

Urban Design

Designing a Hypothetical Neighborhood to Promote the Localism; Convergence of Urban Village Approach and Democratic Urban Design: The Link between Theory and Practice

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Abstract

The "Urban Village Approach" is one of the most appropriate ways to eliminate recent urban problems, including social, environmental, cultural, and economic shortcomings. Although the urban village approach is generally proper to resolve these types of flaws, its combination with the democratic concept of urban design can definitely provide more effective solutions. So at first, this paper aims to present a theoretical combination of these two approaches in the form of recommended principles and criteria, and then attempts to introduce a hypothetical wasteland for illustrating the practical aspects of it through design suggestions. A major part of the achievements of this paper is based on theoretical and empirical findings obtained from comparisons and descriptions, but in order to achieve more tangible results, the practical aspects of findings are proven by displaying 3D designs and schemes. Consequently, these proposed principles and criteria can be utilized in designing a democratized urban village form that finally leads to some vital qualities, such as flexibility, inclusiveness, localism, diversity, vitality, naturalness, identity, etc. These qualities, in an appropriate and consistent relation with the existing contexts, will also bring some desired concepts within, like justice, equality, freedom, and democracy to the urban and rural areas and neighborhoods.

Keywords: Urban village, Localism, Identity, Nature, Democratic urban design.

1. INTRODUCTION

Due to the process of industrialization and its urban problems, the missing rural nature and identity became more important. Therefore, many approaches were theorized in order to restore the tranquility, originality, and localism of the human habitats in the urban areas. In this regard, the profession of the urban design evolved and new concepts and attitudes began to come into existence; for instance, City Beautiful Movement, Garden City, Urban Modernism, etc., were theorized to deal with these types of urban flaws. In addition to urban aspects, these concepts had also economic, industrial, scientific, religious, and logical justifications [1,2]. As time passed by, the human values highlighted the natural identities and social factors but these were unfortunately forgotten in the urban developments,

specifically in developing countries.

Now, two related questions can be raised. How the urban designers and planners can improve the democratic and human features of the urban areas? How do these features meet local sustainability and identity in urban neighborhoods? In response, this should be noted that combining the rural and urban identities and features seems useful to improve the localism and human values of private and public spaces and places in urban areas. The combination of the rural and urban natures refers to the urban village approach. Furthermore, answering these questions requires a comprehensive historical review of urban villages. Hence, two sections have been considered as the historical reviews of evolution and the surrounding issues of the urban village approach in the world and Iran. In this regard, the efficient or inefficient consequences can be observed in detail to achieve a clear and conductive conclusion for this paper. Unfortunately, the urbanization has led to a manifestation of a separation between the village and the city. Therefore, the rural values have been

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degraded and today's science is named "Urbanization", which refers only to the cities. As a result, this mentioned issue is reducing the democratic aspects of the human habitats. In order to solve this kind of separation, the theory of urban village was introduced as an attempt to connect the rural and urban contexts. It becomes one of the successful examples of the present century, both in theory and practice.

The urban village is considered as the practice of implementing the accelerated rural development strategy and a spatial basis for performing this strategy [3]. Moreover, the concept of urban village can be identified with a set of units, allowing a re-localization of politics through participatory democracy [4]. Thus, the urban villages and small towns can play an important role as a rural incubator in the process of rural development and provide many of services and facilities in multiple urban areas [5]. At first, the physical changes got priority over other urban developments, but later the local investment in social networks was considered as the main priority [6]. It is a fact that the initial link between rural and urban issues only shows the physical transformation of the city to the village and vice versa, but as time goes on, this link will lead to many cultural and social interactions. It is noteworthy to say that in order to get the right answers and successful patterns, the original features should be maintained and should act in an adjusted way. Therefore, the combination of the urban village approach and democratic urban design will point to more justly, equal, and citizen-friendly habitat. Moreover, the democratic process of urban design can be applied in all criteria of the urban village approach, thus this paper will discuss the overlaps of these two attitudes to achieve a more responsive pattern.

