

## Interventions, Territorial Structure and Environmental Knowledge in Muslim Built Environments<sup>1</sup>

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### Abstract<sup>2</sup>

This paper argues that higher quality built environments can never be commodified, but rather should evolve from its inhabitants. Nowadays, users can choose from what is already produced by profit seeking industries, yet they cannot decide their manufacturing specifications. Environmental elements or configurations are no exception. Capitalism with its Western mode of production resulted in shaping built environments all over, including Muslim Middle Eastern settlements. Hence, components of the built environments such as houses and schools became **commodities** thus eliminating users' participation except on the selection level from an already finished products. This process is quite different than traditional ones in the Muslim built environment in which production is based on users' control. I.e., production is not based on participation as one might think, but rather on the power of controlling all environmental configuration by residents at all levels. This process, as the paper argues, will have massive positive impacts such as sustainability. The paper depicts three major mechanisms to delineate the process of creating built environments with the least possible cost yet leading to much higher qualities than those created by capitalism. The three mechanism are: 1) reducing land value as much as possible to an affordable level for the masses; 2) environmental decisions are based on the principle of damage leading to "accretions of decisions" with no external interventions; 3) deep territorial structure to further concentrate responsibilities in the hands of local inhabitants. Thus all three leading to environmental knowledge based on local control and thus responding to local needs, ambiance and materials resulting in sustainable environments. In summary, environmentally, commodification of capitalism is the archenemy of sustainability.

**Key Words:** Intervention, territory, convention, rights, sustainability

## 1. INTRODUCTION

Thus far, most if not all attempts to enhance quality of the built environment are external. For example, to deal with sustainability whether in academia or practice, actions are external. They are based on governmental and professional interventions. On the political level, officials of governments meet in conferences to reach agreements between States to reduce pollutions. On the administrative level, authorities develop building codes to control environmental and urban activities to reach sustainability. On the academic level, studies were created to reach proposals and solutions to have a sustainable urban sittings or buildings. On the professional level, many designs proved their success of a building in a specific site.

All such attempts are external and if succeeded as in a designing a building or a site, it is just a success in one or few sites, but not the whole environment. Although rules and regulations usually deal with all sites, they are still attempts by those outside the site. What is needed is a strategy that would pull the environment as a whole to a higher quality. This paper argues that such a goal cannot be achieved without control springing out from the sites' inhabitants, and this cannot be reached without considering rights or hukuk.

Although issues of this paper are about the Muslim world, they do apply to other cultures. This paper raises the following question: How does different cultural thinking creates Architecture or environmental knowledge in general? Or, how does a society produces built forms? Could best environmental solutions come from current Western modes of production? The obvious answer for most is: yes, as history of producing goods or knowledge guided societies to western modes of production.

Capitalism is based on profit-making through consumption. The consumption process has two ends: producers and consumers. The built environment is no exception. There are producers (architects, planners, municipal officers, building material industrialists, manufacturers, etc.) and consumers (residents, the public, etc.). In such equation affordability determines the quality of the built environment. Higher qualities for the richer while the poorer might become homeless. The quality of lavish buildings (e.g. Banks) is improving fast whether in terms of its building materials, technology, or space organization. There could be no other societal system that could push the edge of the field of architecture and urbanism forward as capitalism. However, the gap between excellent architecture and what the general public in so called Third World countries could afford is becoming wider. Societies of the Third World countries do not need excellent architecture as much as they need affordable environments. Meanwhile, producing affordable environments became a commodity in itself that has to be produced: a typical attitude of capitalism. That is why we hear today of participation, empowerment, enablement, grass root movements, etc. The existence of such terms suggests that they are not the general practice; they are the exception. Although ideologies of empowerment, sometimes, stands against capitalism, its results are still a commodity targeted towards a specific class of people. I.e., this mode of thinking is fruitless.

## 2. THE RIGHT OF REVIVIFICATION

In all realms of society making, the predominant Western model is based on evolution, especially the law. The law is in a constant flux, not necessary reforming or reflecting societies' norms and values. Through democracy, the society, challenges its laws and moves to new ones. Only the active individuals and the powerful could decide the changes in the law by

mobilizing the masses. The more active, the knowledgeable and the wealthier (the powerful) are the ones who are pushing the boundaries of the law. Some studies showed that only 0.02% of the population in the United States decide the candidates from whom the president or the congress man will be selected<sup>3</sup>. Those who are elected, constantly improve (according to their convection) the law which in effect changes the relationship between the State and individuals through redefining the rights of all active parties involved in shaping the built environment whether they were users, owners, companies or Governmental agents.

Fearing possible creation of chaotic environments, as well known, through planning codes, the law prohibits land appropriation without the State permission. In such situations, the law with good intention will lead to monopoly and thus land speculation as the law is always penetrable form the powerful.

Refuting Malthusian theory, one might argue that land availability compared to global population is immense. In fact, the current population of the world can fit easily in one country such as Sudan if not the United Arab Emirates (Akbar, 2020: 1035). Thus land value does not reflect land shortage as it does reflect land speculation. However, in Islam, the low or hukuk led to maximize the percentage of owners in society. If it is 60% in capitalist society or 40% in socialist ones, in Islam it should come close to 100% if Islamic hukuk was implemented. How?

