Rights and Civilizations

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Abstract

Are there Islamic built environments? Attempting to answer the question, the paper by concentrating on the property's and individual's rights, argues that it is impossible for Western paradigms of civilizations to lead to prosperous and sustainable environments with justice for all. The reason is the inevitable monopolization which is leading to poverty, stratifications, pollution and thus misery. On the other hand, the legal system of rights in Islam (*hukuk*) has the potential for prosperity for all (whether the people were Muslims or not). Issues such as: decision-making processes, regulations, the role of environmental professionals, design, quality of the built environment and access to resources are discussed.

Urban Studies and Pseudoscience

Are there Islamic built environments? The issue of the possibility of naming an environment as an Islamic was raised, discussed and exhausted for almost fifty years. Why then revive it in a conference that is trying to link Muslims' current quandaries with the future of human's prosperity?

Although discussions about this question benefited some Muslim communities on the identity level, it did not generate much knowledge that would benefit non-Muslim societies. My position is that there is much to learn for non-Muslim societies as well as current Muslims (who are not following Islamic societal principles) if we managed to answer the question: what makes a built environment "purely Islamic". The term "purely" denotes that some environments are higher than others in full filling the criteria of being Muslim built environment. I. e., there is a utopian built environment if Islamic principles were fully applied as the case during the Caliphs' reign, or being quite distant as our present environments.

The question: "are there Islamic built environments" remained for some quite unscientific (pseudoscience). Even if it was based on statistics, such data were often subjective. On the other hand, as K. Popper argued, if the statement or the argument is refutable and its results are predictable then it could be scientific (although his method is in principle self-defeating since it cannot explain wisdom for example, as will be discussed). Hence, I will argue that there are Islamic built environments and I will try to defend such a claim, hoping to prove it. If others managed to refute it, new avenues for research are henceforth opened for further "scientific" endeavours. Let us not forget that fields of urbanization such as architecture, urban studies and planning are quite stagnant in producing knowledge compared to other fields. The reason could be that most studies are either subjective (as in design) or depending on other scientific fields such as mechanical engineering (as in cooling buildings and sustainability). Thus, knowledge progress in urban studies is often limited to junctures with technical subjects. Nevertheless, this conference-essay will try to create through a humanistic discipline an avenue for a scientific inquiry although it is not a technical one.

Moreover, as I. Lakatos argued in his research-program method, I will hold on to the Islamic Legal System, particularly in properties' and individuals' rights (known as Islamic *hukuk*) as a

hard-core that is most essential to achieve Islamic Built Environment. To defend this hard-core, a protective-belt is created. This belt is based on: 1) ability of individuals to access resources and knowledge; 2) freedom of action to all without damaging other individuals or surrounding environments; 3) and interactions of basic human tendencies with initiatives such as: the innate of improving one's own site, rejecting external interventions, imposing one's own value, possible expansion of territories, etc. Undoubtedly, these elements of the protective-belt usually increases and decreases according to society's norms manifested in rules and regulations. Obviously, this essay will not be convincing as the limited space is not sufficient to answer controversial issues that are already delineated in *Qas al-Haq* (Akbar, 2014); still, it might attract your attention to embrace such approach.

The Argument

The terms: empowerment, enablement, users' participation, grass roots, decentralization and the like, denoting granting end users more power, are mostly ones of current Western interest. Western modes of administering societies (capitalism, democracy) which led to catastrophic results such as pollution in the West and poverty in so called third world countries pushed researchers to quest for new ideas, among which those terms denoting fields of research were developed. Still, they all mean: the State which is in control through its legal apparatus is giving away some of its power to others through its institutions or professionals. Thus logically, as it had the right to give it away, it should have the right to take it back for any logical reason in the future depending on the situation. Contrastingly, in the Islamic Legal System it is remarkably different. The State is not above individuals; it cannot manipulate power and thus cannot exceed its limits by changing rules and consequently properties' or individuals' rights. All players in the built environment, including the State are given rights by the Islamic Legal System (hukuk) that draws the limits of their lawful actions (Akbar, 1988; al-Lahham, 2000).

After more than thirty years of research I concluded the following: 1) there is no legal system that can give end users maximum freedom of action without damaging others or the built environment as Islamic *hukuk* does. 2) There is no legal system that can give all members of society access to resources to empower them as Islamic *hukuk* does without depleting resources. These are two among other principles that would create civilizations without monopolies which would change almost all societies' characteristics including quality of life and the built environment. Furthermore, in modern societies, rules and regulations were enacted to avoid possible conflicts between acting parties whether in the political, economic or environmental arenas. This resulted in massive number of laws leading to diverse interpretations of those laws and thus more additions of rules creating the need for more lawyers, courts, etc. However, with Islamic *hukuk*, expected conflicts are minimized as those empowered individuals or institutions will run in separate tracks engraved by Islamic *hukuk*.

The issue that Islamic *hukuk* provides maximum freedom of action is often rejected by many. Although this is not a central issue to our argument, it should first be cleared as it is causing much confusion. To simplify it, one could classify relationships affecting individuals' behaviours in to three types: 1) his or her relationship with Almighty God such as prayer and fasting; 2) her or his relationship with other individuals or institutions such as family members, neighbours and colleagues or bosses at work in which rules of conduct are the dominant characters (decency, obedience, do not lie, do not cheat, ...); 3) her or his relationships with the State which is the subject of this essay.

As the relationships with God and individuals (the first two types) were characterised by forbidding some behaviours by Islam (no alcohol, no usury, *hijab* etc.), most researchers ignored the third type, thinking that it must also be a similar typology of restrictions with little or no freedom at all. Thus, this type of relationship (between individuals and the State) was largely ignored even by many Muslim researchers especially in urban studies.

Logically, if it is proven that some criteria could be generated to decide what Islamic city is, it should follow that there is an Islamic Architecture; however the reverse is not necessarily true. The argument for the existence of Islamic built environments stems from the following logical constants or parameters that is inherent in the basic human tendencies: the more individuals having access to resources and freedom of action without damaging the environments and others (as Islamic *hukuk* leads to), the less the society is stratified and thus the less individuals are monopolized. Moreover, if those individuals had the freedom to access knowledge (as Islamic *hukuk* give them the right), and because those individuals are within different circumstances, they will produce inventive solutions suitable for their own sites. Hence, composed environmental configurations resulting from Islamic *hukuk* should produce different solutions for those different sites. Those inventive solutions if they were successful and thus convincing to others will be copied or even reproduced by those living the same circumstances. Such reproduced solutions gradually will become conventions (Akbar, 1987a).