In addition to physical and social aspects of each urban or rural project, economic features are also involved. Thus, the economy is always in connection with physical and social aspects and has many effects on them. Since the urban villages act as independent and self-sufficient communities, the economy and its related factors are very important. In this respect, in addition to the residential land use, the touristic and commercial activities, as the sources of income and the ways of internal development, need to be developed. [5,6]. In fact, the urban village approach is certainly interested in the relocation of a city in its environment and depends on the economic policies and job creation. Therefore, the urban village should unite a set of diversified economic activities [4]. The economic needs should include the growing living standards, access to daily activities, and infrastructural facilities [7].

As said before, the urban village pays attention to the different needs of humans in the urban or/and rural areas, but its essence and practical actions can be more democratic by exploring its common features with the democratic urban design. To prove this, multiple patterns which are proposed in a series of small-scale and practical schemes can be designed to illuminate more tangible practices. These suggestions may be able to develop this approach with more stable and consistent physical and social indicators, better than before. For this reason, the

final challenge is to create a neighborhood that will be a more popular, productive, and more beautiful place to live, both for present and future generations. In this regard, some fundamental criteria and principles will be derived from the urban village and democratic urban design foundations and will be applied in a hypothetical wasteland. Thus the practical suggestions will be schemed and offered through the combination of these two approaches, suitable for the development of suburban wastelands.

2. FAILURE OF MODERNISM AND BACKING TO THE TRADITION

In modern times, there was always a discrepancy between real human values and urban issues. Urban modern theorists have constantly mistaken the city as a phenomenon to meet the simple human needs, and unfortunately, they have forgotten complex needs [8]. The industrial revolution (1760-1840) was the most significant event which led to the urban modernization. Industrialization and its artificial atmosphere destroyed the nature, environment, and localism of urban spaces and in this way, new ideas were shaped around industrialization to fix the flaws. For example, the Industrial City of Tony Garnier (1918), the formation of Ciam Congress (1928), Le Corbusier's Radiant City (1933), etc., were raised from the following issues [2]. Therefore, the rise of urban problems brought in an idealization of rural life and the necessity of analyzing the new social problems which gave birth to sociology at the beginning of the nineteenth century [9]. These kinds of urban problems were intensified by passing two world wars, which highlighted the demand for urban reconstruction and management more than ever.

In 1898 Ebenezer Howard tried to bring up the idea of Garden City as a way to rescue the cities from industrialization and all the attendant problems. On the basis of his theory in 1903, the city of Letchworth was founded. This city had many problems but was successful against industrial urban shortcomings [10]. Garden Cities were the practical manifestation of a simple yet brilliant idea. They were a reaction to the environmental and social legacy of Britain's industrial revolution, rapid growth, and also the poor and unhealthy housing conditions that came with that. Generally, there were many of antecedents, such as New Lanark in Scotland (1800-1810), Saltaire near Bradford (1850-1872), Bournville outside Birmingham (1879-95) and Port Sunlight near Birkenhead (1888). But Howard's idea was much broader, provided for a general planned movement of people and industry away from the cities [11]. As time passed by, the modernism got a lot of criticism, but in 1961 Jane Jacobs criticized this approach, basically better than ever. She noted the problems of modern urbanism, detailed and accurate, and tried to show the gaps of the modern city. This issue opened up an opportunity for the emergence of new ideas and urbanism models, to deal with environmental problems, such as pollution, urban sprawl, loss of urban identity and localism, urban depersonalization, etc. [12].

In order to solve these kinds of problems, the urban village approach was raised as a way to fulfill good and acceptable urban requirements. Lewis Mumford in 1961 said that cities are closely related to the nature of villages and depend on them. He argued that the cities should return to their origin in order to resolve the social and cultural problems [13]. The urban villages were discussed again by Herbert Gans, in a form of urban sociology as environmental sustainability and regeneration of the identity and urban performance that is based on the old town [14]. This anthropological and sociological work challenged the assumptions of planners about the nature of life within areas designated as slums. Gans defined the urban area as an urban village, as he found new groups of residents trying to adapt their village like institutions and cultures to the distinctly urban milieu [15]. In late 1980, the concept of the urban village was developed as an important and viable approach to create the successful and long-lasting neighborhoods. In response, the Urban Villages Group (U.V.G) was established and charged by the Prince of Wales with the task to appraise past mistakes and learn from existing urban communities that worked. During the early research, the group sought the advice of the urban design from a wide body of theory, including the work of Leon Krier and Christopher Alexander [16,17].

