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WIDEN THE SCALE OF URBAN DESIGN TO THE LEVEL OF CITY PLANNING: ARGUMENT BEYOND A CASE OF TWO CITIES

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HIGHLIGHTS

- Some settlements do not have the opportunities to be discovered as famous traditional cities.
 - Urban design passes through continuous alteration in definitions and limited change in roles and scales.
 - The focus of urban design is the city, town and parts of them.
 - Can urban design be a mongrel of different disciplines?
 - The transdisciplinary body of knowledge transcends the scales of urban design towards a contriving better life in both two cities.
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ABSTRACT

The current paper traces two characteristics streak. The first is providing a mutating role for urban design as an academic discipline launched for a better life of the second streak. The latter is the world which has urban problems in different places. Some cities are suffering from the overcrowding and overloading population with various types of activities. Notwithstanding having such variety, some cities could have a feature of hardship in the way of citizen's living. The cities of hardship are in the known and unknown places. Despite the fact that urban design has repeated presence in schools of Architecture and professional practice, it is still an enigmatic term, used separately by different groups in different situations to provide a world's better life. Besides the increasing attention to the subject and the rising number of academics and their praxis that are engaged in urban design have caused a pressing need for a clearer scope of work as well as defining the limitation between the large and small scales projects it exposed. Can urban design (UD) extend to have the regional level in its agenda and work on design level? Can UD be a mongrel paradigm for different disciplines?

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1. INTRODUCTION

After subsequent decades of unchecked sprawl, more people than ever are moving in to live in a better city. Dense urban living has been directed as a relief for the context and environmental crises of our time. However, is the internal displacement among cities better or worse for the well-being? Although it is difficult to answer the question 'What makes a good city?', we have to put into consideration that sometimes, the goodness is affected from outside the city. The environmental crises caused by overcrowding, traffic pollution, noise, and industrial emissions are just a few of the issues that have to be continuously recognised and approached to deliver a high quality of life without high environmental expenses. But, doing this will also bring advantages beyond city borders. This is not to say that the urban environment is not designed in detail rather than in a detailed process done by several alliance partners from different disciplines spatially from the scale bigger than the city. The task is to find out a substantial body of knowledge produced by the universities and research intuitions.

The current paper starts reviewing some concepts related to the city from being ignored, invisible in the developer's agenda. By this, it can stand on the purport of the unknown cities. The relationship between the known and unknown cities is the research motivation that is investigated using the content analysis. Afterwards, the study concludes where Egypt has hidden cities or not. What can urban design do for the art of relationship between the two cities? Finally, the present work shows a transdisciplinary body of knowledge in city design as a tool to alter the limitation between the macro and micro scale of urban design. Widened scale will open a border for a transdisciplinary urban design that can discuss some problems comes from the relation between cities.

2. THE CHARACTERISTICS OF THE TWO CITIES: RESEARCH JUSTIFICATION

The twenty-seven governorates–*Muhafazat* (Arabic Pronunciation) in Egypt that form the adumbrative structure of the state. Muhafazat consists of 217 cities and town with differentiate in size and citizen population (General Organization for Physical Planning, 2014). Several manuscripts discussed the challenges and opportunities that some of them may have and neglect the others (Elshater & Abusaada, 2016a, p. 108). Hypnotically, being known or unknown city is in the current manuscript in term of the being listed in the development plans and being authentic for both the citizens and the decision makers. In MENA region, many unknown cities have not taken the opportunity to be explored from a large number of researchers like the famous historic towns. Those distant cities should be taking part in the future investigation of works since they could have similar features to dystopian cities. The main issue not only discusses how to enhance the urban area to become liveable but also how to stop the urbanity's transformations that make cities run toward being anti-utopian and prevent it from being dystopian.

Generally, from one side, the known city is a place that has a large population (Wirth, 1938, p. 18), a well-structured city, having appropriated a visual and functional appearance, featured by the art of order and art of chaos, having an adequate level of liveability and quality of life that cover the subjective well-being and objective well-being. The known city is described by utopia that means 'no place,' 'good place,' and 'perfect place' (Mumford, 1922, p. 1). From the community point of view, Utopia means well-planned cities, with no hovels or slums (Grosz, 2002, p. 135). Knowing a place is a beneficial and necessary process, ranges from the citizen's and tourist's simple claim of familiarity with a visited location to the elaborate perceptions of the permanent inhabitant's the walk-through (Borden, Kerr, Rendell, & Pivaro, 2000, pp. 18-19). The city is saturated with people, their movements; millions of eyes

watching the world surely the city is well-known?... Surely, there are no places in the city that are unknown. On contrast, no one knows everything about the city even the decision makers although the database is available (Pile, 2000, p. 264). In the western communities, Jacobs and Appleyard (2000, pp. 497, 501) give five physical characters of the good city which attract people to live attached to the services it provides, and surely it will be well known for most. The five characters are the liveable street and neighbourhoods; some minimum density of development as well as the intensity of land use; living, shopping- in some reasonable proximity to each other; manmade environment which create the city's ambience and identity; the spatial organization that adjust the relation between the public and private places.