Thus, as circumstances vary among different sites, each town or city should have its unique convention. Even each quarter may develop its own distinct environmental solutions in some details. In such situations, we may conclude that the environment is "purely Islamic". Therefore, it would be almost impossible to argue for the existence of an Islamic Architecture or Urbanism on the physical or spatial level unless all circumstances are quite similar among most if not all sites, which is almost impossible. I.e., for a physical or a spatial configuration or a pattern or a typology to be labelled as an Islamic, it should not resemble others in their composition unless all circumstances are similar which is quite rare. This argument negates what most researchers were trying to prove on the physical or spatial level. Of course, some elements invented by Muslims solely should be labelled as Islamic, such as *muqarnas*. What about the configurations of elements that are unmistakably named Islamic composed of, for example, bent entrances, dead end streets, *mashrabiyyas*, etc.?

When the Prophet peace be upon him arrived to Medina, he did not ask newly Muslims to leave their dwellings to new ones because they were built by them when they were not Muslims. In fact, gradually, following Islamic *hukuk*, their environments were transformed to be an Islamic. From this, few questions emerge: is the built environment that is inhabited by non-Muslims such as Damascus will be considered Islamic after, say, fifty years of its occupation by Muslims although it's original layout was planned by non-Muslims? To the contrary: is the environment that is laid out and occupied by Muslims for centuries such as Granada is considered Islamic although it is now inhabited by non-Muslims for centuries too? I. e., what are the inhabitants' urban actions' limits for an environment to be distinguished as Islamic? Is the Mosque that is designed by a non-Muslim architect using some church vocabulary considered Islamic as in Hassan II Mosque in Casablanca? Searching for answers for such questions to prove some claims on the identity level as most scholars did might not serve humanity much. To the contrary, searching for criteria isolated from occupants' beliefs, whether they were Muslims or not, might benefit humanity at large. I. e., this extreme position which I will take should reveal new avenues for research whether it is proved right or wrong.

This position will lead to another set of questions: Of course, environments created by Muslims using Islamic *hukuk* will be labelled as an Islamic, but what if non-Muslims create environments using Islamic *hukuk*? This is quite possible, as on the value level (drinking alcohol, dating, etc.) non-Muslims could practice their convictions while using Islamic *hukuk* in creating their future environments if they were convinced. Finally, what about current Muslim environments using non-Islamic systems of property rights, as in Saudi Arabia, is it Islamic?

Muslims and their cities vary in almost every circumstance whether it is a geographical location, ethnic origin or cultural custom except in Islam which is supposed to unite them; otherwise there is no need to talk about Islamic environments. In other words, the suggestion in this essay is to separate between peoples' customs, ethnic origin, geographical conditions, etc. which are often changing as variables on the one hand, and the residents' decisions and actions stemming from their rights which is always influenced, directed and limited by Islamic *hukuk* on the other. This separation was quite confused by most scholars especially orientalists as evident from the following review.

A Historical Review

What are the major paradigms of scholars (using T. Khun's terminology) on the question: what makes an environment Islamic? Some researchers based their conclusions on observing end products (ornaments, domes, courtyards, bent entrances, streets typology, etc.). They did so by concentrating on its form and spatial relationships, beauty, elegance, compositions and thus uniqueness such as the work of Creswell and Oleg Grabar. For some within this paradigm, sacred geometric patterns and craftsmanship captured their attention such as K. Critchlow and K. Azzam (the activities of the Prince's School of Traditional Arts for example). Others concentrated on growth's control whether it was centralized or decentralized such as the work of Guest, Lammens and al-Janabi. Few analysed configurations' functions and values (school, mosque, bazar etc.) and their impact on socio-cultural relationships such as William Marcais and Adel Ismail. However, the most spread notion on what makes an environment Islamic are those of Von Grunebeau which concentrated on physical-spatial sittings especially the ones from his Northern African observations on the urban level. Louis Massignon's approach that highlighted economic activities and the process of settlement which concentrated on Kufah's merchants was developed further by al-Ali using al-Al-Basrah (in the first century of Higra) as a case study. Among the landmark contributions of course is that of Ira M. Lapidus, which concentrated on social classes, quarters' inhabitants' power, Guilds monopoly, etc. during the Mamluk's reign. This approach is quite similar to that of Jean Sauvaget which was influenced by K. Marx's class straggle. The last two paradigms pictured the Muslim city as an arena for political gains and power affecting morphologies. The concept of "regionalism" that was developed in the West in the seventies had its toll on the argument whether there is an Islamic environments or not, such as the refusal of D. Kuban on the theoretical level and the acceptance of R. Chadirji and R. Badran on the practical level. Lately, within doctoral programs, many linked Muslims environments scientifically to issues such as climatic comfort, materials suitability, etc. These are some of the important contributions that were followed by so many others

For sure, by analyzing Muslims' built environments, many attempted to generate new building designs and urban proposals suitable to our contemporary needs. The question is: are they really suitable although they are the product of using Western paradigms in observing past environments of past circumstances? Moreover, are they really suitable although researchers observed Muslims' past built environments that might be created by referring to

non-Islamic practices? The street between Bab Zuwaylah and Bab al-Futuh in Cairo that is lined up with lavish extravagant Mamluk Mosques wasting public funds of the needy is a good example where the distance between two mosques are less than 200 meters in some cases. Another example: Islamic Architecture should be honest. Are not these moving domes in the Grand Mosques of Mecca and Medina cunning and lying (figure 1)? Are not such domes that were used for structural purposes are now -- although beautiful and breathe taking -- fake symbols of the genuine past? In fact, such practices of coping and reproducing past solutions became the trend especially for the rich and powerful (figure 2) (Akbar, 1994).

Few tried linking the Islamic Legal System (*Shari'a*) with the built environment as Otto Spice, Robert Brunschvig, al-Hathloul, Hakim and al-Lahham did. However, their contributions were based on understanding Islamic rules on past urban praxis. Of course, much was explained on the peculiarity of Islamic built environment; yet, how could we potentially utilize such codes of *Shari'a* law for current conditions, was explored by few such as the work of al-Hathloul on the level of the conventions of use. In conclusion, this past brief description of some scholars' contributions as a series of paradigms which was followed latter by so many others denotes that none attempted to suggest to non-Muslims the use of Islamic *hukuk* in their built environments. Fortunately, although quite rare, some Western researchers pointed out lately to the possibility for Westerners to learn from Muslims' built environment as a process (and not as a product) by concentrating on residents' participation (Cozzolino, 2019; Porta & Romice, 2010).





Figure 1. Figure 2.