The major mechanism that create ownership is obviously establishing it through appropriation, which is the logical origin of any ownership. Not unexpectedly, appropriation has been extensively discussed by Muslim jurists. They recognised unowned and unused land as mawat, and followed certain principles in utilising it. Mawat literally means “dead”. With respect to property it means unowned and unutilised land. Land is considered dead if there is no trace of building or cultivation; if it is not used by the neighbouring locality as, for example, a common pasture, burial ground, or as a source of wood or food for cattle. However, differences among schools of law exist regarding the status of unutilised land abutting urban areas. Is it to be considered dead land or not? All schools of law with the exception of some jurists from the Hanafi rite, consider it dead land.

According to custom, dead lands may be revived and consequently owned by the reviver. ‘Ihya’ literally means “life-giving”; thus, those who utilized a parcel by building on it or farming in it will won it. There is ample evidence from the Prophet's traditions, rulers’ actions and jurists’ opinions to support the principle of recognizing ownership of dead land to those who revive it. The Prophet said, “The people are God’s people, the land is God’s land, he who revives a piece of dead land will own it, and the unjust root has no right.” In another tradition he declared, “He who revives dead land will be rewarded by God (in the day of judgment)”. A man who had revived dead land came to ‘Ali (the forth caliph) and said, “I came across a land that was ruined or its (original) inhabitants had left it, and I dug streams and cultivated it.” ‘Ali responded, “Eat pleasurably (enjoy it) you are righteous not impious, a reviver not destroyer.” ‘Ibn Qudamah (d. 1223/620) relates that “Reviving dead-lands is the custom in all regions even if there are differences among jurists regarding its regulation.” (Akbar, 1988)

Any revived land will create its own rights. The rain water of a revived land as a house will carve its discharge channel as a right for example. From such diverse circumstances, of course many different opinions of jurists were raised by scholars, such as what are the actions that are needed to own a land? What are the rights of a revived land so the accumulations of the actions of the many revivers will not lead to chaotic environment? As explained in Qas al-Haq, such land policy led to the reduction of land value.

### 3. ACCRETIONS OF DECISIONS

One may think of two types of extreme environments. The one that is well organized, such as those designed and built by the State with much funds, and the ones that were created without any interventions, yet often created by poor people. Obviously, by comparing both, one will conclude that interventions are often leads to a higher quality environment. However, if one considers the residents poverty, which is an empowerment issue, one should be able to distinguish between quality, morphology and decision making process. Unfortunately, this was not realized by many officials and professionals. Thus, as common, fearing possible creation of chaotic environments, through planning codes, the law prohibits additions or changes in the built environment without the State permission. All building activities are done within Municipal codes. In such situations, the law with good intention will lead to the elimination of users' participation in creating environmental solutions. How?

The places of conflict between neighbours are usually the interfaces between their properties. At these interfaces the conflicts and resolutions between neighbours are played out. They are the boundaries where conventional, personal, deviant and aberrant behaviours came to the surface: the undesirable movement of one resident towards another triggers a situation of conflict. To avoid such conflicts, attitudes of contemporary capitalist societies' laws was the minimization of possible disputing-interactions between neighbours. A typical attitude of its individualistic belief, capitalist societies laws defined and defended properties boundaries, and devised the needed laws and penalties to control these boundaries. This resulted in eliminating the experiences of the sites' residents from contributing to the accumulation of environmental knowledge.

The attitude in traditional environments is the opposite, the Islamic legal system maximized the interaction between neighbours on those boundaries which enhanced the process of evolving best environmental solutions. This was done through the principle of damage. The Prophet said: "neither *darar* nor *dirar*" which translates as: "there should be neither harming nor reciprocating harm<sup>4</sup>." This tradition was interpreted to mean that one may act in the built environment so long as the action causes no harm to others. The tradition was used by the society to evaluate the legality of individual actions in the physical environment. Thus, each change was treated as a unique case and judged by referring to this principle.

Jurists differ as to the exact meaning of this tradition: *Darar* is what an individual benefits from at the expense of others, such as changing a residential property to a factory whose noise or effluent will harm neighbours; *dirar* means an action which harms others without benefiting the acting individual, such as opening an unneeded window to look at the neighbour's yard<sup>5</sup>. The use of the tradition as a tool and the opinions of jurists suggests **complete freedom** of action if others are not damaged. The only actions that a party may not execute are those which affect another's property physically, such as knocking or hammering on the neighbour's wall, or those which affect the residents of the adjacent property-- for example, an intrusion on a neighbour's privacy.

One might argue that the environment might be chaotic if the principle of damage is activated. This is not the case. The freedom of individuals to act without harming others has led to the very interesting theme of the "right of precedence." A property can possess the right to damage other properties within limits, without being damaged itself. For example, a person built his house and opened a window that did not overlook other houses. Later the neighbour built a house and wanted the first person's window sealed. The window can remain because

the first person preceded the second and had the right of using the window while the second person had to adjust ('Ibn ar-Rami, 1982: 315) ('Ibn ar-Rami, d. 734/1334, who was a building inspector and wrote a book of building laws). The term "hiyazat ad-darar" literally, "possessing damage" means the right enjoyed by a property to damage other properties because its owner preceded others in action. The cases suggest that possessing damage is related to a properties and not to individuals. Let us call the right of possessing damage as the "right of precedence." Obviously, this is not the case in contemporary environments where all owners are alike; one rule for all.