On the other side, being an overlooked city has been described adjectively by the several words; unknown (Ophir, 1991, pp. 73-77) (Pile, 2000); invisible (Calvino, 1972), (Ophir, 1991), (Gilderbloom, 2009), (Mendieta, 2001), (Hudnut, 2007); declining small; overshadowed (European Union, 2011), (Cox & Longlands, 2016), (Bell & Jayne, 2007). Furthermore, the database of scientific research about the neglected cities or town are not available or even know their names. This ignorance gives floundering development plans of the future outlook for them.

Table 1: Typologies of Unknown Cities/Towns- Sites

Typology of Terms	Characteristics	Literature
Invisible Cities/Sites (Hidden Cities)	<ul style="list-style-type: none"> · Lack of Networking, Unlisted in Developing Agenda, invisible in the developers' agenda · Poverty · Low affordable Housing for housing for the elderly, the disabled, and the poor. · Invisible to policy maker · Local cities facing globalisation 	(Calvino, 1972), (Ophir, 1991) (Gilderbloom, 2009) (Mendieta, 2001) (Hudnut, 2007)
Declining Small Cities/Town/ Overshadowed City	<ul style="list-style-type: none"> · Equity: Decline in public services provision · Environment: Neglected of culture landscape, vacant land use. · Economy: Resource base/old economy in decline, lack of growth opportunity · Culture & Community: vacant and abundant housing, diminishing tax base, lack of animation in politics, isolated indigent population, social isolation, ageing demographics 	(Bell & Jayne, 2007) (European Union, 2011) (Roberts, 2014) (Cox & Longlands, 2016)
Ignored Cities/ Places	<ul style="list-style-type: none"> · Places of conflicts · Lack of affordable housing policies for everyone · Ignored recourses 	(Gilderbloom, 2009) (Hardoy & Satterthwaite, 1991). (Hein, 2006) (Whyte, 2010)
Hidden Place, Unknown City/Town	<ul style="list-style-type: none"> · Could not be reached · Invisible to policy maker and decision makers · Problem of Justice · Poverty 	(Ophir, 1991, pp. 73-77) (Pile, 2000, p. 264)

Source: the author

Similarly, Paul Knox (2009, p. 11) describes the ignored small towns that have the potentiality of being heavens in the fast world, places whose inhabitants think globally but act locally. On another side, the growing and changing small and medium-sized cities can play a vital role in the well-being not only of their own inhabitants but also of the surrounding rural populations. This could be happening in the case of having a transparent network and database of potentiates to themselves and other cities in the same nation. In this matter, the European Union (2011) provides a way forward concerning essentialities of these small cities for avoiding rural depopulation and urban drift and for promoting balanced territorial development. The researcher(s) uses the term unknown for being invisible, hidden in the decision makers and developer's agenda which related to the developing countries. The argument moves forward to the suggestion that the unknown is not so easily known—it may be all too visible in the decision maker's agenda, right in front of eyes, buried in the underlying infrastructures of everyday lives, so intrinsic and hardly even feel its presence anymore. When the development plans have a room for the unknown cities/sites, the life in both two cities may come better.

DOES EGYPT HAVE (UN)KNOWN CITIES?

To answer this question, the research starts by sorting the list of cities that could be taken in a research study (**Figure 1**). Also, a questionnaire was designed to discover the scholars' and experts' recognition of some cities in Egypt. Recent research concludes from a content analysis of on one of the scientific websites (Ibrahim & Ibrahim, 2004) for launching scientific manuscripts. The outcomes show that the case studies are homogeneously distributed in the researchers' interest. The analysis of the website was in December 2016. The following remarks are illustrated in **Figure 2**:

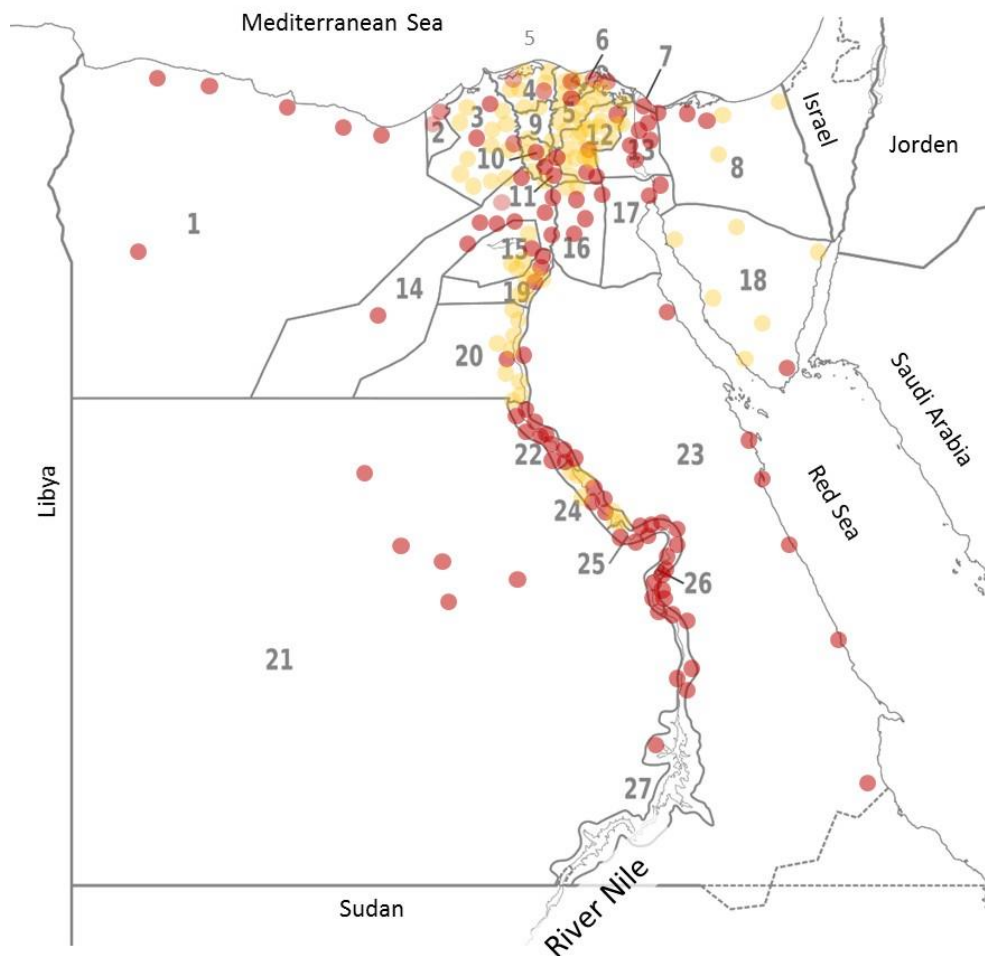
- The total numbers of listed/mentioned cities (*c*) are 97 out of 217 cities (44.7%). These cities are within the boundaries of the twenty-seven regions.
- Total number of research work that has a city/site in the case study are 450 manuscripts (69.3%) out of 648 papers.
- Most articles that list a city are focused on Cairo. 148 documents (23.88%) out of 450 manuscripts do not take Cairo City as a case-study. If we count the Greater Cairo agglomeration, the number of papers will be 244 documents (45.22%) out of 244 manuscripts.
- Strangely, the authors' affiliation with universities that located outside Cairo does their research works in Cairo/ Greater Cairo, not in the city they belong.