Justice

The Parthenon was constructed with approximately 100,000 tons of cut marble. What was the average cost of cutting and moving such quantity per ton at that time? The Parthenon is known for its 34-foot high Doric columns along with 50 impressive marble figures sculpted into the frieze. What is the cost of carving and placing those columns and figures on site? Is it one thousand working hours per one column? What is the cost of a well-trained craftsman per hour? How many columns were in the city at that time? What about Rome (figure 3)? How many tons of stone are used to build the Colosseum? Of course it is possible to calculate the cost using today's technology; however, using those days intensive manual labour work needs a research. In all cases, the point is that much of the society's wealth at that time was invested in Rome. I.e., Rome was a parasitic city compared to surrounding towns. The wage of one craftsman work for one day in Rome might build a house in another town of the empire such as Jerash in Jordan. The following picture (figure 4) makes the point. If we consider the man

carried by the slaves as Rome, then the rest are Algeria, Tunis, Lebanon, etc. The picture should clarify the issue of justice.

Why then we architects glorify those fascinating end products (the Pantheon, the Parthenon, the Colosseum, etc.) without considering justice? If power, wealth and knowledge are concentrated in Rome for example, environmental products unquestionably will not reflect justice on other sites. The reason is that inhabitants' capabilities outside Rome to produce urban elements were week and often not professional. Unfortunately, it is not only Rome, its Vienna of the Habsburgs, Moscow of Russian Tsars, London, Paris, etc. each representing a dynasty and a power in the Past. The same is true these days, however, the source of power is different; it is economical and bureaucratic such as Cairo, Casablanca, Bombay and Lagos. The same is also true for past Islamic urbanism with lesser degree. When wealth was concentrated in Baghdad during the erection of the circular city by the Abbasids (which is not an Islamic act as it was wasting wealth on projects and not the needy as Islamic hukuk declares), built environments in other towns obviously were not purely Islamic (Akbar, 1988). The reason is that such towns were created by Muslims who were neither wealthy nor powerful and their knowledge was often shallower because Islamic hukuk was not fully implemented. The people did not enjoy their Islamic rights. They may have bent entrances in their houses, but the built form in terms of quality is not in its full potential. Sizes of their houses are quite small with poor amenities. They could not afford having mashrabiyyas in their facades for example.





Figure 3. Figure 4.

My argument is that – excluding Islamic *hukuk* -- balance between justice and power regarding human nature to create civilizations with individuals enjoying freedom, dignity and creativity was problematic at the philosophical level in all cultures. Chomsky for example discussed anarcho-syndicalism, while David Harvey criticized capitalism, etc. I.e., no path was yet defined to avoid oppression, coercion and autocratic rule to unleash human's capacity for prosperity.

Is Islamic City Vernacular or Organic or ... etc.

This confusion of the balance between justice and power is quite evident in urban studies. The reason is that any set of properties' and individuals' rights is a reflection of the relationship between justice and power. How? Of course most pre-modern environments that were not created by authorities were characterized by bent alleys, dead end streets and unorthogonal layouts of properties. To study such environments, scholars labelled them names such as: vernacular, traditional, organic, decentralized, preindustrial, architecture without architect and bottom up decision making environments. These labelling are misleading as they did not

consider properties' and individuals' rights which affects peoples' capabilities and consequently issues of justice are not raised. Compare for example this settlement from Morocco (figure 5) with the Hafsiya housing project in Tunis that won the Aga Khan Award (figure 6). The first from Morocco was built by poor people. The second is designed and built by a developer under the Municipality's approval who owns the land. For some researchers, the immediate conclusion is that the second could be an Islamic, while the first is merely a squatter settlement. To reach their judgments, questions of properties' and individuals' rights were often not raised. Residents in the first although claim ownership while the government does not recognize their claim, still show much care of the site regardless of their severe poverty. To the contrary, residents in the second are often tenants and thus their interest in maintaining the environment is much lower. If we keep in mind the inhabitants' innate, then initiatives of residents in both should be remarkably different. In the second, residents are not as much responsible, though the project is considered Islamic since the designer used traditional patterns from old Tunis such as overpasses and dead-end streets. In fact, this method of design process that copies form traditional environments certain elements or patterns and reproduce them for current designs is the norm among most designers.





Figure 5. Figure 6.

What is a Mechanism?

How hukuk guide, influence and draws the limits of individuals' and institutionals' actions and how such limitations affect the environment? The answer is through "mechanisms". Let us take one example. In Shari'a law any property owner can raise his edifice as long as he does not damage others or the environment. If his action damages others, he needs the damaged individuals' permission. "Neither darar nor dirar" refers to a tradition of the Prophet (peace be upon him) that translates as: "[T]here should be neither harming nor reciprocating harm". This was interpreted to mean that one may alter the built environment so long as the alterations cause no harm to others, and was used constantly by Muslim authorities to evaluate the legality of one's actions in the physical environment. In such situations, he who wishes to raise his edifice, needs his neighbours' permissions as any addition will harm them through, for example, the increase of the number of passers-by (especially vehicles). Whether the neighbours were Muslim or not, this "mechanism" of placing decisions in the hands of the community, will certainly control density as it is often impossible to corrupt the residence to accept damage. If they accepted, they are the ones to suffer. Contrarily, if control is in the hands of outsiders such as municipal officials, some powerful property owners might corrupt officials as evident from high-rise buildings in which neighbouring residents have no right to object to such a huge scale development although it will affect their community. Even if the capacity of water electric and sewage networks were increased to suffice the projected needs (which will affect the city's budget), the passers' by numbers will increase (whether pedestrians or vehicular) which will affect the neighbourhood thus affecting the quality of the environment.

This is one mechanism. There are over one hundred mechanisms that would enhance the quality of the built environment through Islamic hukuk regardless of the residents' religion. A Muslim might argue that such mechanisms will be more efficient if implemented using Muslims' values especially the ones of respecting and caring for neighbours; meanwhile a non-Muslim might argue the same being proud of his values. For example, the residents' property-right living around a dead-end street having access to it is that they are the sole owners of the place, and thus no one could enter that space without their permission. They have the right to build a gate to demarcate their territorial claim (for some, this might resemble spaces within gated-communities; in fact, there are many differences, Akbar, 1987b). In such situation, the burden of maintaining the dead-end space is the residents' responsibility. This shared responsibility that brings the residents to meet and discuss their communal tasks will increase their social bonds, whether they were Muslims or not. Nonetheless, the usage of the space will be affected drastically: if the residents for example were Muslims, they may pray in it in Ramadan evenings; if they were agnostic, they might drink alcohol and dance in it. Although the nature of use is quite different in both cases, environmental consequences are quite similar. The cost of implementing services such as street paving or lighting is the residents task, thus one should expect the cost to be reduced if the residents will do it themselves. They may both light the street from a power source connected to their properties directly without using separate street lighting cables. Or to the contrary, the cost will increase if they hired a contractor as they are ignorant of such technical requirements. In both cases, this might lead to a society with competing companies to provide such services under the residents' control which will increase quality and reduce cost. All this will mean a State with less bureaucracy, less budget, less taxes, which will increase the residents' wealth leading to higher quality built environments because the residents are much richer and thus can invest much more in their communal space. Of course, several questions regarding the practicability of these mechanisms will be raised which are answered in Oas al-Haq (Akbar, 2014). Let us take one more example with some details which will hopefully clarify the balance between justice and power to delineate the relationships between mechanisms stemming out of Islamic *hukuk* and the quality of the built environment.

