, all of which are valuable traits to possess (Rosada, 1994:7; Rachels, 1999:6; Herskovits, 1973:52). Rosada (1994:6) and Rachels (1999:4) state that ethnocentrism becomes negative when one's own group becomes the centre of everything, and all others are scaled and rated with reference to it.

Rosada (1994:5) and Ruggiero (1973:18) suggest three important steps to take that will enable people to eliminate the possibility of ethnocentrism (Rosada, 1994:6): (1) Study the cultural context in which the action occurs, (2) determine the circumstances of time, place and physical conditions surrounding it and (3) learn the reasoning that underlie it and the moral value it reflects. At the heart of these three steps lies the importance of learning to “take the role of the other”, the ability to see things, especially that with which we are not familiar, from the perspective of the other before any consideration of judgment is considered (Ruggiero, 1973:14; Rosado, 1994:5). In this way ethnocentrism can be transformed into something innovative and positive.

3.6.2.2 Cultural relativism

Various authors declare that cultural relativism is a principle that was established as axiomatic in anthropological research by Franz Boas in the first few decades of the 20th century and later popularized by his students (Herskovits, 1973:51; Rosada, 1994:6; Ruggiero, 1973:14). Boas first articulated the idea in 1887: "...civilisation is not something absolute, but ... is relative, and ... our ideas and conceptions are true only so far as our civilisation goes". However, Boas did not coin the term (Rachels, 1999:5). This term is an old idea that needs constant renewal in the context of our modernising worlds. “Cultural relativism is in essence an approach to the question of the nature and role of values in culture” (Herskovits, 1973:37). If values are shared ideals that give rise to beliefs and norms of behaviour around which people or a group organises its collective life and goals, cultural relativism declares that these values are relative to the cultural ambiance out of which they arise. Rosada (1994:2) states that we live in a rapidly changing global society that increasingly brings people of various cultures in closer interaction with each other. This interaction can be positive or negative depending on the level of sensitivity and respect people have for other cultural groups. Therefore a model that establishes a manner of “common ground” is ideal in understanding these patterns (Rosado, 1994:5).

According to Rachels (1999:4) Franz Boas believed that the sweep of cultures to be found in connection with any sub-species is so vast and pervasive that there cannot be relationships between culture and race. Cultural relativism involves specific epistemological and methodological claims (Rosado, 1994:2). Whether or not these claims necessitate a specific
ethical stance is a matter of debate. This principle should not be confused with moral relativism (Rachels, 1999:5).

Rosada (1994:1) declares that negative attitudes towards other cultures and ethnic groups arise out of ethnocentrism and not relativism. If people want to be successful in today’s multi-cultural, information age, world society, they will need to develop a culturally sensitive frame of reference and mode of operation (Rachels, 1999:3). Cultural relativism, according to Rosado (1994:9) and Ruggiero (1973:14) raises a problem for itself in that, as is true of any theory, it tends to view things exclusively from its own narrow perspective. However, cultural relativism can serve as a helpful theory when it comes to the urban social system and can make a contribution in this regard (Ruggiero, 1973:14). Social sciences tend to greatly overstate the human perspective, but in the field of urban planning this aspect is missing (Rosado, 1994:9). This study consequently incorporates a focus on cultural relativism in its approach to urban social systems. The subsequent paragraphs will serve to indicate the contribution of such a focus.

<table>
<thead>
<tr>
<th>Difference between Ethnocentrism and Cultural Relativism</th>
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<tbody>
<tr>
<td><strong>Ethnocentrism</strong></td>
</tr>
<tr>
<td>Exclusive</td>
</tr>
<tr>
<td>Closed mind</td>
</tr>
<tr>
<td>Culturally Insensitive</td>
</tr>
</tbody>
</table>

(Compiled from Rosada, 1994)

One cannot get away from the fact that the city is a “melting pot” of cultures and races. The social dynamics should indicate this as a socially sensitive situation (Forrester, 1969:23). Urban dynamics can use cultural relativism as a social system in order to understand the urban environment better. Only once there is such an understanding can one plan for sustainable cities (Newman, 2010:32).