During December 2014, an experimental study conducted and launched by the author on the Internet using the Facebook. It aims to measure two issues and the selection of city's name which were selected randomly from the Egyptian book of the phone codes. First, what is the extent of knowledge of the names of these cities? Second, what are the names of the cities that never came within research papers and dissertation? These cities, for instance, are Bella, Elhamool, Kelin, Koutour, Koutour, Menait Elnasr, Deer Mouase and Sidi Salem. The result mentions that most of the cities were unknown for more than ninety percent of the responded sample. The remarkable note was taken regarding the unwilling of doing researches on places rather than Cairo is because of the authenticity of data.

On the other side, the investments that had taken place during 2007-2012 distributed mainly in Greater Cairo based on the report presented by General Organization for Physical Planning (2014). The report includes three cities and Delta which holds seven regions (Beheira, Kafer ELsheih, Damietta, Dakahlia, Damietta, Gharbia, and Al Sharqia).

DISCUSSION: WHAT IS BEYOND BEING UNKNOWN CITY?

In the urban age, most Egyptian settlements, either small or large, in urban or rural areas, have transformed to adopt some of the city's character. However, some of these were not planned, in terms of design, to be large cities. The transformation, in some cases, was not followed by sufficient interest in developing a process that causes exclusion and inclusion. The exclusion process occurs in what could be called unknown cities (Calvino, 1972); (Borden, Kerr, Rendell, & Pivaro, 2000), (Elshater & Abusaada, 2016a), and inclusion is common in what are termed unknown cities (Figure 1).



State's Region			
1. Matrouh	8. North Sinai	15. Faiyum	22. Asyut
2. Alexandria	9. Gharbia	16. Cairo	23. Red Sea
3. Beheira	10. Monufia	17. Suez	24. Sohag
4. Kafr E-Sheikh	11. Cairo	18. South Sinai	25. Qena
5. Dakahlia	12. Al Sharqia	19. Beni Suef	26. Luxor
6. Damietta	13. Ismailia	20. Qalyubia	27. Aswan
7. Port Said	14. Giza	21. New Valley	
● Listed/cited cities		● Unlisted/un-cited cities	

Figure 1: The number of listed/cited cities in Egypt, source: (Elshater & Abusaada, 2016a)

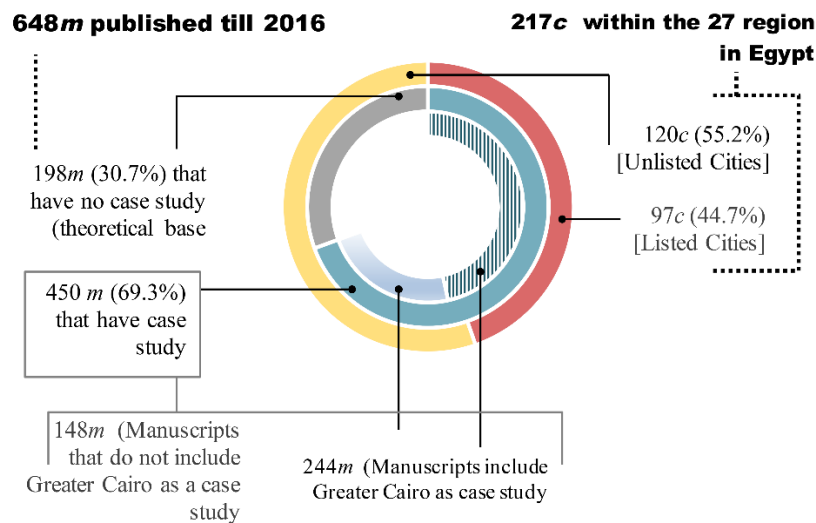


Figure 2: Number of manuscripts (*m*) that have a case study of a city versus the number of cities/towns (*c*) in Egypt, source: the author