Does Malthusian theory leads to pollution?

In 1798, Malthus wrote about the dangers of excessive population growth as world resources according to his thesis will be depleted one day. He argued that food production increases arithmetically and thus populations can outgrow their resources as their increase is geometrical. The Irish potato famine of the 19th century is a classic example. As known, this argument affected the field of economy leading to the control of access to resources (minerals, lands, etc.). Challenging Malthusians, unti-Malthusians claimed that if resources were wisely consumed, the more inhabitants, the more knowledge is advanced and thus the more sufficient the resources for humans will be. However, as pollution is inevitable within current Western systems, their challenge was not materialized by, for example, proposing a sound societal system whether political or economic. As evident from pollution indicators, if all populations consumes as Westerners do, pollution is imminent. Thus, unit-Malthusians search for wisdom in consumption was not materialized in a sound economic political theory while States continued regulating access to resources hoping for wiser exploitations of resources.

As pointed out by many scholars, globalization is unfortunately stratifying citizens into two distinct groups, the rich and the poor. This is one major plight among many produced by

capitalism. However, even if one accepts that other plights, such as pollution and environmental degradation, can one day be controlled under the existing internationally accepted democratic political structure (although refutable), then this plight (rich vs. poor) arises as a serious one. It would result in divided, inefficient, crowded, and unjust cities for some residents. The nature of urbanism and the socioeconomic structure of our contemporary cities in the Muslim world reflect this situation. Our major contemporary cities are often parasitic, depending for their survival on the products of surrounding localities (as with lavish Rome during the Roman Empire). This illogical and unacceptable human misery, although severely criticized, is largely practiced as other societal alternatives beyond capitalism (such as Islam) are not envisioned.

To clarify a remedy for this, let us explain in brief three mechanisms stemming out of Islamic *hukuk*: the first is the right of accessing resources; the second is the concept of '*Ibn as-Sabil*, or the traveler; and the third is alms giving (*zakat*).

In modern societies, access to resources, minerals for example, is limited to those individuals who have the means to obtain the required permission from the State (being influenced by Malthusian theory for wiser consumption). The system of rights in modern societies is much based on the vertical obedient relationships between individuals and the State. The State, for example, defines what constitutes the common interest for the public (Al-Lahham, 2000). If the State decides that such a mineral is quite rare and thus should not be exploited without its permission, it will have the right to limit access to that resource. This might lead to the manipulation of that mineral to the advantage of some over others. With Islamic hukuk, however, the situation is drastically different. No one, including the State, has the right to limit any resource to any individual. Those who manage to reach a mineral will have the right to possess it, own it and sell it or manufacture it. Certainly, one would ask: but this would deplete some rare resources? Other might argue: for sure, this will lead to the misuse of some minerals (uranium for example). Fortunately, this will not happen. The place to answer such concerns is not here as it is already discussed in "Qas al-Haq" (Akbar, 2014). However, in this short essay it might be convincing if we discerned the impact of recognizing ownership of minerals (not lands) to those who possessed them, on the quality of cities. I will first explain briefly the different opinions of Muslim scholars regarding access to resources.

As explained earlier regarding the three types of relationships that affects people's behaviors, the relationships between individuals and the State were explained by jurists at the theoretical level, but were not fully implemented in practice except during the reign of the first four Caliphs. In general, early rulers within each dynasty (Umayyads, Abbasids, Ottomans, etc.) were much keener to implement Islamic *hukuk*. Thus, what will be explained next was not practiced in most past Islamic eras nor in our contemporary societies. Therefore, because Islamic *hukuk* was not implemented, one can argue that most past settlements plus all contemporary ones cannot be characterized as "purely Islamic", but rather as built environments inhabited by Muslims. Why?

Jurists have distinguished two types of mineral: surface minerals (ma'adin zahirah) and hidden minerals (ma'adin batinah). Surface minerals are the ones that can be obtained with little effort such as salt, while hidden minerals are those that need a great deal of effort to obtain such as gold. Hidden minerals were further divided into two types: solid minerals such as silver and liquid minerals such as oil. Further, jurists have classified properties that hold minerals into three types: private properties, treasury properties (owned by the State), and mubahah or accessible properties for the public (this last category does not exist in most

if not all contemporary societies). To minimize land speculation in order to maximize its utilization by as many individuals as possible to exploit minerals, the Islamic legal system has devised mechanisms to ensure that unutilized lands containing minerals could not be owned by any institution or individual, even by the State (Akbar, 2014).

Regarding minerals on lands not owned by the State, rulings of jurists varied if a mineral exists on privately owned land. Most Maliki scholars had the opinion that minerals on all lands, including private lands should be owned the State. The ruler should decide on their exploitation. This opinion resembles to some extend our contemporary system of rights. On the other hand, the jurists of the three remaining schools of law, as well as some Maliki jurists, although agreeing that minerals on private lands are not owned by the State, had two different rulings. The first is that of all Hanafi jurists, some Shafi'i jurists and Sahnun (a prominent jurist from the Maliki School of law, d. 854 AD) which states that ownership of minerals belongs to the owner of the land. The second ruling is that of most Hanbali jurists and some Shafi'i jurists which states that solid minerals should be owned by the land owner, however, liquid minerals should not be owned by the land owner. If such liquid minerals could be reached from neighboring property, it should be owned by those who managed to obtain them.

The jurists of the Hanafi, Shafi'i, and Hanbali rites agreed that land containing surface minerals could not be revived or owned and could not be allotted by rulers. The reason for such prohibition is to facilitate public access to such minerals. Those minerals are just like water and pasture. They are for those who collect them. They argued that if such lands were owned, a class of wealthy people would be created who is not in fact productive.

What if a group of individuals as partners managed to discover a remote site with hidden minerals, and invested much time by erecting the needed construction for mining, do they own that land, or should they be forced to give others the right to collect minerals from the same spot? Regarding hidden minerals in dead lands (lands not owned by any one), the majority of rulings of jurists gave those who invested the right to remain in the area for mining, but that they should not hinder others trying to reach the same source of mineral from a neighboring site.

These are few detailed glimpses of Islamic *hukuk* out of tens that opens the door of accessing resources. Jurists' rulings in fact allowed for the maximum exploitation of resources by opening doors to as many end users as possible. This will create a society with maximum percentage of owners. This simple concept will have a fundamental positive impact on both: quality of life and quality of the built environment (Akbar, 2014). How?