The Urban Village Campaign was subsequently launched in June 1990 to promote the development of higher qualities and more sustainable urban environments designed to the highest standards and with strong input from local communities. Also in 1992, the Urban Village Group published the first edition of the Urban Villages Report, which was prepared as a discussion document or form of a manifesto [16,17]. In 1995, in a report that entitled Urban Village Economy, the prosperity and livability of this concept was shown and in 1997 the second edition of Urban Village Report was published [17]. Generally, the first application of an urban village policy was done in Phoenix in the USA [4]. After a while, this approach became popular more than ever, and several samples such as Greenwich Millennium and Poundbury in England, Kelvin Grove in Australia, and Lakeland in the USA were successfully implemented. According to previous reviews, early literature indicated that the urban village approach is influenced by some concepts such as contextualism, naturalism, traditionalism, and sustainable development. On the other hand, it can be understood that this approach should also bring the maximum protection for the community and shall encourage the maximum possible self-sufficiency.

3. URBAN VILLAGE

Throughout the history, the old urban patterns and approaches have always been replaced by newer and more appropriate ones. John Friedman has noted that the collision between the rural and urban areas can be eliminated by developing the urban village approach to provide basic needs as the first goal [18]. As mentioned before, the urban village approach was raised to struggle with the problems of modern urban planning and design,

actually in order to compensate the lack of identity and localism, lack of sense of place, lack of belongingness, and deterioration of housing qualities and urban naturalism. The concept of the transformation of rural attributes into urban characteristics, or vice versa, generally defines the main meaning of the urban village approach. This approach aims to transfer the values and environmental benefits of the urban life to an area which needs protection to retain and enhance the rural qualities and also life conditions.

In this regard, there are some investigations in Iran, which mostly concentrate on designing some rural contexts to improve the sustainability of the settlements, usually with more emphasis on the environmental and physical sections and focusing on SWOT analysis method. Although they also pay attention to social and economic sustainability, these issues have not been sufficiently investigated through democratic and humanistic factors. Some researchers have tried to prevent the rural decline and extreme construction of the luxurious villas as a reason for ignoring the natural backgrounds. As a result, they have put forward some regulations to control the unpleasant development of rural fabric, uncoordinated constructions, and destruction of the indigenous context. Some other researchers have emphasized on the identity and human scale with scheming vibrant public spaces, compact forms, pedestrian-orientation, public transportation, efficient consumption of the resources, mixed-using, special physical features, and respecting the environment [17]. On the other hand, some of these attempts have valued modern power systems, clean energies and physical arrangements [19], and some others have used quantity-oriented methods, for instance, SPSS software to offer some practical solutions such as creating the hierarchical network and considering diverse land uses [20]. In fact, these efforts have tried to articulate a model for the development of the link points between city and village, and also have listed the potential of the urban villages which have been generally used to improve the natural and local conditions [21].

Nowadays, the main problem is to prepare an appropriate urban form to be in line with the current reality of our culture and society [22]. The mutual collision between the major urban changes and the emergence of critical and rational ideas about enlightenment led to a debate about city redevelopments and urban improvements. For example, the ancient city walls were the first traditional symbols of the cities. In the early stages, these walls were destroyed to let the city grow, and also to prevent the destructive effects of dense population on public health [9]. However, nowadays the concept of the city wall is a source of inspiration for preventing from the urban sprawl (of course not as a brick or stone wall), which is one of the vital and the initial goals of the urban village concept. The urban villages effectively and efficiently are using the land and are maintaining the agricultural areas and open spaces. Urban villages are improving regional air quality by reducing car travels and also by consuming more efficient resources, such as land and energy. Successful urban villages attract people and

provide social, recreational, and cultural places [17]. For this reason, the urban village is considered as a self-contained, self-reliant, and self-organizing context for social, cultural, and economic living system that is able to meet its essential needs internally, all by itself and it has also been a self-contained, human-scale, socio-economic production unit [23]. The Urban Village Group showed the main principles and pillars of this movement in a report released by the UK (1992). This report acknowledged this movement as a development of adequate size or critical mass with walkable and pedestrian-friendly environment, which has varied architecture and a sustainable urban form to achieve mixed land uses with equal and mixed tenure. Based on this report, this movement should create more employment opportunities, and should present basic shopping, health and educational needs with a degree of self-sufficiency [16].