Internally displaced persons (IDPs) from unknown cities are settled in known cities where they can get the benefits of proper planning and design, on the one hand, and better living conditions, on the other (Figure 3). In known cities, displacement is accompanied by the related problems of overcrowding and an overloaded capacity of services. We can, therefore, postulate that the liveable context is articulated in opposition to one in which people are like ants, vehicles are forever swarming here and there, and buildings are built randomly. Searching for the reason of a city being overloaded, there a hypothetical relationship in a displacement scenario in the two cities, the known and the unknown cities.

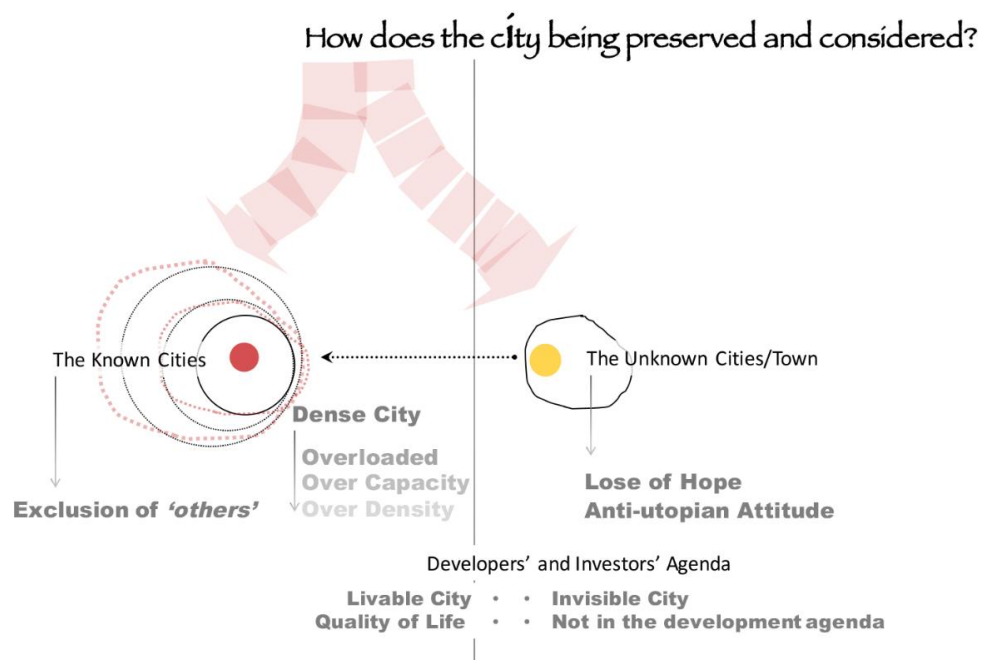


Figure 3: The transformation and displacement from the unknown cities to the known cities, source: the author

In this matter, the World Bank describes “have[ing] favouritism towards few cities at the expense of the whole distribution of cities consisting of secondary and small cities, and then we have a problem” (Wiggins, 2015). Meanwhile, Martin Whyte (2010) in his literature *‘One Country, Two Societies’*, raised the problem of neglecting the small cities in China in comparison to the development of the well-structured cities. Generally, this neglecting affects all cities or the towns’ prospects which depend on the urban system of alliance (Roberts, 2014, p. 16).

Many concepts have underpinned the definition of the term “Unknown City”. The merging of characters and traditional hierarchical, systems and functional typologies of cities brings forth a new hybrid and perspective of cities that are not listed in the development plans and don not have a database of knowledge to be discovered for several reasons and in some cases, are not visible. This system will take action of both the unknown and known cities. Consideration of these concepts and system which widely covered, it is essential in devising a definition that can be used by international development agencies in drawing up policies and programs to support their development. In seeking to redefine what we understand a secondary city to be, it is useful to review the past and contemporary thinking in the field of hierarchy, typology, systems and functions of cities.

3. A TRANSDISCIPLINARITY OF URBAN DESIGN TOWARD THE ALLIANCE OF THE TWO CITIES

Arguably, urban design (UD) discipline has paradigms of the art of the city. It is a scientific art and not a pseudoscience in the level of research, education, and practice (Marshall, 2016, p. 266), (Moudon, *An Alternative Pedagogic Model for Doctoral Research in Urban Design*, 2015). At the beginning of the 1950s, it had emerged as a concept note at Harvard University. Throughout the last five decades, it had passed with two notable paradigm shifts in several places in the world to be ended at two scopes of interest: the urban rehabilitation and new development projects (Madanipour, *Roles and Challenges of Urban Design*, 2006), (Abusaada, 2015) (Elshater & Abusaad, 2016b).

The literature describes the urban design as a tool to develop the knowledge-base of city design (Moudon, 2002, p. 54) and the greatest impact on the nature of cities and city life (Lang, 2005, p. xix). In the knowledge-based of urban design, the adjectives can describe it are interdisciplinary, multidisciplinary, and transdisciplinary. The single discipline is not listed to describe the urban design for the nature of being a collection of theories and praxis from other disciplines (Lang, 2005). Scholars believed that UD has not separated areas of science (Madanipour, 2007, p. 13). Moreover, there was no benefit in urban design being an independent discipline as there was an urgent need for urban design to become a multidisciplinary science.