As resources distributed naturally in distant sites from each other, Islamic *hukuk* devised another mechanism that encourages travelling to mining, agricultural or pasture lands. 'Ibn as-sabil, or literally, the sun of the road, is a specific term for the traveler whose travel expenses is funded by zakat, or alms giving. Taxation in Islam, known as zakat, is generally 2.5 per cent of a merchant's annual income. If the person is a farmer, it is 5 per cent of the annual crop if the land is irrigated by human effort or 10 per cent if it is irrigated naturally. If the income is from mining, then it is 20 per cent of each extraction, etc. In fact, many details of zakat for all types of human activities were explained by jurists. What is interesting is that zakat should be given to eight types of people (not to infrastructures or externalities such as schools or hospitals). Among those types are: the poor, the in debt and 'ibn as-sabil (the wayfarer or the traveler). Jurists insisted that it is not even the right of

the State to relocate the funds of *zakat* to any other project (a dam or a road or even a mosque for example). I. e., Islam invests on individuals and not in infrastructures. Those empowered individuals will for sure add to the society's wealth leading ultimately to increase available funds for services and infrastructures (Akbar, 2014).

With this wealth of funds designated for 'ibn as-sabil, jurists have developed an extensive literature on the conditions that give an individual the right to obtain funds to travel. If one reviews those conditions he will conclude that they are minimal, such as that a person will not be funded if he declared that he is travelling for a vacation, or if he is touring several regions. However, it is essential to favor 'ibn as-sabil if he is seeking a job or knowledge. In fact, 'ibn as-sabil was mentioned seven times in Qur'anic verses encouraging Muslims to pay generously those wishing to travel.

In other words, society has designated much of its resources to encourage job seekers, mineral explorers, and merchants to explore new sites for jobs, minerals and imports. Meanwhile, Islam did not recognize borders between regions. The concept of a country demarcated by borders controlled by a State is modern in the Middle East. A world without borders would create a truly global situation that allows all members of society, especially the needy, to travel with the funds of 'ibn as-sabil and exploit land resources. Definitely, such travelers will transport some products with them that might be dismantled in the new site to be reproduced by other entrepreneurs. Above all, they will transmit knowledge with them. I.e., Islamic hukuk was pushing for globalization since then. This is the opposite of our contemporary situation where borders between countries are opened only for the rich and the powerful to invest in poor countries by exploiting the needy.

The Nearer Then the Nearer

Moreover, Islamic *hukuk* devised other mechanisms that would reduce the chance of crating mega cities through decentralizing most political, economic and administrative activities (Akbar, 2014). In such decentralized conditions, travel would obviously be to merited locations that contain minerals and life supporting resources; i.e. to sites of productive jobs, and not to capital cities or regional cities occupied by bureaucrats as in our contemporary world. It is a well-established fact that current migration from rural areas to cities is due to several reasons among which are job opportunities in major cities. Most investments of contemporary societies (universities, hospitals, stadiums, etc.) are in cities where the rich and powerful live at the expense of rural areas. Thus, hoping for a better life, migration of the poor has crowded cities while States have controlled access to resources. Although locations of some contemporary cities do not support life, much of society's wealth is invested in them. Water is brought to Amman and Riyadh, food is brought to Dubai and Casablanca. The location of unjust modern cities does not reflect the merit of their sites, but rather the sociopolitical structure. Even mega cities, with merited sites, such as Cairo, are over-crowded and thus became consuming parasitic cities living on surrounding economies.

On the other hand, if Islamic *hukuk* is implemented, job seekers will be drawn to sites that need jobs and sustain life necessities. A major mechanism in *zakat* is that it should first be given to the local needy but not even to relatives living in close by cities for example. The prophet, peace be upon him, has declared that the poor of each locality are more entitled to *zakat* and then the next closest ones depending on their locations. I. e., distance decides priority of rights (*al-'aqrabu fa al-'aqrab*). This mechanism, coupled with the *'Ibn as-sabil*, will draw the unemployed to sites of those who can pay *zakat*. The ability to pay *zakat* means that *zakat* payers are living in sites that are saturated with minerals, crops, etc. Thus,

settlements created by Islamic *hukuk* compared to contemporary cities would reflect the merit of the site and not the bureaucracy of the powerful. In such a scenario, settlements would attract job seekers. Over time, the unemployed (the poor) in crowded settlements would be attracted to newly established sites that are saturated by *zakat*. I. e., unemployment with Islamic *hukuk* means that settlements of the unemployed can no longer absorb emerging new hands as the resources and manufacturing activities depending on them would not support new jobs. Thus, they have to travel.

Is Zakat Objects Or Cash Money?

Among the interesting mechanisms of *zakat* devised by Islamic *hukuk* (excluding *zakat* from merchants) is that *zakat* could not be given as cash money (*'athman*) in most cases. It should be given as objects (*'a'yan*) from the same products. The *zakat* of cows should be cows; dates should be dates, etc. This mechanism makes it difficult to transport objects as a *zakat* to the location of the poor, rather the poor will be drawn to the sites of those products. If the surplus of a product as a *zakat* is olive, this means that this site is welling to absorb more working hands to grow olive trees. Meanwhile, *zakat* of merchants are usually cash money (*'athman*). Part of *'athman* will be paid to travelers to cover their traveling expenses. I. e., two mechanisms create the movement of manpower to saturated lands with promising productive jobs (and not bureaucratic jobs); one pushes the unemployed, and the other pulls them. This is one example of how few mechanisms work together to fight poverty which will change quality of life and consequently the environments. These mechanisms by moving the unemployed will reduce the rate of unemployment to almost a zero level. Ultimately, these mechanisms will lead to a continuous balance between various settlements to maximize the benefit of all working hands for the benefit of the society (Akbar, 2014).

Comparisons

In such cases, the difference between the rich and the poor would certainly be much less than the disparity which current globalization is producing. In June 2019 for example, the richest 0.1 per cent of Americans held nearly a fifth of the country's wealth, up from 7 per cent in the late-1970s and equal to the wealth of the bottom 90 per cent. Thus, with Islamic *hukuk* we should expect a higher quality of life in such economically homogenous settlements, unlike the case of some of contemporary globalized cities that are gradually being transformed into few islands of the rich in an ocean of the impoverished as in Mumbai. Moreover, it is becoming very crowded. People per square mile for example in Ulaanbaatar, Mongolia are 670,261 individuals. However, major Western cities such as New York, although, managed to some extent to overcome crowdedness and poverty, still some residents, especially emigrants, did not enjoy their share of opportunities in education, training and health, thus affecting quality of life and consequently the built environment.

With Islamic *hukuk*, residents will not be forced to transport goods and life necessities from one site to another (which is costing much and polluting the environment) as settlements are merited to sustain life necessities since first explorers selected sites that sustain life requirements. Of course, not all sites could support all life necessities; some transportation of few goods will be needed.