Jurists' opinions varied according to the damage caused to neighbours. The damage caused by the smoke of a potter's fire, for example, had the right to continue ('Ibn ar-Rami, 1982: 301). In a case, a jurist was asked about houses inside Qairouan city which had been used as tanneries; the tanners were forced to move out. Thirty years later some tanners wanted to renovate the same houses as tanneries. The neighbours protested on the grounds that the houses had not functioned as such for thirty years. The jurist answered that the tanners had the right to move back (al-Wansharisi, 1981). Some jurists, however, will not allow such damage to continue regardless of the amount of time that has elapsed. For example, a jurist was asked about shops for pounding kernel in the market which had houses above them. The pounders had been forced to move outside the city, but now they had come back. He answered that since they cause damage they should be moved (al-Wansharisi, 1981).

The cases suggest that an owner may damage others if his action precedes them. In other words, there was a rather well-established principle regarding the right to damage others if the damage is not severe. But what about actions taken in the past which will inevitably damage others later on? I.e., the owner was allowed to take such action because there was no one there to object -an example is building a tannery whose odor will harm future neighbours? If the action could potentially, but not inevitably, damage others in the future- an example is the creation of a window that might overlook future properties, the action had the right to continue even if it damaged neighbours. 'Ibn Taymiyyah (d. 728/1328) was asked about two houses in which the water spout of one house was directly above the other's entrance, and had been in that position. Did the owner of the latter house have the right to prevent the damage caused by the water spout? He answered that since the water spout had been installed first, it had the right to continue<sup>6</sup>.

The following will explain that the "right of precedence" did not result in a dominance relationship between properties as the term may suggest but rather ordered the relationship between neighbours and created social bonds without the need for municipal rules. Let us explore the various situations that created the "right of precedence."

The owner who precedes others in possessing a "right of precedence" has the right to continue an inevitable damage. In one case in Tunis two neighbours fell into dispute because a canal leaked into the neighbour's well. As the canal was built before the well, the well owner was asked to counteract the damage of leaking ('Ibn ar-Rami, 1982: 375). Against collectively owned property, the "right of precedence" was also upheld. In a dead-end street owned by its inhabitants, one of the houses abutting the dead-end street but which did not have access to that street had a small, covered, long disused septic tank within the dead-end street. The owner of the septic tank wanted to reuse it, and the owners of the street could not prevent him from doing so, as the septic tank preceded their dead-end street (Al-Wansharisi, 1981). In short, the builders who acted later had to accept the previous "damaging acts" as constraints.

The “right of precedence” is decided by the preceding action and not by the preceding building. If owner A preceded owner B in building his property, then owner B have the right to initiate “damaging acts” if there was no objection and would have the “right of precedence.” For example, if two properties are on opposite sides of a through street, and one owner (B), whether or not it preceded (A) in building the house, opened a door that could damage A in the future by limiting A’s choices of opening a new door, then B will have the “right of precedence.”<sup>7</sup>

The concept that one property may enjoy some rights over the other made individuals aware of their rights. A good example of such awareness is the case of a lime-kiln owner who, having one fireplace, decided to build another fireplace using the same chimney. The neighbours protested on the grounds that this caused additional smoke, and the new fireplace was banned by the judge 'Ibn al-Ghammaz who was appointed as a judge in Tunis in 718/1318 (Al-Wansharisi, 1981: 9).

Thus, in conclusion, the “right of precedence” **ordered** the relationship between owners as a **series of constraints**. To allow residents’ complete freedom, the environment should be considered as a series of constraints. Logically, there is no other approach. I. e., each acting individual should have to deal with all decisions made by previous individuals. The “right of precedence” which established and ordered the relationship between owners as a series of constraints led to build environments characterized by accretion of decisions. In such environments, in which land value accusable to all, with no outsider interventions, one would expect that most, if not all environmental products are created by its residents. Environmental elements are not commodities.

Furthermore, in traditional environments, the concept of accretion of decisions resulted from elements between properties such as windows, doors, party walls, passageways between neighbours, water spouts, and the overpasses. It should be possible to imagine the traditional built environment as a **network** of territories in which each territory has a relationship to adjacent ones. The residents of a territory in one block relate to each other through water spouts, cisterns and over passes (*sabats*). The cistern, for example, is an interesting element that established a relationship between neighbouring territories. The physical organization of the cistern as a constraint resulted in the following case: A person bought a house, and the seller informed him that the rainwater running off his neighbour’s house could drain through his new house. Later, the buyer prevented his neighbour from draining water on the ground that he was also draining ablution water. The buyer’s protest was accepted since rain water is occasional while ablution water is a constant. The neighbour only had the right to drain rainwater ('Ibn ar-Rami, 1982: 352). Furthermore, each block relates to others through windows or doors or even overpasses with the right of precedence. This network does not exist in contemporary environments. Thus, despite the freedom of owners in traditional environments, accretion of decisions created relationships between them. Although each territory is independent, yet the boundaries are transparent as the residents of each territory has legal relationships with neighbouring territories.

Although owners had complete freedom while accepting previous owners’ decisions as constraints, they followed the society’s convention. Freedom of action was framed by convention. The traditional principles satisfied various needs and situations. The outcome was “diversity within unity.” The question is then “why users and builders followed the same convention?”