The word ‘interdisciplinary’ is used to describe a far broader phenomenon, which extends across all sectors of society (Blackwell, Wilson, Street, Boulton, & Knell, 2009, p. 8). In other words, ‘interdisciplinary’ describes how individuals work together towards end points decided through mutual consent (Rendell, 2007, p. 223), (Finkenthal, 2001) (Klein J. T., 2010, p. 17). It involves the combining of two or more academic disciplines into one activity to create something new by crossing boundaries and thinking across them. As to see if the planning and design can categorise as a discipline, it should first define the concept of the scientific discipline (Finkenthal, 2008, p. 89) (Ackerman, 1989, p. 29).

Typically, the professional practice of UD comes in the form of interdisciplinarity or multidisciplinary which mixes or collect another field of specialisation i.e. the Architecture, landscape Architecture, planning, sociology. Gosling & Maitland (1985) described it as the common ground between these disciplines. The way the experts handle the process can determine being *multi or inter* (Klein J. T., 2010), (Lattuca, 2001, pp. 78-109). Besides the second produces a new track for knowledge (Hirt & Luescher,

2007, p. 424). Transdisciplinarity connects a research policy that converges many disciplinary borders to create a holistic procedure of knowledge beyond disciplines (Mittelstrass, 2001, p. 497) that involve academic researchers from different unrelated disciplines as well as non-academic participants (Tress, Tress, & Fry, 2004). It fits research efforts focused on problems that cross the boundaries of two or more disciplines (Kessler & Dawson, 1999, p. 2). It can refer to ideas or techniques that were originally developed by one discipline or more but are now practised by several others (Nicolescu, 1997). Transdisciplinarity has another obvious meaning. In this, it refers to the synthesis of diverse forms of research and includes specific techniques for linking scientific experience in problem-solving through principles and actions in some cases (Klein J. T., 2008, p. 117), (Mittelstrass, 2001, p. 499). When the very nature of a problem is under dispute, transdisciplinarity can help determine the most relevant issues and investigation involved (Figure 4).

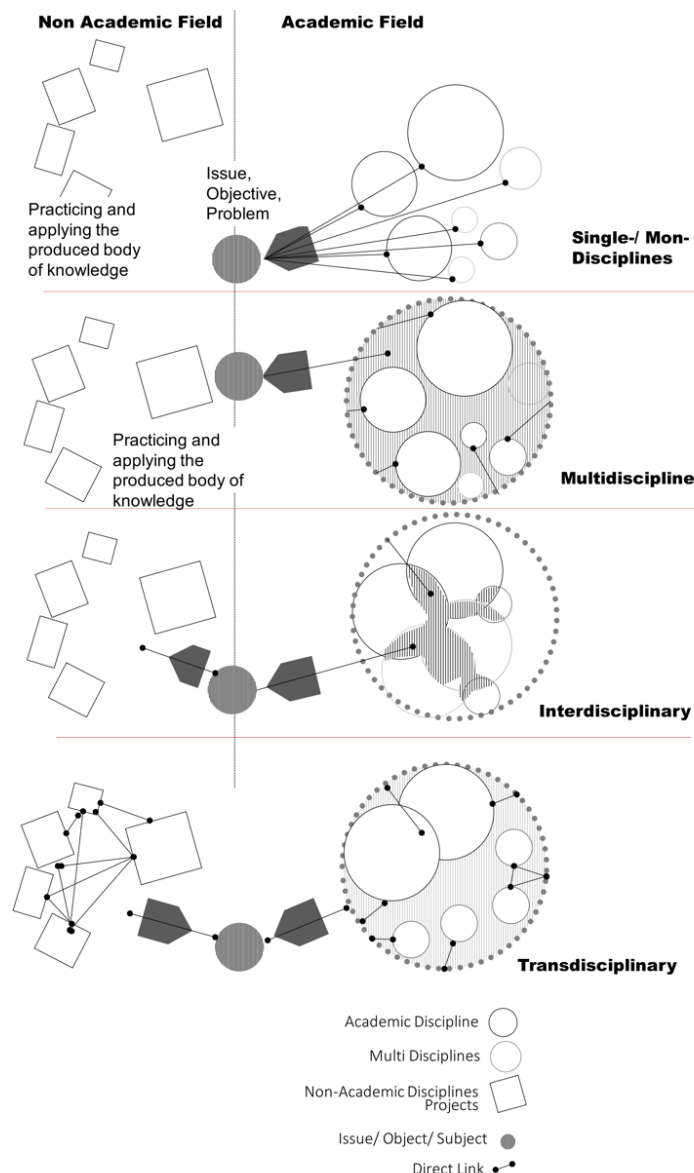


Figure 4 . The difference between the disciplines, source: the author

In this way, the current research can consider the transdisciplinarity transpires when engaging specialists cooperate in an open exchange and discussion, giving an equal load to each prospect and relating them to each other. This might be tricky because of the overwhelming amount of information involved, and because of incommensurability of specific signals in particular area of specialisation. To exceed under these conditions, scientists need not only in-depth knowledge and know-how of the disciplines included, but skills in moderation, mediation, association and transfer. This can merge the academic and non-academic in one common ground of procedures rather than sequenced manner. Return to the city, town and places inside, urban design based on the symposium— “Design Urban Design” at Middle East Technical University (2016)— may need to have an alter ground of knowledge that copes challenges and bridging gaps in said discipline. In reviewing differences between Architecture, urban design and urban planning, the scales (large and small scale) widely coved in some classic writings. Sternberg (2000), (2007) declares that theses disciplines are interested and the scale per se do not distinguish urban design from architecture and urban planning. The overlap. “Urban design inquiries into the human experience that the built environment evokes across private properties or in the public realm” (2007, p. 34). In brief, designing for person’s experience cannot be limited to the scale which in some cases transcends the borders between two or more cities.