For sure, one will ask that resources will be depleted if taken by those who managed to exploit them! Indeed, the opposite will happen. Consumption will drop. The reason is that capitalism which created the poor (through monopoly) who are forced to work extra hours, led to the maximization of production of minerals by the rich who are seeking more profit. Charles Dickens critique of unrestrained capitalism by the heartless business men was lucid.

Extreme poverty forces the poor to work extraordinarily just to survive, while the consumption of the rich increases. A rich man's house that has thirty aluminum windows in a mansion is a good example of extravagance. Undoubtedly, the argument is not to prohibit the rich from enjoying their wealth, but rather, their wealth accumulation should not be from manipulating others by enjoying extra rights over others. Most of the rich became richer often because of monopoly at all levels.

If access to resources is opened as Islamic hukuk leads to, it would be quite impossible for a rich person to hire others (because there is no poor) except with much higher wages. In such situations, people may join forces and work as partners or become competing producers. To give an example, if you need a job, why then should you work in others mineral mine and not extract the same mineral from the next site! Often, the answer might be: "I do not have the means in terms of capital or knowledge to start mining". Islamic Hukuk devised other mechanisms to overcome accumulations of wealth in few hands. Islamic Hukuk also pushed for sharing knowledge without hindering the process of knowledge growth (Akbar, 2017). Thus, the logical situation is that most workers will join as partners and thus will not exhaust themselves as they are not starving. This might reduce their production while for sure it will increases its quality as production processes becomes enjoyable gathering and not a mandatory duty for survival. Such ambiance will affect them socially and psychologically raising quality further. Notably, the summation of all those partners without bureaucracy will increase the percentage of producers adding to the quality of life. This happens because the society at large is based on the absence of bureaucratic governmental institutions which will increase the number of producers (Akbar, 2017).

Now day's companies are owned by those who hire the unemployed, thus owners do not have to be on the production sites. A billionaire living in Geneva may own factories in India and Bangladesh. If a factory pollutes the environment owners will not be affected as they are not on site. Or even they might corrupt official of the factory's site to maximize profit by avoiding possible treatment of industrial waste. However, when most people are quite close in their income, the production industry will depend mostly on companies owned by those who work in them as partners. The production mode will be characterized by the absence of absentee ownership. In such cases, if the factory is polluting, owners are the ones to suffer. Thus owner-workers will search for manufacturing methods that does not pollute. If we add to this the mechanisms stemming from Islamic *hukuk* of damage in which surrounding residents will have the right to stop polluting factories; gradually all polluting factories will be eliminated. The production system will change to technologies that produce factories that will never pollute. Not polluting becomes the norm and the convention, hence it is Islamic environment.

One might ask: what is the role of environmental professionals? Would such application of Islamic *hukuk* reduce their role because the people are in control of built environments? In fact, to the contrary, the role of professionals will increase as they will be hired by the massive number of rich people who want to improve their environments. These days, few can afford the cost of hiring an architect, while few urban designers and planners are employed by the State. If most residents are not poor, the chances for architects to find jobs from the masses are much higher. The same is true for urban designer who will be hired by community residents to organize their places that they control. In such cases, nothing is forbidden to design and implement since no municipal rules are there that would hinder innovations. For example, it is unthinkable these days to design and construct a glass swimming pool as an over-pass (*sabat*) in the middle of the street as the municipal rules does not allow such

construction. With Islamic *hukuk*, as long as the residents agreed, they could do so (remember the mechanism of damage). Technically this is possible (figure 7). If such a solution is proposed by an architect and the residents realized its potential benefits, others in other communities will copy and improve the glass pool especially in hot dry regions. Gradually, the hanging glass swimming pool will become part of the convention and will be recognized as an element of the Islamic architecture for that region.

What about design methods and Islamic *hukuk*? Many attempted to dismantle the built environment for further understanding, among which is the work of J. Habraken in his book "the Structure of the Ordinary", which I believe, stands as a landmark (Habraken, 1998). It is indeed an original work in decomposing the every-day environment through his three "orders": the order of place, the order of form and the order of understanding. Using his "orders", or any other similar method that dismantles the built environment in terms of control, a design method could be created through connecting Islamic *hukuk* to the decision making processes. In other words, some mechanisms of Islamic *hukuk* have the potential to go all the way down even to be explored in the smallest detailed-design-elements as a process. A new gate for research could be opened to further explore the potentials of the built environment for higher quality life in terms of cost, comfort, beauty and sustainability (figure 8, is from the *The Grunsfeld Variations*, it is a student's interpretation of the concept of participation in to the design process, Habraken, 1981).



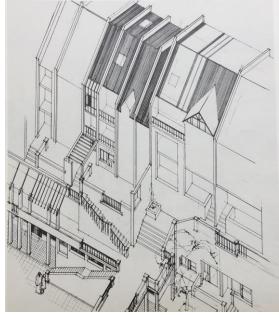


Figure 7. Figure 8.

For all these reasons I argued at the outset for the term: "purely Islamic". To clarify this let us take an extreme bold example. It is said that the shortest Friday *Khutba* was: "luqma fi batni ja'i' khayrun min binh' alfi jami'" which translates as: "a bite in the stomach of a hungry is superior to the construction of one thousand jami' mosque". Is this statement in line with the hundreds of mosques in poor countries that are glorified as an Islamic Architecture? Moreover, some of our environmental legacies are not necessarily the product of actions that are not sinful. Is the product of Muslims violating major principles of Islam Islamic? A classic example is the circular city of Baghdad that was mentioned earlier. A current much practiced example is those huge areas of lands allotted by Gulf rulers to their relatives. Those relatives

after selling such allotments had the financial muscle to build fancy Islamic style mosques. Meanwhile, ordinary people cannot afford a housing unit because of land speculation as a result of such allotments. However, if Islamic *hukuk* mechanism of land revivification was implemented, which will fights land speculation, those relatives of the King will not have such financial power and consequently such mosques will not exist. Revivification as a mechanism of Islamic *hukuk* was totally abolished under the banner of avoiding chaotic environments.

In fact, advantages of comparing Islamic *hukuk*, which will increase the percentage of owners, with current legal systems that leads to stratification are endless. Advantages of implementing Islamic *hukuk* can be predicted in all aspects of life such as happiness, efficiency, prosperity, justice, sustainability, etc. Let us think of just one example: the less poverty there is, the less the crime will be, the less is the need for police, courts, jails, etc.; consequently, the more the financial power of the society will be, the better education and awareness will be. Indeed, Islamic *Hukuk* is an iceberg that we did not even discover its tip. Islamic *Hukuk* is composed of hundreds of mechanism that are interacting to push societies, whether Muslims or not, to a higher quality of life in all aspects, and not just urbanism.

Is the Question a Moral or a Scientific One?