The main reason for the sophisticated conventions of the traditional Muslim environment in the Middle East and what was documented in the books of law is the principle of damage that gave acting parties total freedom.<sup>8</sup> This is why we recognize building types. For example, wooden screens are all over the facades of traditional Meccan houses (hot dry climate), while quite few windows are found on the facades of traditional Riyadh (hot dry climate). Each region has its distinct type at all levels. A type is usually based on few rules followed by users and builders. The type could be a “simple-spatial-organization” or a technical solution that everyone understood; builders as well as users. The type became rich and complex when multiplied. The environment was a series of few sizes of built and open spaces that repeated themselves according to the rules of form-making or conventions. This complexity that resulted from the type is a natural outcome of following the same conventions.

Obviously, the most efficient solutions for environmental problems could also be created by users who live on the site and experience its constraints and potentials. Each user has a unique situation to deal with. Thus, the built environment could be viewed as huge laboratory to test different solutions. Users usually adopt a solution when they see that it works in reality. A user creates a solution, others will adopt it, and in the process, will improve it. Thus, “accretion of decisions” seems to be a required circumstance for affordable innovative solutions. In contemporary environments, municipal rules and regulations produce organized environments that are not based on “accretions of decisions” and thus have eliminated the social bonds and user's contributions to the “conventions of creating spaces.” Most residents of the site have no control beyond usage, contrary to traditional Muslim built environments that are characterized by residents' full control leading to the improvement of the conventions. How?

In the past, the principles of damage have contributed to the development of better solutions by owners or users which in turn refined the conventions. A theme arose from the cases of conflicts between neighbours resulting from the principle of damage; that is, the resolution never takes into account the damage caused by the ruling of the judge towards the new action. If a created window is proved to cause damage, the owner of the window must seal it or change its position. How he does it or how it affects his interior is his problem. Owners gained different experiences from such criticism situations. Each owner had to deal with his unique constraints to find proper solution, and this widened the range of the society's experience.

In traditional environments the acting individuals did not ask for permission, they made a change, and if the neighbours experienced damage, there was a judgement as to whether the change should be permitted. This gave people a chance to try different solutions which also widened the range of the society's experience and refined the conventions.

Any designer can easily furnish an apartment; but when he moves into his own apartment, he will spend much time adjusting the furniture as the situation is real. The principle of damage means that each stage of addition is small in scale and made by those who experience the realistic constraints of the site. This is an important role of accretions of decisions to refine conventions. Each small addition is based on understanding realistic problems and not hypothetical proposals as often done in design by remote professionals. In large contemporary schemes some initial decisions are realistic, but what follows is inevitably hypothetical since the consequences of the first group of decisions are not known as they are

not yet built. This is to say, the larger the scheme is, the less realization of the constraints by the designer, and the less realistic the ultimate design will be.

Any building is a sum of decisions that are made before the building is on site. The more buildings in a project, the greater the number of the decisions to be made. Each decision is based and linked to other decisions as yet untested and unbuilt, and miscalculations are inevitable. The principle of damage leads to a small number of decisions according to established conventions of form making and based on the experience of existing decisions as constraints. In fact, one could argue that the only method of creating environments in which users have full freedom is through the rights of precedence, otherwise, logically the environment will be chaotic. Furthermore, design should be viewed as a process that brings about social interactions among users who would contribute to its improvement at all levels. All these controls by the site inhabitants will obviously lead to the utilizations of local materials within an enhanced environmental knowledge. In short, the built environment is not a commodity, but a process. Does this mean the rethinking current design philosophies and municipal policies?

#### 4. SIGNS OF AUTONOMY

Most contemporary scholars describe public spaces of traditional Muslim towns as a labyrinth thoroughfares and alleys. They see it as it exists today: a network of linear streets in an organic fabric. In the past, this was not the case. There were gates (*bab* or *bawwabah*) all over the city that divided this one continuous street into many smaller **places**. These places were controlled by its inhabitants with no outsider interventions, this has affected many aspects of city life. In other words, the same traditional physical organization had a totally different quality than our contemporary perception; we perceive it differently because gates have disappeared (Figure 1 and Figure 2).

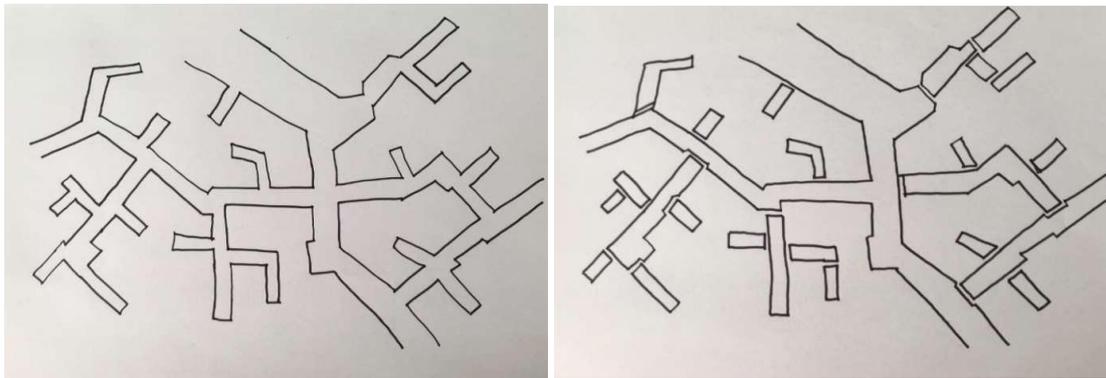


Figure 1. (Left) is after removing gates Figure 2. (Right) is before removing gates. Both are hypothetical illustrations for a site in which the same site is perceived differently when streets are subdivided by gates into several places

Gates are controlled from one side except in unique cases; it is usually controlled by those living inside the space.<sup>9</sup> Because a family or group of families such as relatives or neighbours, control what goes in and out through their gate, the gate was a very important sign of autonomy for the users of that place for the simple reason that those who live inside can shut out those coming from the outside. In residential areas, two types of gates were common: gates of quarters and gates of sub-quarters, such as gates of dead-end streets, forecourts, etc. (Figure3).