As time went by, the initial principles of the urban village approach were being more completed. For example, it was discussed that the urban villages should tend to have the public transportation and clear emphasis

on urban public spaces. Nowadays, the urban village plays a vital role in solving the problem of rapid urbanization; it also prepares housing for the lower income families and is a good channel for the combination between nature and community and so returns the localism and identity. It affords a proper way to prevent the urban sprawl and revives the dead and lost urban spaces and communities. In this regard, this paper attempts to combine the components of the urban village approach with democratic norms to focus on social sustainability besides physical and environmental features. To achieve this combination, the initial and common principles and components of the urban village approach should be analyzed clearly, which are shown in details in Table 1. After that, the combinatorial principles and criteria of this paper can be investigated and can be applied in a hypothetical wasteland, which will be a good example for the future urban developments with more rural spirit around the cities.

Table 1 Multiple principles and components of the urban village approach

Current Problems	Desired Benchmarks	Proposed Solutions	Results
- Lack of identity	- Combination of urban and rural values	- Mixed land use	- Visual beauty
- Lack of sense of place and localism	- Public welfare	- Relative increase in building density	- Attention to human dimensions
- Lack of proper residential land use	- Harmony and equality	- Combination of the housing patterns	- Endogenous economy
- Urban sprawl	- Safe and healthy areas	- Creating rural and vernacular features	- Increasing the identity and belongingness
- Poor environmental qualities	- Pedestrian-orientation	- Protecting natural values and fields	- Fixing the urban sprawl
- Ugly cities	- Localism	- Sustainability in all dimensions	- Development of suburban lands
- Dominance of vehicles	- Traditionalism	- Rectification of the educational needs	- Optimizing the brownfields
- Weak civil societies	- Contextualism	- Economic and job self-sufficiency	- Enhancing the environmental qualities
	- Naturalism	- Internal development	- Creating the tranquility in communities
	- Economic and job development		
	- Social interactions		
			- Increasing the social solidarity

4. DEMOCRATIZED URBAN VILLAGE FORM

Citizen participation encompasses efforts to engage the citizenry in the decision making of the community [15]. This indicates the right to participate at each level of decision-making process, including assessment, planning, implementation, and evaluation, which provides the equal living terms for citizens [24]. This statement clearly points out the democratic way of thinking about urbanism. Future development policies should consider rural-urban possible outcomes and opportunities. The realization of these kinds of

developments needs to consult freely with people; then the sustainable social, economic, and natural sources are ready to exploit the opportunities [25]. Many urban ideas have indirectly pointed out to humanistic and democratic concepts. For example, the Good City of Kevin Lynch as an appropriate place to live [26,27], Pluralist Planning of Donald Appleyard as an effort to achieve urban justice and pluralism [28], and Responsive Environments of Ian Bentley as a way of responding to multiple citizen needs [29].

After a decade, Francis Tibbalds tried to theorize the city based on the term of people-orientation. He has

mentioned some vital principles to achieve citizen-friendly urbanism, such as mixing uses and activities, human-scale, pedestrian-freedom, access for all, making it clear, lasting environments, and controlling change [30]. Over time, the urban developments affirmed the participation of civil societies. Later it was proved that the public spaces are effective platforms for the realization of civil life and social communication. Nowadays, civil society is introduced as a factor of growth and expansion of the public sphere that contains the human freedom with natural rights [31]. In result, the creation of public life can help to increase the citizen participation and involvement, as well as improving the quality of the residential environments and activities [32].

Current topics of urban design consider the urban spaces as the platforms for social gatherings. The ultimate goals of urban spaces are social interaction and citizen participation. Thereupon, there should be an interaction between people and authorities to reach high-quality urban areas which have the potential for collective activities [33]. All of these statements need a democratic urban or/and rural platform to fulfill the ultimate goals. In this regard, the combination of the urban village approach and democratic urban design can help to create a community with high localism and democratic senses. The initial materials are obtained from theoretical and literature investigations. In fact, the proposed principles are achieved through integrating the concept of democracy with urban village principles, using comparisons and descriptions. These proposed principles can be assumed as a way of reaching democratized urban village form.