If all circumstances vary between the distant regions of the Muslim world, and if Islam is the only tying ideology that affects Muslims' actions, then the major fastening element that units Muslims is hukuk. Thus, Islamic hukuk should be at the heart of our discourse. Moreover, with this understanding of the relationships between Islamic hukuk and the environment, we can now propose an answer to the question: what makes an environment Islamic. The answer for me is: the more a society implements Islamic hukuk, the closer it is of being "purely Islamic" in all aspects of civilization among which is urban activities. If Islamic hukuk is implemented, innovations of those well-off masses will be unleashed without damaging others or the environment. Those masses that are enjoying freedom, honour, respectability and dignity will be creative in all aspects of their productions whether in the economical or environmental level. Their environments might commence with poor shapes and forms in new locations; nonetheless, gradually it will be crystalized to sophisticated compositions that suits their conditions. In these circumstances, the built environment is not an end in itself, but rather, means for a dignified life. While residents in well-established towns that enjoy most amenities, environmental excellence is their target to crate astounding monuments if they wish as long as the cost is the product of just society. Islamic architecture is not just a bent entrance or a courtyard; it is making the best out of the least by those ambitious, resourceful, enthusiastic dignified individuals. Their product is then will be labeled as "purely Islamic".

This definition will liberate us from past forms and patterns which sometimes were constructed by unjust decisions. It will liberate us from past compositions to be reused irrationally (although some times nostalgically) as a reference to our totally different present urbanization. Concurrently, this definition will welcome all new inventions from other civilizations to be tested, implemented and then added to Muslim's urban vocabulary. Consequently, this definition denotes that it is dynamic in itself, i.e., constantly changing with time to adopt new ideas and inventions; and not static as, unfortunately, perceived by the terms "Islamic Architecture", or "Islamic Urbanism".

However, this definition should not debilitate our heritage as Muslims. Indeed, this question of what constitutes Islamic urbanism is a question of "morality" and not environmental, technical or even scientific. Al-Hamra palace in Granada is a good example. Who dares to

claim that it is not Islamic although it is so lavish which led to the exhaustion of the State's budget that led to the Aghlabids defeat? I visited al-Hamra four times to discover new experience of beauty and sophistication in each trip. Who dares to question the role of the timeless beauty of calligraphy in our heritage? The morality of the question makes it indefinite and constantly debatable and alive raising issues that would enhance the built environment.

One may ask: if the question is moral and not scientific, why then it was dealt with in this essay which is dealing with scientific inquiry? My answer is: the question should remain moral if we tried to judge what is already there. In such cases, the answer cannot exclude a contribution by Muslims' on the societal level, but rather on the individual level. For example, Taj Mahal as a monument crated much debate among some religious elites because it is a construction on a tomb that is forbidden in some sects; while architects glorified its beauty. Thus, if we considered the question a moral one, Taj Mahal could not be rolled out from being an Islamic monument.

To the contrary, seeking theories or explanations to define what could constitute Islamic built environment for our future decisions should be a scientific inquiry. The reason is that we as researchers should target a higher quality built environment. To find it, we should search for it everywhere and in all times, not only the past. Another reason is that Islam came to all humanity, and thus if its product should be labeled as Islamic, it should not occupy itself with just forms or patterns as they are quite diverse in the various regions, but rather should concentrate on methods and tools where ever they are to improve the quality of environments. For these two reasons the inquiry should be scientific.

Two Conundrums

One even may wonder why this essay started by accepting Western epistemological approaches while it is dealing with Islamic *hukuk* (a subject in the heart of Islamic teachings). Moreover, although Popper's "refutation" method is based on challenging and refuting theories to develop new ones, yet in this essay I never tried to refute Islamic *hukuk*, but rather kept defending it. Explanation might be through "rationality" although it is quite a bumpy subject in Western philosophy. As known, rationality was linked to progress; yet, by the twentieth century, much scepticism were raised regarding the power of reason and man's ability to progress continuously. Earlier on, David Hume, for example, who lived in the age of reason, argued that reason is the slave of passion. He managed to bring attention to issues of feelings rather than rationality. I. e., although rationality is quite uncertain, I will try to explain this epistemological quilt through rationality within two inevitable conundrums.

As well known, democracy in its simplest form means that governing the society is the people's right. Western "rationality" could not find a method to execute this right except through election. Election means the creation of a body of individuals who will define public interest, goods, etc. and then rules accordingly. This will inevitably leads to a bureaucratic class of people. In best cases, this class will be honest and serve well. In worst cases, if this class does not become a dictator, it might misuse the given power. In all cases, a class of bureaucrats is crated that is not producing real goods, but rather administration. I. e., "rationality" could not visualize other means of governing. In Islam, the president or the Caliph should be also elected; however, with a very small class of bureaucrats because of Islamic *hukuk*. The difference is in the size of the bureaucratic class which is quite large in the Western mode of democracy. It might reach 40 per cent of the population if we added bureaucrats of governments to institutions. Even the private sector that is characterized by

absentee ownership in capitalist societies is saturated by bureaucrats. Government spending may exceed 40 per cent of the GDP in most cases (Akbar, 2014). This is the first conundrum.

The second is that democratic civilizations throughout history are swinging between honest ruling class who do not produce real goods, and evil rulers who should be replaced through elections, protestations, or sometimes revelations. The society is rarely settled. In best cases, when there is a peaceful change of power through transparent elections, types of governments are usually changing form socialist to conservatives or from Keynesian to Thatcherism, to name only two examples. These changes lead to the change of rules and regulations which will change patterns of rights. Otherwise, why different political parties are racing for power?

However, if Islamic *hukuk* was implemented, and because rights are fixed and cannot be changed (as the belief is that *hukuk* form almighty God), all parties shaping the economy or the environment should respect those well-known rights. This will lead to eternal settled conditions especially if we realized that almost all interfaces of possible interactions and consequently possible conflicts between acting parties are well defined in terms of rights. There are rights of ownership of heights, rights of party walls between neighbors, rights of property subdivisions, rights of digging mines, rights of harvesting rain water, rights of protesting against any new addition in streets which is different than those of squares or deadend streets, to name only a few. These are urban rights; there are of course political rights, economic rights and social relationships rights. All these rights which reduces the number of bureaucrats and draws the limits of their responsibilities leads to stabilized societies.

Within these two conundrums, theories of Western epistemologists were developed such as logical positivists (just to give one example). For example, Karl Popper as well as logical positivists concentrated on the context of justification. Although Popper's method clarifies how theories could stand against scrutiny; and although he wrote *The Open Society and Its Enemies*, and *The Poverty of Historicism*, yet his method did not explore other "possible structures of societies" in which scientists could be challenged beyond Western rationalities. The same is true for Thomas Khun. Although he was interested in the historical development of scientific theories; i.e., how theories challenge each other and mature to be accepted or rejected by the "scientific community", meaning that he gave more attention to the context of the scientific discovery; he is also, as Popper is, within Western paradigms of understanding civilizations.