If gates prevailed in traditional Muslim environments, then the authority could not penetrate in to the places beyond them. This explains the disappearance of gates from traditional environments. Government's elimination of gates, logically, began with gates of quarters because they were external and thus controlled by a larger number of residents. With dead-end streets, however, responsibility was more concentrated among the fewer number of residents and thus they objected to their gate's demolition. Thus, gates of dead-end streets or their physical traces still exist (Figure 4), while gates of quarters can often be inferred from literature or post cards (Figure 5, Figure 6, Figure 7) (Akbar, 1988: 164-173). Furthermore, the vocabulary of gates in Arabic language was refined, indicating both their importance and prevalence. For example, 'Ibn Manzur (d. 1311/711) related that "*darb*" was defined as the gate of a dead-end street while "*daraba*" as the gate in a through street ('Ibn Manzur, 1957).



Figure 3. (Left) The location a gate of a dead-end street in the city of Tunis that was demolished Figure 4. (Right) The wooden frame of a gate of a squire in Sidi Bu Said in Tunis. Notice the whole in the corner of the wooden beam to support the gate in Figure 3 and Figure 4

Governments have eliminated gates in order to control the spaces laying behind them. In Cairo, for example, in 1798, French soldiers demolished some gates of quarters and through streets. The residents of dead-end streets resisted the demolition ('Abd al-Wahab, 1957: 36). When gates were removed, the spaces behind them were no longer private but became part of the public domain. This has increased the percentage of public spaces in the built environment. The same physical organization provided shallower territorial structure (Figure 8 to 14).

Gates of dead-end streets were erected by the residents.<sup>10</sup> The only objection to gates was from neighbours such as the owners of the abutting walls if their walls, for example, were damaged by the vibration of closing and opening the gates. 'Ibn ar- Rami(a building expert lived in Tunis, d.1334) states that it is customary to have gates on streets, and no one usually objected as long as no damage to neighbours was involved ('Ibn ar-Rami, 1982: 336). Gates of quarter, on the other hand, were usually erected by residents and occasionally at the request of the authorities. The existence of gates up to the beginning of the 20th century implies that most shared places within the traditional environment were controlled by the residents.<sup>11</sup> Thus, **conventions** were developed to control the shared space by residents with no external interventions.

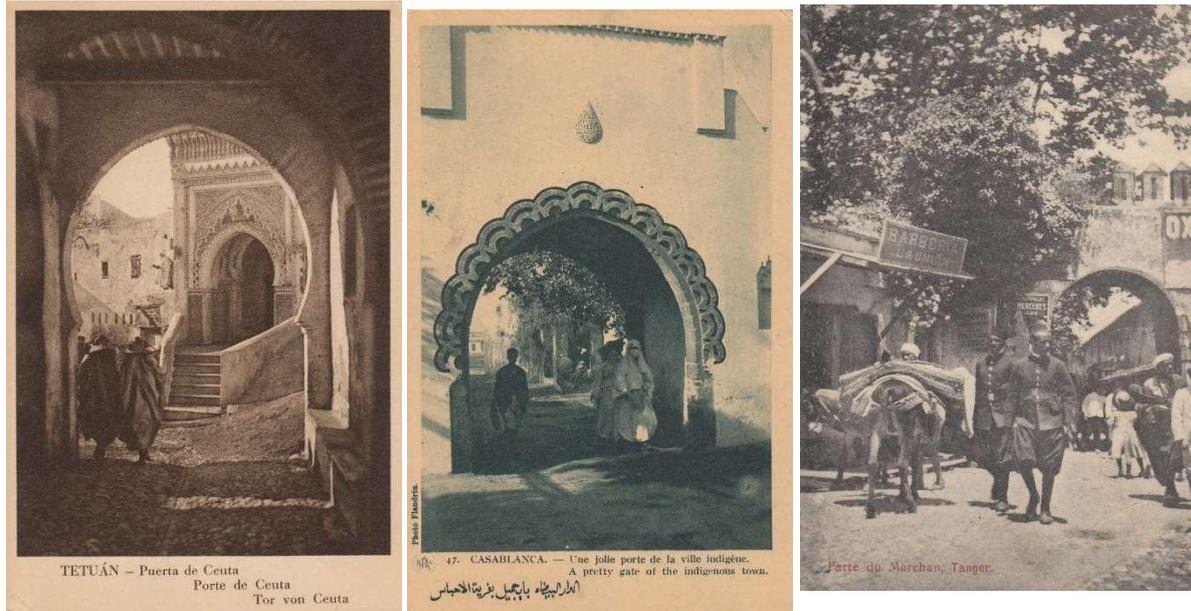


Figure 5. (Left) is from Tetuan (Anonymous, nd) Figure 6. (Middle) is from Casa Blanca (Anonymous, nd) Figure 7. (Right) is from Tanger. All three are post cards from Morocco (Figure 5, Figure 6 and Figure 7). As for dates, it is well known that post cards became quite popular in the beginning of the twentieth century. Thus one would assume from the French text that they were taken in the beginning of the twentieth century during colonization (Photographers of Post Cards are not known) (Anonymous, nd)