Madanipour (2007) argues the ambiguities of urban design through it the scales of professional practice. Through involving professional practice, the first range of uncertainty is on the scale in which urban design is interlaced. Mandipour's concluded remarks were “[W]e should stress that, although a degree of specialisation through the separation in the scale of engagement can be useful, the nature of both processes should be seen as closely interrelated.” (Madanipour, 2007, p. 14). Descriptions of urban design point that the design of cities and settlements as a whole as well as the design of some parts of city settings (Lang, 2005, p. 4). In this matter, the range of issues and concerns lectured both the macro and micro-scales of urban design, however, are very distinct from each other. Whereas the design of cities and settlements has focused on the broad issues of organisation of space and functions, the micro-urban design has concentrated on the public face of architecture, on public space in parts of the cities, and more detailed considerations of design at that scale. Another ambiguous issue related to the designing of the cities that handle the individual city or the relationship between cities on an extended scale and change the limitation of urban design (**Figure 5**). When recognised simultaneously, as happens in the definitions of urban design, they could create a large degree of ambiguity and uncertainty.

Such uncertainty can be noticed in discrimination between two sets of definitions. The first is the one which describes urban design as ‘the physical design of public realm.’ (Tibbalds, 1988, p. 12). The term public domain often refers to the space in the city which is not private and the private is in the individual building. Does this lead to ignoring the private space which considers a part of city life? And could be handled by urban design which comes in definition with “.... every person and their dog is an urban design” (Tenant, 2004). If ‘urban’ is simply the public sectors of the city, what should we call the collectivity of urban design with the private and public domain?

The second is the description of Lang (2005, p. 20) about “the broad goal of urban design is to provide opportunities, behavioural and aesthetic, for all the citizens of and visitors to a city or one of its precincts.” What does happen if the visitors are regal through the daily commute trips? And they come with their way of life to change the receiver communities. Can urban design open a scope to handle the destination city and expelling settlements. The large and small scales of engagement are rooted in much deeper debates about the nature and concept of urban design. Meanwhile, urban design mention in literature that the concern to the context of the city through handling the design of small piece of the city (Madanipour, 1996), (Shane, 2005), (Krieger & Saunders, 2009), (Carmona, Heath, Oc, & Tiesdell, 2010), (Shane, 2011), (Dovey, 2016). This means the upper level or the macro scale of urban design is

the city scale. Where is urban design seen to design the small and large scale and as a part of the context of the state that pay attention to the broad behaviour, social and formation of regions?