4.1. Flexibility

Improving the opportunities for alternative urban lifestyles and effective influence over local land uses can realistically engage the citizens in urban debates. In this way, interdependence is maintained, and democratic fairness is satisfied. For instance, inflexible cases lead to poverty, undesirable location, and unpopular transportation choices [34]. Thus, the urban village approach should offer diverse alternatives to residents and citizens and let them have the right of more freedom of choice. The public spaces of urban villages should have the ability of convertibility and variability to increase citizens' participation and sense of belonging. This participation should be mostly based on peoples' management, instead of specialists. In addition to the physical dimensions, the flexibility should be applied in social and economic aspects to provide optimal and efficient neighborhoods.

4.2. Inclusiveness and universality

For highlighting the democratic nature of the urban villages, public and private spaces should be available to the wide range of social groups and classes, especially for minorities. People of different ages, genders, backgrounds, and cultures almost invariably have different perspectives, thus a full range of community should be considered. This is usually far more important than involving large numbers

[35]. For example, the essence of urban villages respect pedestrian-orientation and public transportation, but the people should be able to use their personal vehicles in a controlled way.

4.3. Use of local potential and skills

The local skills are important in the community. These will help to develop the social capabilities and to achieve long-term sustainability [35]. Thus, the urban village approach should be based on local potential and should operate in a self-sufficient way of action. For example, the use of local and vernacular architecture can prepare a good context for the optimal use of local reserves [16]. In this way, an appropriate identity will emerge. Issue also reinforces the vernacular factors, local labor force, and employment. Finally, all of these will improve various social, economic, cultural, and environmental qualities of the urban villages and promote the participatory aspects of local decision-making.

4.4. Diversity in density

Diversity is a way of achieving an equal and justly condition, regarding the various existing views or needs. Diversity in density provides an opportunity to consider other vital actions and activities, such as recreational activities, commercial land use, and services. For example, besides the short and high-rise buildings, the mid-rise buildings should be regarded as the balancers. This matter leads to the social justice and encourages a broader range of citizens to live in urban villages.

4.5. Vitality and dynamism

Designing a vibrant environment (natural or artificial) can be assumed as a powerful factor in creating cohesive, healthy, active, and participatory communities. These types of communities have a high percentage of identity, mobility, social presence, and sense of belonging. In fact, a vibrant environment should raise various and valuable economic and social activities in local areas.

4.6. Emphasis on democratic public life

A public life requires an acceptable level of democratic participation and collaboration and also learning how to listen and observe. Thus, designers and planners generally need to work with a more sophisticated understanding of the conditions and possibilities of democratic politics to reach the good conditions of democratic public life [36]. Always the people who use the environment are active participants in changing the environment [37]. Therefore, the realization of this statement requires a public and local platform in our neighborhoods, which is utilized for public interactions. In fact, besides the private life, public life should also be taken into account. Small scale local communities have more potential for creating the social relations and interactions. In result, the emphasis on the public life increases the social presence and interaction,

and in the following, the social participation appears which leads to the creation of democratic spaces.

4.7. *Emphasis on natural values*

A good life always requires a good environment and thus the urban and rural areas should be built in connection with nature [24]. In urban villages, attention to the nature is an essential value. In fact, the consideration of natural values stimulates the feelings of citizens and also produces high quality neighborhoods. Thus, the formation of healthy and vibrant citizens is one of the valuable results of this concept. For instance, by constituting a green belt, the flaws such as urban sprawl can be controlled; moreover, it can improve the identity and level of visual beauty, as well as creating the environmental comfort and tranquility.

4.8. *Democracy and equality of access to services*

The urban services, infrastructures, and facilities should be available to all citizens, in equal terms. In fact, the urban villages should support the equal accessibility for all communities to resources [24,38]. This means that the urban villages should administer proper and same distances in achieving various and vital parts of the neighborhood. In other words, all citizens must be able to get their daily needs, easily and simply.

4.9. *Democratic access network*

Access network designing is an important and effective factor in the division of land and the future development of the neighborhoods. Since the access network of urban villages is designed in an organic form, the designers and planners can use the grid and distributary network patterns, in addition to organic ones to create a more democratic urban villages. Then the social justice will be considered besides the natural and ecological issues of that. For example, a grid pattern can divide the land more equitably.