By examining cases of agreements and disputes among the residents one concludes that a dead-end street was legally owned by the people who shared its usage; no individual is allowed to make any change in the dead-end street without the consent of all the partners. The partners are those who own properties abutting the street and have access to it ('Ibn Taymiyyah, nd ).<sup>12</sup> If gates prevailed, and if most traditional towns were compact, with little public space, then private properties were often found behind others' shared places. This situation required conventions allowing the residents of those enclosed properties to pass through others' shared places to reach the public domain. Otherwise the residents controlling the external shared places will dominate the residents who have to pass through those places. Principles of easement rights or rights of servitude were well known to the public and served this purpose, thus eliminating the potential dominance between neighbours caused by the location of gates (Akbar, 1988). This perhaps is one of the most important features of the Muslim city. To create efficient environment in terms of minimizing public spaces, the territories are arranged to be included one inside the other which might invite dominance among residents; yet, easement right is meant to eliminate dominance and free the inside residents. In contemporary environments, however, this elimination was conducted by demolishing gates and creating an environment of shallow territorial depth, i.e. each territory having direct access to the public realm as in Figure 9.

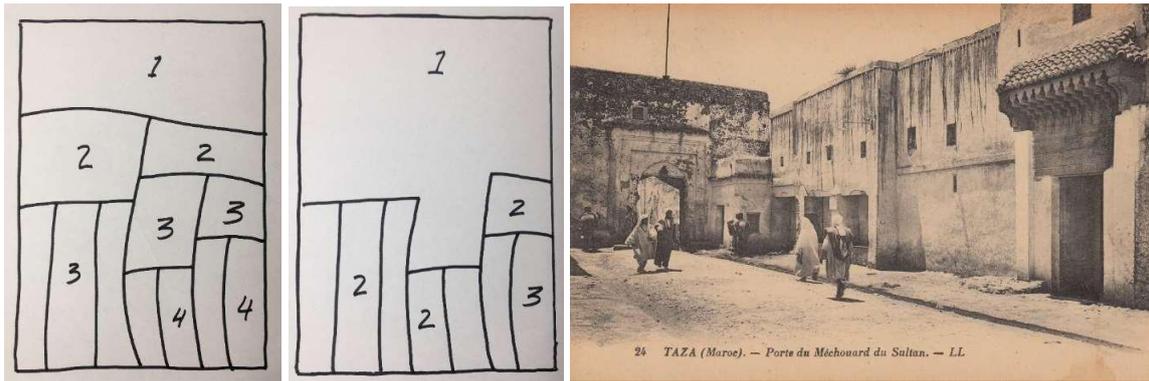


Figure 8. on the left represents a territorial structure that is transformed to a shallow one as in Figure 9. (in the centre, Habraken, 1989). The one on the left, has 4 levels of territories. One has to pass 3 gates to reach territory 4. In figure 9 in the centre, one level was eliminated. In the traditional Muslim environment, sometimes 3 levels were eliminated. Figure 10. on the right is from Taza, Morocco showing the location of a gate between two quarters (Anonymous, nd)

Because the traditional environment was composed of homogeneous territories controlled by the residents and were marked by gates, quarters, markets, squares, streets and dead-end streets were named after their occupants. For example, Al-Baladhuri (a historian, d. 892) mentioned the quarter (harat or mahallat) of Najjarin (carpenters), the quarter of Saqqayin (water-carriers) and the quarter of al-Yamaniyyah (the people of Yemen).<sup>13</sup>



Figure 11. (Left) from the city of Tunis showing the location of a gate separating a dead-end street from a square. Notice that at the far centre of the photo there is another gate that is separating the square from the main street

Figure 12. (Right) from the city of Tunis showing the location of a gate separating a dead-end street from a square. Notice that at the far centre of the photo there is another gate that is separating the square from the main street



Figure 13. (Left) from the city of Tunis, showing a gate that is removed. The gate is within the market separating two zones Figure 14. (Right) showing the same gate from the opposite side. Notice that the shops were closed before Juma prayer



Figure 15. (Left) from the city of Tunis also, showing a gate that is separating a residential quarter from the market Figure 16. (Right) from the city of Taza, Morocco, showing a gate that is separating two residential quarters (Anonymous, nd)