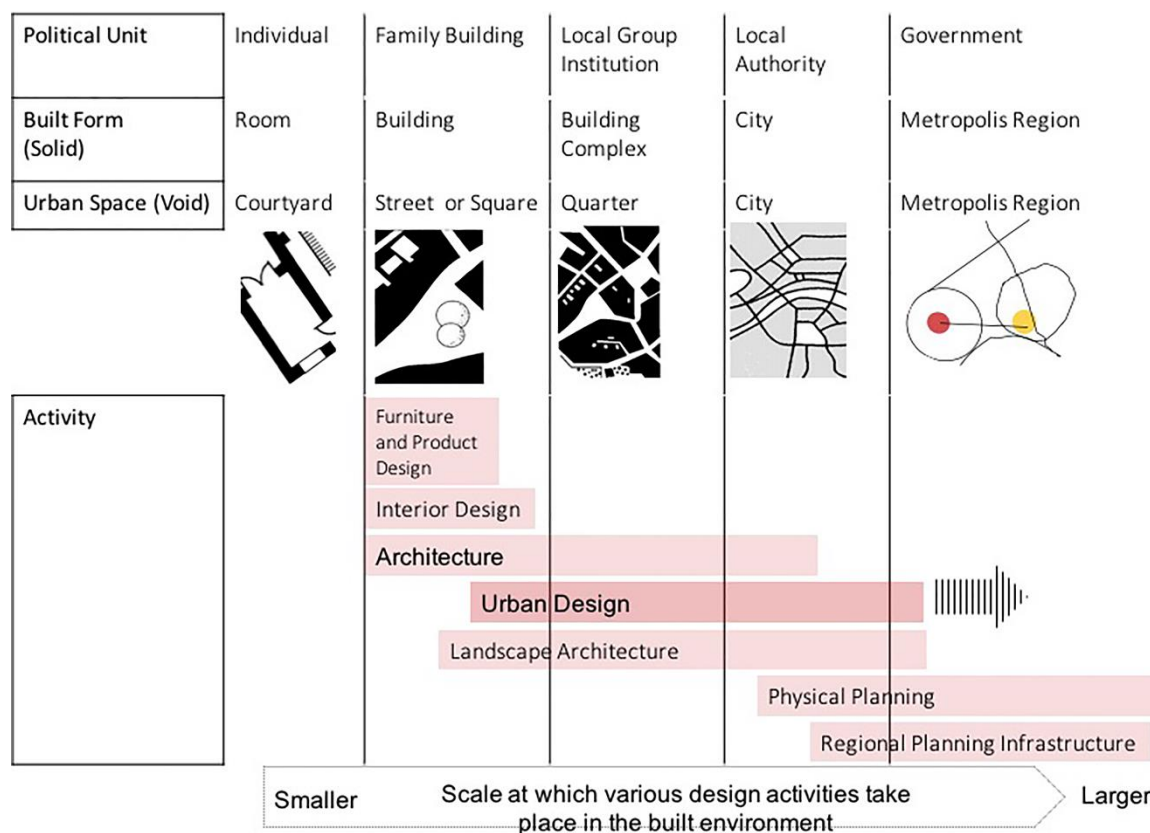


Figure 5: The scales of disciplines that near to the Architecture of cities. Source: the present author based on (Ericson & Lloyd-Jones, 2001, p. 5)

The latter is a clarity of urban design which is very close to city planning, admitting with a particular concern in the physical fabric and its form. If this was compared with the definition of the Royal Town Planning Institute about planning as being involved in the 'management of change in the built and natural environments' (Royal Town Planning Institute, 1991, p. 1), not to design and control the change, the similarity becomes evident to give widen the scale and limitations. The tangibility between urban planning and urban design facilitate the mission to adapted some tasks with regard to 'design' which could not be handled by planners that focus on strategies. In common with many commentators, Madanipour also sees contemporary urban design as a multidisciplinary field of activity rather than a discrete discipline or profession.

Therefore, disciplines provide crucial knowledge for all issues of humans' needs as well as methodologies and tools for interdisciplinary and transdisciplinary work. In the region of the Middle East and Northern Africa (MENA), several cities may have an essential need for improving the interaction between the theory and practices in term of design aspects; this discipline, with new approaches, is matching with the urban context that should be extended to boundaries of the state and beyond. Today, the urban designers in this region need to develop the outcomes of the American's and European's thoughts and praxis to be more robust toolkits with the ideologies in the field of urban design within the trans levels through transdisciplinarity and interdisciplinary.

4. CITY/REGION-WIDENING THE SCALE: TRANSDISCIPLINARITY FOR ART OF RELATIONSHIP BETWEEN THE TWO CITIES

The key point is to retrieve the field of urban design paradigm as an integral urbanism to be extended to the regional level to be able to discover, from one side, these unknown cities and be put on the development agenda from the other side. This extension will open a room for urban design not only to be the link between disciplines and to put the main interest in cities and towns rather than to be transdisciplinary-based that deals with all human settlements using two tools; *design* and *planning* (Figure 6). Especially after reviewing the shortage in the design aspects at the regional level, the experts could present a futuristic vision, policy, guidelines, norms, and codes for design. Urban design in the problem of overloading can present transdisciplinary body of knowledge (Figure 7) to manage and control a community movement and a design trend. The goal is to unload these cities from carrying extra dense inhabitants and structures. The current paper aims, firstly, to recognise the societal movement in the behavioural dimension as well as to describe the injunction in making decisions related to the residents that move in and resettle outside the additional onus cities. Secondly, it puts a design trend to list the percentage of high structural loads, the conflict vector with surrounding conditions, and the negative influence. It studies the new design trend 'back to the order' that enhances and beautifies the city's reloaded areas and how to resettle these residents, taking into account the city formation experience with significant financial returns. An assumption is that if this could have happened and the unknown cities have an opportunity to be a good place for living, then the overloaded known city becomes consecutively a good place, too. A second assumption stems not new compared to the work of the Austrian writer Camillo Sitte, through his book "City Planning According to Artistic Principles" (1889). To Sitte, the total process of city planning is the inspired and the all-encompassing work of art.

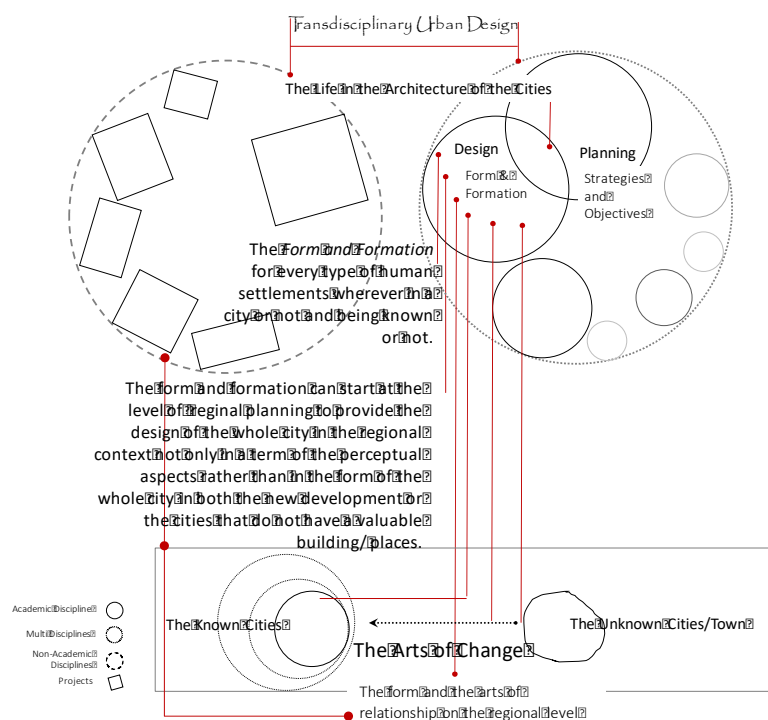


Figure 6: The two tools of the architecture of cities; design and planning. The design can contribute to solving a problem of the two cities through the art of relationship.