Now, the principles of democratized urban village form are summarized and illustrated in Table 2. As seen in the Table, there are several differences between urban village approach and democratic urban design. The most obvious differences are in social aspects. This means that the general principles of democratic urban design have more social quiddities. In this regard, this paper is tried to bring this social quiddity to the urban village approach. Many of the principles in Table 2 are in common together; for example, the equality of access to services covers the inclusiveness, and the social justice exists in most of the principles. Therefore, in order to ease the way of testing the practical aspects and proposed designs, this paper classifies these principles separately. Moreover, it is important to know that how these principles and criteria should be run in practical dimensions. Hence, the next section provides a hypothetical wasteland to implement the practical suggestions.

Table 2 The combinatorial principles and criteria as the final solutions

Proposed principles	Comprehensive and macro results
Flexibility	Democratic fairness\ Right to choose\ Convertibility and variability\ Citizen participation\ Optimal and efficient environment\ Citizen intervention
Inclusiveness and universality	Impartiality\ Public respect and citizenship responsibility\ Human dignity\ Quality rather than quantity\ Social justice\ Involvement of diverse social groups\ Attention to minorities
Use of local potential and skills	Localism\ Sustainability\ Expansion of local capabilities and participation\ Self-sufficiency\ Distinguished identity\ Contextualism\ Job creation\ Income generation\ vernacular architecture and urbanism
Diversity in density	Creative framework\ Diverse services and activities\ Social justice\ Involvement of diverse social groups\ Responsive communities\ Livability\ Balancing the urban density
Vitality and dynamism	Cohesive, healthy, active, and participatory communities\ Improving the identity, mobility, and public gatherings\ Sense of belonging\ Promotion of diverse activities \ Creative environments
Emphasis on democratic public life	Face to face interaction\ Educating the social values\ Citizen participation\ Creation of public places and spaces\ Regeneration of the social relations\ Public aggregation and solidarity
Emphasis on natural values	Respect for natural environment\ Stimulating the human emotions\ Livability\ Citizen well-being\ Prevention from the urban sprawl\ Strengthening the identity\ Visual attractiveness and beauty\ Environmental comfort
Democracy and equality of access to services	Social justice\ Involving the diverse social groups\ Environmental comfort\ Social welfare\ Responsive environments\ Livability
Democratic access network	Dynamic neighborhoods \ Democratic land dividing\ Social justice and equality\ Protecting the valuable lands\ Compatibility with existing fields

5. HYPOTHETICAL WASTELAND AS THE PLATFORM OF SUGGESTIONS

This section provides and introduces a hypothetical wasteland as a platform to test and display the principles and criteria extracted from the combination of urban village approach and democratic urban design. The neighborhood that will be designed in this wasteland should include local features in a form of residential area with democratized urban village qualities. Therefore, an appropriate field is needed to get practical aspects. As illustrated in Figure 1, this hypothetical wasteland gives us

a good opportunity for testing the proposed principles and criteria that are mentioned in Table 2. This site has been carefully prepared to connect the theory and practice. According to Figure 1, the land dimensions have been assumed with 600 m (length) and 500 m (width), that has a moderated slope from northwest to southeast. There is also assumed a mountain area on the north, forest-agricultural land use on the west and east, and a river with a width of 20-25 m along the middle of the site. Moreover, a roadway is assumed with a width of 25 m in the southern part, as the only vehicular access.

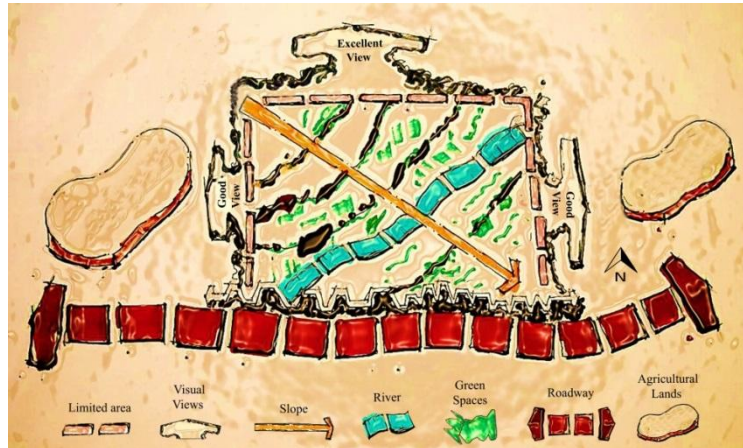


Fig. 1 Hypothetical wasteland and its geographical and natural details; this hypothetical wasteland is considered as a suitable platform for realizing the proposed principles and criteria