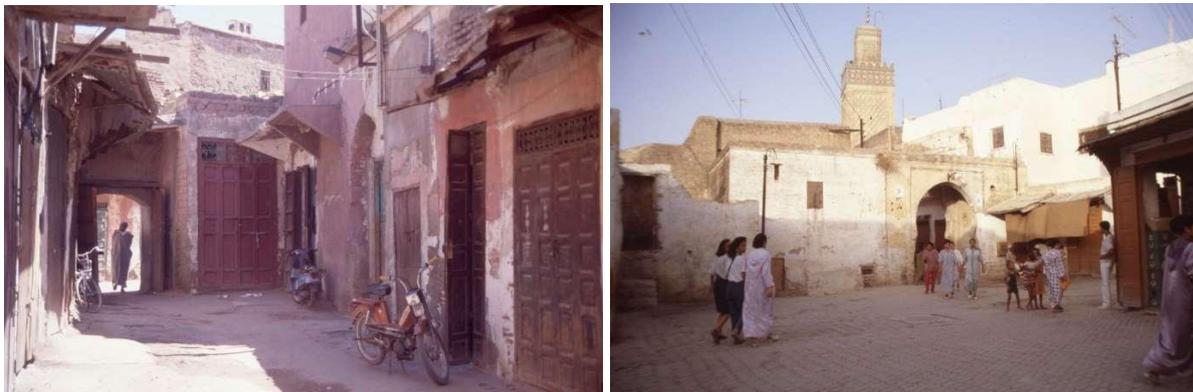


Figure 17. (Left) from the city of Fez in Morocco, showing a gate that is still existing and separating two residential quarters. Notice that the gate opens to a square Figure 18. (Right) from Marrakesh in Morocco, showing a gate that is still existing and separates between a dead-end street and a through fare

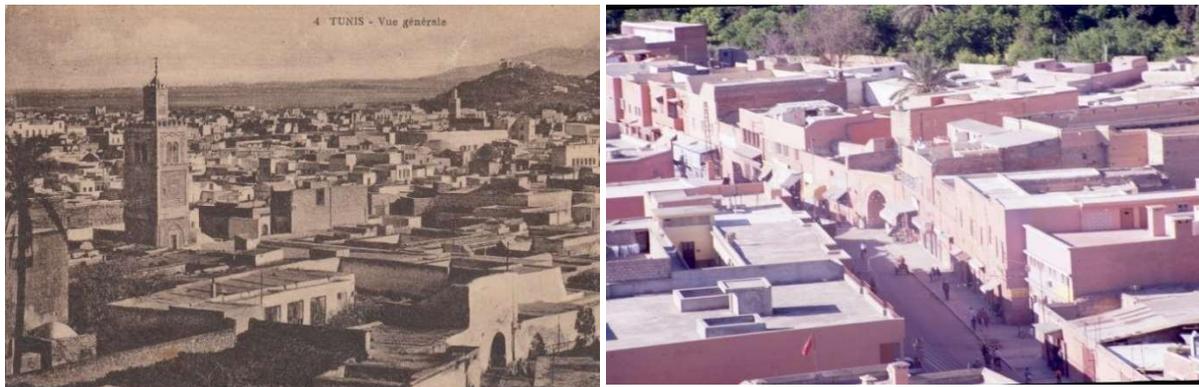


Figure 19. (Left) is from the city of Tunis, showing a gate that is leading to a residential quarter. Note that the gate is in lower right corner of the picture (Anonymous, nd) Figure 20. (Right) is from the city of Marrakesh in Morocco, showing a gate that is leading to a residential quarter. Note that the gate is in the centre of the picture

## 5. CONCLUDING REMARKS

Needless to say, the attempt of this paper is not to discard current theories and methods of urban studies, but rather to bring attention to the importance of the role of residents in enhancing the quality of built environments as being a fundamental issue. For example, implementing revivification means that the percentage of owners will be in its highest possibilities. This will enhance quality of the built environment as with sustainability for

example. How? Pulling those concepts, we may conclude that environmental decisions in these towns were made by the inhabitants through “accretions of decisions.” Each individual who revived a property, she or he is indeed carving a territory with the least possible cost by pulling available resources and materials. Gradually the built environment is evolving. Shared elements such as forecourts, squares, streets and dead-end streets were collectively controlled by its surrounding inhabitants. The town is a series of adjacent properties controlled by users. This means that the morphology of these towns is the outcome of many small scale decisions made by the users, i.e., “accretions of decisions.” The users occupied properties that formed lanes and dead-end streets, the streets were formed by the boundaries of the quarters. Each territory contained other smaller territories that held smaller territories, and so on.

The major difference between contemporary cities and the Muslim towns in terms of territorial structure is that nowadays individuals do not control public spaces directly. External agencies, such as municipalities, do it for them. To the exception of private properties, territorial boundaries within public spaces in contemporary cities are not well defined and thus professionals use physical elements to create the hierarchy of spaces such as public, semi-public and semi-private. This will cost societies through materials consumptions. Much of the societies wealth is invested in such public spaces while the poor could not find decent houses. A perfect equation to create crime needing more police, courts, jails ... etc. thus costing the society. In Muslim towns most spaces were private. However, the parties that were responsible for each space, varied depending on the space. The party can be a family, sub-tribe, tribe or even just neighbours. In other words, every spot of the city is controlled by a well-defined party that inhabit the site and not like present day municipalities that are remote from the site.