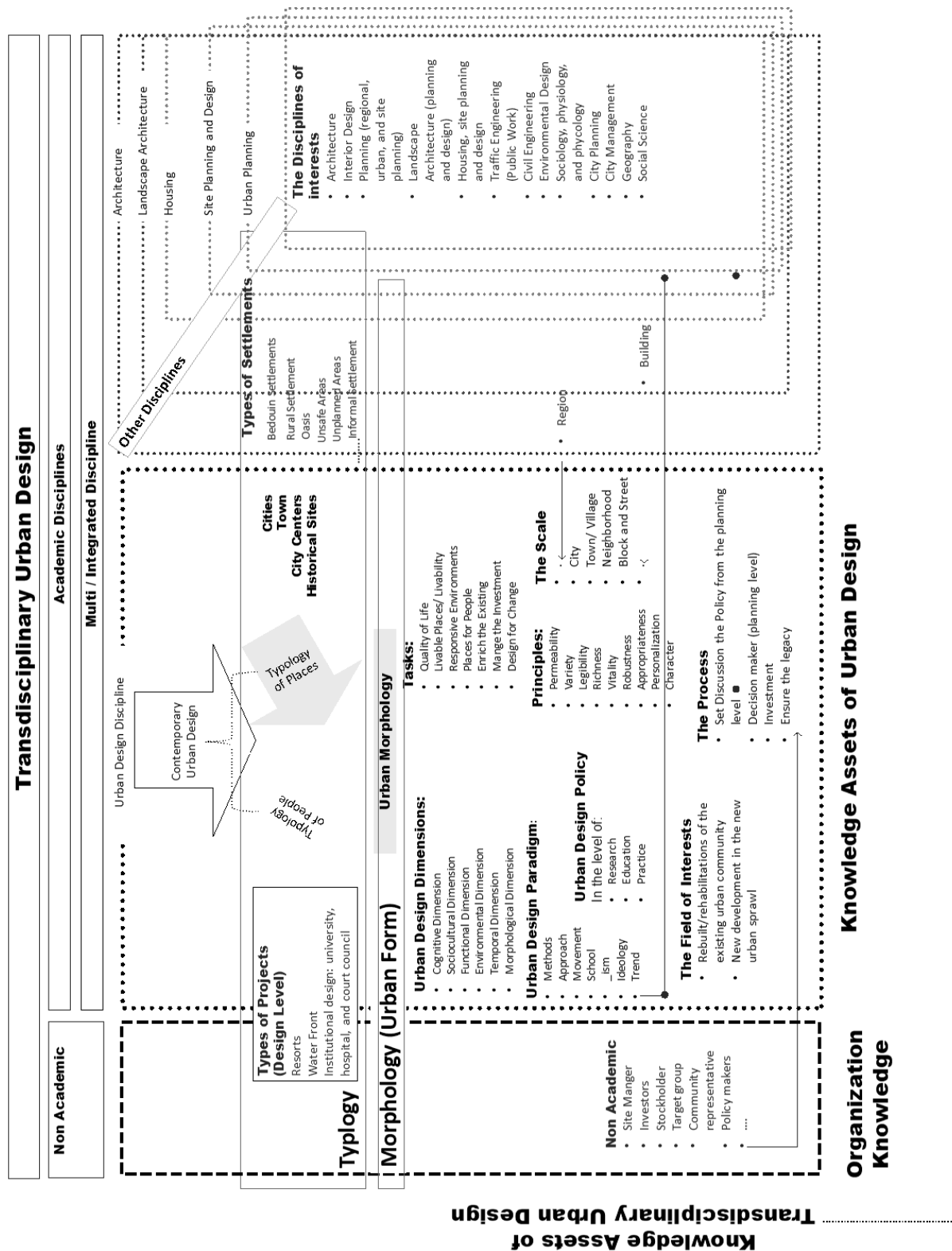


Figure 7: The transdisciplinary urban design and the items that could be listed on its agenda.

Ultimately, I would rather say that people have created cities, as cities remained to create people. This means that there is an interactive relationship between the people and the city. This relationship between them is fateful; both of them try to change the other. Hence, it is not necessary to make arguments about any point that starts this effect, whether from people or the city, because the key intent is focused on understanding the human-city relationship to provide a better living for both. In conclusion, two identical talks of Marks, 'Change the world', and Rimbaud, 'Change life', could inspire us to how urban design could change. To contrive a kind of change, a vision may come for the task of urban design to have a modified, integrated, and transitioning role with different disciplines for any human settlement on the earth. Moreover, the scale of urban design needs to be extended to the unlimited borders of the city to develop the process of being in all types human settlements which covered in regional level to meet the large scale of urban design.

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