6. RESULTS AND DISCUSSION; PROPOSED DESIGNS

This section discusses the practical aspects of combinatorial principles and criteria, as well as their multiple results. Thus, the essence of each of the proposed criteria and principles is explained through several proposed designs (3D and map), as the graphical definitions of their basic and vital components. In fact, these can be effective for preparing the urban villages with more democratic features and also community senses and localism.

6.1. Balancing the mass, space, and access system

The mass should be designed in connection with the space for achieving more livable places (Figure 2). In order to create this kind of relation, some factors such as flexibility, inclusiveness and vitality should not be neglected. Hence, the building area should be balanced in the height and volume. Moreover, a neighborhood center should be offered to establish a relative balance between mass and space (Figure 3). This center will instate the sense of belonging, localism, identity, etc., through improving the social interactions, aggregations, and activities which will also lead to higher levels of social life and civil society. By appearing the civil society that involves the social participation and collaboration, some qualities such as social justice, equality and also democratic places will be achieved.

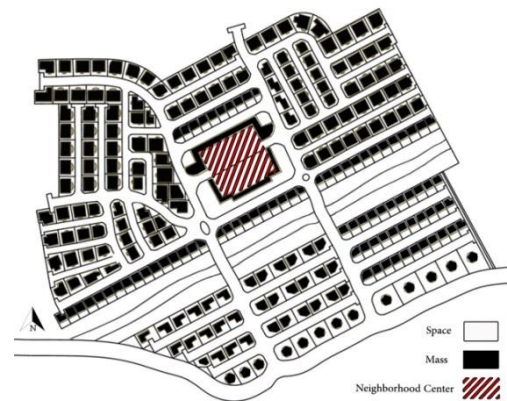


Fig. 2 Spatial arrangement of the neighborhood; the connection between mass and space

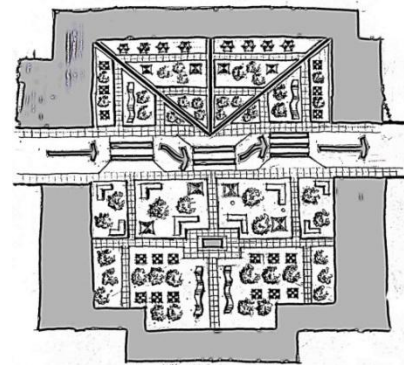


Fig. 3 Public neighborhood center as the spatial connector and balancer

According to Figure 4, a hierarchical access system is suggested with diverse widths. This system is shaped through the combination of organic, grid, and distributary networks that can bring more democratic urban villages. On the one hand, this issue brings up the mobility and dynamism because it saves the spaces and places from pure geometric and repetitious shapes. Also, it is a way of reaching a democratic, justly, and equal land dividing (Figure 5), like grid network that divides the land the equally. On the other hand, this kind of urban network preserves the valuable urban lands, as well as creating harmony with the existing values. Variety in the distribution of access system leads to flexibility and diversity and also some benefits, like livability, right to choose, convertibility, and variability.



Fig. 4 Proposed network; democratic access system



Fig. 5 3D plan of land division which formed within the access system

6.2. Appropriate height and density

By constructing a balanced range of low-rise, mid-rise, and high-rise buildings in the area and applying the diversity in building densities (Figure 6), a good context for arranging vital and important land use and activities, like commercial, recreational, and services, has been afforded. Balancing the height system will encourage an

expansive range of social classes to live in these areas for claiming various flexible demographic densities. These items will create the dynamism, mobility, social and economic self-sufficiency. Figure 7 shows the 3D plan of proposed density and height system.