What are the economic, cultural and social implications of the traditional territorial structure? For example, cleaning the city was the responsibility of the inhabiting party as they would not allow outsider to enter or litter indiscriminately their properties. In contemporary towns, governments have to clean public spaces. Users will litter them as the space are not theirs. This must have saved part of the wealth of the society. For sure, many ambiguities will arise as we are much entrenched in the capitalist system. How such territorial system works? How traffic will flow within them, etc.?<sup>14</sup>

Indeed, one may need several volumes to unleash the impact of the difference between the two ideologies of perceiving the built environment. Should it be a commodity, or locally germinated through conventions? For sure, conventions did not cost much, conventions are always alive and healthy reflecting society members norms and values, and above all, 18 conventions gave us sustainable environments in the past. Thus conventions should continue to do so if given the chance once again. Let us take one example: if the residents of a community wanted to build an over pass in their street to be used as a kindergarten, they cannot do it nowadays as the rules of municipality will not allow it, and if it is allowed, it should follow rules. However, if it was the residents’ choice as in traditional environments, they will act with no permission. If they were poor, they will utilize whatever they can of waste materials to build it. Everybody would participate with his knowledge, his man power and his wealth. It might be flimsy at the outset. As the community grow financially it will improve its overpass. In this endeavour, the people learned much. Yet, let us always remember that the people will not be poor since they will have access to resources as Islamic

hukuk leads to. Resources are not monopolized as our contemporary rules and regulations leads to.<sup>15</sup>

As conditions of residents of other communities are definitely different such as local building materials or morphology of the street, then, the appropriate solutions needed for each overpass will be different, and it could only be genuinely different if it evolved from the site's residents. On the other hand, as land was almost with no cost, and as people had access to resources, their capabilities are then quite similar, the solutions will be then quite similar for each region. Thus, we then may talk about typologies, patterns or conventions leading to sustainable environments. Let us remember that sustainability is just one indicator to the quality of the built environment among many others if people enjoyed more control.

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All images used in the article belong to the authors, unless stated otherwise.

### Conflict of Interest

There is no possible conflict of interest in this article

### Notes

1 This paper is an argument concentrating on quality of the built environment and Commodification. It is developed using data published in two books and three papers. The books are: Qas al-Haq, and Crisis in the built Environment; the papers are: Akbar. J., 1987, Akbar. J., 1988, Akbar. J., 1993.

2 Regarding methodology, please refer to: Akbar. J., 2019.

3 This process is known as "tweedism", Lessing, L. Our Democracy no longer represents the people. Here's how to fix it. Available at: TEDxMedAtlantic, <https://youtu.be/PJy8vTu66tE> (accessed 19 November 2019).

4 Another translation is "there is no injury nor return of injury." Al-Muwatta. 1982. 529.

5 'Ibn Habib. d. 328/940. explains that no darar means that no person should harm another person, while no dirar means no person should be harmed by others; al-Wansharisi. 1981. V. 9, p. 46. Dirar has also been explained as harming oneself so others will be harmed. 'Ibn 'Abd ar-Rafi', the judge of Tunis, d. 733/1333, relates that dirar is "to harm yourself, so others will be harmed;" 'Ibn ar-Rami. 1982. 299. 'Ibn 'Abdin. 1966. d. 1836/1252, V. 6. 593.

6 The latter owner did not own the land when the first owner installed his water spout. 'Ibn Taymiyyah. nd, V.30. 7

7 For cases see 'Ibn ar-Rami. 1982. 322-323. An owner may also initiate a function that could be damaging to others if it is similar to damages already caused by other properties. A person may introduce a furnace, which would cause damage, if most adjacent properties had also caused similar damage. This principle would pull industries having similar damages to the same section of the city.

8 In "Crisis" I argued that centralized policy by states is distractive to conventions. The less the regulations the stronger the conventions; Akbar. J. 1988. Ch. 8.

9 There are, however, gates that separate two territories of the same level; for example, a door between two houses which is controlled from both sides. This type is quite rare. For detail see Habraken. N. J., 1998

10 For example, al-Wansharisi. 1981. V. 7. 79. reported a case from Taza, Morocco in which the gates of some quarters were demolished because of a conflict between two groups. Later, the people wanted to rebuild the gates that led to the market from the revenues of some shops that were donated as pious foundation. Jurists were asked whether this was possible? Jurists allowed rebuilding the gates by using the revenues of the shops because this would make the shops safer.

11 From the Geniza documents Goitein. 1969. 86. referring to al-Fustat in Egypt, concludes that "the documents do not contain a word for public square which can only mean that there was none."

12 Furthermore, two principles in cases of disputes among neighbours were used. The first was that if a neighbour made a change and the others did not object, tacit approval of the action was assumed. A person opened a door on a dead-end street that had fifteen dwellings and no one objected. Eight years later, some of the residents objected. It was judged that during the residents' silence their right to object had lapsed. Even had the period of their silence been less than eight years, their objections would not be considered. Al-Wansharisi. 1981. V. 9, 63. The second principle was that the existing morphology of the dead-end street would be the basis of resolving disputes. Any new change within the dead-end street had to be made through agreements by all members. In case of a conflict among the neighbours one must look at the existing morphology of the dead-end street. If some neighbours desire a change and all but one agree to it, the action cannot continue. 'Ibn ar-Rami. 1982. 336.

13 Al-Baladhuri. 1978. in his documentary gives the name of the dead-end street then the owner after which it was named, and does the same with all elements, see for example pp. 280-287, 293-296, 353-363. Al-Maqrizi. nd, V. 2. 37. a historian d.1414, says that darb (street or dead-end street) al-Aswani is named for (yunsabu) the judge Abi Muhammad al-Aswani,.

14 Answers for such questions will be impossible in this paper. They are dealt with in Qas al-Haq. Akbar. J., 2020.

15 It is quite impossible to cover the issue of accessing resources in this paper. For details: Akbar. J., 2020. Qas al-Haq, Ch.4.

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