Caleb and Rosado (1994:5) view cultural relativism is the main social system that drives South African cities. This is a very important observation to take into account when working in the South African urban context (Rosado, 1994:2).

3.7 Cities as complex social urban systems

The discussion so far has described the city as a (1) complex (multiple linear and complicated), (2) social (micro- and macrosociological), (3) urban (civilisation within society), system (interacting parts). These terms enhance the idea of the city as a system consisting of three complex interacting parts. Throughout this synthesis one could observe that sociology is the
main focus of such a system. Higgins (2011:121) declares that by creating sustainable cities, the social sphere should enjoy priority.

3.8 Urban social systems as building blocks for social sustainability.

3.8.1 What is sustainability?
Sustainability can be defined as development that meets the needs of the present without compromising the ability of future generations to meet their needs (United Nations, 1999).

Although the concept sustainability originated from natural environmental concerns, an integrated balance between the various spheres in society (previously in this chapter referred to as dimensions of urban systems) namely the economic, environmental and social spheres became important (United Nations, 1999). This is known as the triple bottom line approach that defines sustainable development (United Nations, 1999). Figure 3-2 illustrates this understanding of sustainability.

The human dimension slowly started to become more significant in sustainability debates. Higgins (2011:290) for instance defines sustainability in terms of its potential for long-term maintenance of well-being, which has environmental, economic, and social implications. Sustainability interfaces with economics through the social and ecological consequences of economic activity (Higgins, 2011:260). Within the context of this study the focus will fall only on social sustainability as a building block for sustainable urban social systems.

![Figure 3-2 Elements of sustainability (Source: Adapted from Higgins, 2011)](image-url)
3.8.2 Social sustainability

Social sustainability is according to Newman (2010:5) one aspect of sustainability or sustainable development that is gaining importance in urban planning circles. Social sustainability encompasses human rights, labour rights, and corporate governance (Anand & Sen, 1996:4).

Social sustainability is the idea that future generations should have the same or greater access to social resources as the current generation ("inter-generational equity"), while there should also be equal access to social resources within the current generation ("intra-generational equity") (Higgins, 2011:16). Social resources include ideas as broad as other cultures and basic human rights (Higgins, 2011:16). According to Newman (2010:4) sustainable human development is considered development that promotes the capabilities of the current generation without compromising capabilities of future generations.

In the human development paradigm, environment and natural resources should constitute a means of achieving better standards of living, just as income represents a means of increasing social expenditure and, in the end, well-being (Newman, 2010:20). Newman (2010:23) proposes five main ideas that can contribute towards a more sustainable social future for cities:

- Learning from a context in order to create innovation;
- Cities are growing due to economic globalisation - they need sustainability to develop cities;
- Local community scale provides the focus for management and technology to address globalisation in cities; and
- Traditional wisdom and eco-city social movements can provide a revitalised ‘sense of place’ that can drive sustainability in cities.

3.9 Conclusion

The chapter gave an overview of the development from sociology to an urban system. Various terms were clarified in order to present the argument. In conclusion, cities can be viewed as (1) complex urban (2) social (3) systems within (4) society. This statement will now be studied within the context of the larger study.

(1) The chapter showed that there are simple and complex systems and that cities are complicated multi-linear systems with sub-systems. (2) Cities have various focuses namely political, social and economic, but the social focus of urban renewal has thus far been considered as less important and needs more focus. (3) Cities are systems, and in this light an urban social system was analysed as a micro-macro sociological system (4) within civilisation that contributes to society.
Two main theories that contribute to urban social systems were identified and studied in detail namely cultural relativism and ethnocentrism. Sanderson (1988:110) identified strategies that can be seen as innovative in the understanding of social dimensions. These strategies are: idealist strategy, mentalist strategy, structural functionalism and the conflict strategy. Within the context of the larger study, these concepts will be studied to understand the city as a social system and for identifying certain social systems present within the urban centre. This could ultimately enhance the social sustainability of an area. The following chapter will build on urban renewal as a socially driven process.