Fig. 6 Proposed density and height system which has diversity in its nature



Fig. 7 3D plan of proposed density and height system

6.3. Diversity in land use and local activities

After setting up the diversity in density, the various vital land use and local activities can be suggested and developed in the neighborhood. The correct arrangement of land use and activities improves the quality of public and social life, localism, sense of belonging, as well as tourism, and also prevents the environmental isolation and deterioration. Proposed land use types include residential, recreational, and commercial activities. As seen in Figure 8, the most percentage of land use has been dedicated to residential type; but for claiming the diversity, some high-rise buildings are devoted to commercial and administrative activities at the southern edge of the neighborhood. Moreover, some recreational and touristic activities are located on the riverside, in some mid-rise buildings for creating more vitality and livability. Finally, the macro scale commercial functions are distributed in the neighborhood center to meet the daily needs of the residents.

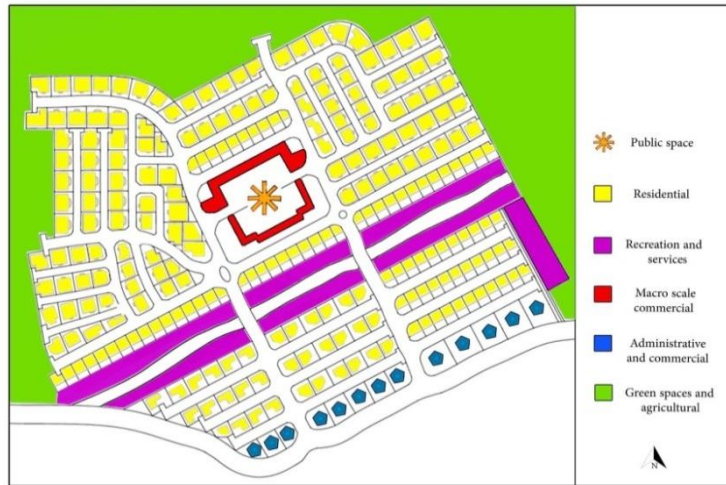


Fig. 8 Distribution of the proposed land uses and their spatial arrangements

6.4. Originality and nature

According to Figure 9, provision of a green belt will prevent sprawl and uncoordinated development. This issue will preserve the valuable lands surrounding the neighborhood. In the eastern part of the green belt, some recreational and athletic facilities have been placed to promote the social welfare, localism, and environmental comfort. Additionally, to reinforce the originality of the natural environment, some recreational and touristic activities have been also arranged at the edge of the riverside. The creation of these kinds of activities will actually result in the environmental vitality, dynamism, and attractiveness.



Fig. 9 Proposed green belt around the neighborhood

7. CONCLUSION

The main aim of this paper is to achieve more democratic and human attitudes in the urban villages as well as to improve the localism, identity, and multiple aspects of urban neighborhoods, such as social, economic, environmental, and cultural features. Based on proposed principles, criteria, and design of this paper evidence, it can be concluded that the combination of urban village approach and democratic urban design brings more

successful and appropriate neighborhood samples with high community senses and localism. This combination provides a concept that operates like a democratized urban village form and leads to some valuable and democratic values like citizen-orientation, participatory design, community events, pedestrian-orientation, etc., which also boosts the urban qualities. This concept can help to maintain the valuable lands, natural identities, vernacular contexts, and generally the local potential. Hence, it can provide an opportunity to use the brownfields site and to develop self-sufficient communities.

More specifically, it can be noted that this paper achieved some vital and fundamental principles of democratic urban village design, which bring more people-friendly nature to current urban developments. These principles are flexibility, inclusiveness and universality, use of local potential and skills, diversity in density, vitality and dynamism, emphasis on democratic public life, emphasis on natural values, democracy and equality of access to services, and democratic access network. Finally, the realization of these principles resulted in some tangible and practical experiences (practical schemes and designs), which presented the ways of improving the urban-rural qualities and created more livable habitats in the form of a democratized urban village form. Indeed, by presenting the practical schemes and designs is attempted to test the adequacy of proposed principles and criteria in four sections, including balancing the mass, space, and access system, appropriate height and density, diversity in land use and local activities, and originality and nature. As the final words, it should be taken into consideration that all of these proposed principles and criteria can be changed due to the nature and location of each project, the public demands, and the process of actions. Hence, the urban designers and planners should be aware of the content of their projects to choose the best direction of achieving the right principles for their particular neighborhood design.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest regarding the publication of this manuscript.

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