Although the two conundrums were viewed as evils among Western thinkers, no practical proposals on the epistemological level were developed to counteract them. For sure, many economists tried hard to fight these two conundrums, such Friedrich Hayek and Milton Friedman who fought government's expanding expenditure and bureaucracy but without practical political suggestions. Hayek's book *The Road to Serfdom* for example, is very critical of central planning; however, no clear path was suggested to liberate people except through market mechanisms. Notwithstanding, markets' policies themselves are the product of Western rationality which is of course quite different from Islamic *hukuk*. Let us explain this through one example: it is forbidden in Islam to sell goods that are not possessed by the sellers. "*La tabi' ma laysa 'indak*" is a tradition by the Prophet (peace be upon him) that prohibits transactions of goods that are not possessed physically by the seller. If this tradition as a mechanism is implemented, the markets will have different role in society. Future trading such as hedge funds for example will not exist. In short, Western thinkers did not realize advantages of Islamic *hukuk* which leads to self-organized societies at the economical arena

with the least possible numbers of bureaucrats without serfdom. The same could be argued at the political level (Akbar, 2014, Ch. 12).

If "rationality" usually varies among individuals and inevitably will be affected by the society's sociopolitical structures, then the larger framework of the society should be investigated to understand progress of knowledge. This is not done by Western epistemologists as evident from their writings. Western epistemologist did not pay attention to Islamic sociopolitical structure, let alone *hukuk*. They were not open to the larger sociopolitical structures beyond criticizing Western ones. Thus they could not visualize advantages of Islamic *hukuk*.

Some may reject this description that Western societies are living in continuous turbulence (the two conundrums), especially compared to current Islamic or so called Third World Countries. They are right if compared to current Arab States for example. However, if Islamic hukuk was implemented, very settled societies could have been created. The reason is that Islamic hukuk through the hundreds of mechanisms will lead to a society without these two conundrums.

In fact, the more one digs into these two conundrums, the more one will realize that major political and economic characteristics of civilizations such as tyranny, freedom, and financial capabilities of individuals are much influenced by the two conundrums which are shaped by rights and consequently led to the crystallization of cultural phenomenon such as individuals' desire to consume, ability to pollute, dignity, innovation, etc. Let us take one example. If Islamic *hukuk* was implemented, almost all services are provided by the private sector in an open resource society leading to a minimal role for the government. As well known, services provided by the private sector are more efficient especially if we remember that the private sector with Islamic *hukuk* will not be monopolized as current companies of service-providers in the globalized systems are. This will reduce cost of services while improving quality. Or even services might be decentralized thus reducing pollution. For example, rather than collecting waste-water in faraway locations for treatments, new decentralized technologies will spread such as the use of digesters which will become part of the environmental conventions leading to even new decentralized inventions and thus shaping the societies' culture.

Let us not forget also that with Islamic *hukuk*, all companies, including those providing services, are owned by those who work in them. A major portion of services will also be covered by endowments such as *waqfs* (schools, universities, hospitals). Let us also remember that the people are capable of purchasing services (infrastructure such as electricity and water) and capable of creating or donating to *waqf* institutions since they are well off because of the application of Islamic *hukuk*. Indeed, one may argue that these two conundrums cannot be managed for civilizations' prosperity without Islamic *hukuk* whether the residents were Muslims or not.

Why use Western epistemology although criticized?

No doubt, Popper's conjectures method helped scientists in hard science as their results of refutations were verifiable. Yet, with social sciences, as human's behaviors are not predictable, and if predicted sometimes could not be rationalized, a method has to be devised to bring conjectural statements or bold arguments to scrutiny. The method was the treatment of each right independently as a theoretical statement that should be refuted. For example, according to the principle of damage, one has the right to prohibit his neighbor from opening

a new door opposite of his to protect his privacy. Rather than searching for many doors to prove the statement that "two doors do not meet in front of each other in the Muslim built environment", the existence of one case of doors in front of each other would raise the argument to another level that needs new statements for clarification. The two opposing neighbors could be relatives for example and agreed to have their doors opposite of each other. In such case, agreements between neighbors are considered above rights. This conclusion is then refuted with one case, rather than collecting more and more data to verify it. This is how Islamic *hukuk* was refuted to be understood.

Let us now salvage another statement: "the reviver of a dead-land (mawat) who discharges rain water to the 'outside' is more rightful in possessing the path of that channel if that 'outside' space became a street". This statement from current planning (capitalist) perspective is absurd. Thus, it should be refuted to be explained. In fact, this statement is a futureterritorial claim which will bring neighbors to collective actions. Therefore, rather than gathering more data to verify the validity of this Islamic hukuk, one case of refutation was needed for falsification. The refutation led to the understanding of the concept of "right of precedence" or "hiyazat ad-darar". A concept which means first revivers or comers will possess the amenities which make their properties functions properly. For sure, one would ask: is not such right unjust for later revivers? Again, Islamic hukuk devised other sets of rights which led to the creation of environmental conventions. Conventions which all residents followed willingly. In other words, rights of precedence are group of rights that are very vital to order the relationships between neighbors without the need for external authorities' interventions such as municipalities (Akbar, 1988). Rights of precedence will reduce societies' spending. For example, all elements between properties in traditional Muslim built environments such as overpasses (sabat), single party-walls, water discharge channels, etc. are signs of materialized rights of precedence without possible future conflicts. They are elements that ordered the relationships between property owners; otherwise, the environment will be chaotic. Rights or precedence brought order without bureaucratic class.

What is even more interesting is that Islamic hukuk are grouped to salvage and support each other. Trying to understand a group of rights separate from other rights will not often make sense. For example: "the tax or zakat of 40 sheep (up to 120) is one sheep". It cannot be cash money. The zakat of, for example 120 sheep is still one, but not one sheep plus some cash. The question is then, why Islamic *hukuk* insisted on *zakat* of livestock to be of the same type and not cash? Moreover, why an owner of 40 sheep is asked to pay his zakat as one sheep (the equivalent of 2.5%) which is as much as those who own 120 sheep (the equivalent of 0.83%)? I. e. both will pay the same, one sheep, as it is impossible to pay half or third sheep. The reason is that half a sheep cannot be alive and thus should not be shared by more than one destitute to avoid possible conflicts. This right may not make since till we refute it to be salvaged by another right which is: "those who give away their zakat, are not allowed to repurchase their zakat item". In such situation, it will be difficult for merchants of livestock to monopolize the market as the market is always saturated with livestock from their own zakat. If Islamic hukuk allowed zakat of say 100 sheep as one sheep plus some cash, this might be interpreted as allowing the possibility for cash payments for all zakat. Islam insisted to close such door fearing misinterpretation which might create monopoly if zakat was paid cash. These mechanisms will help the needy as it will bring down prices of vital commodities. Thus, the first obstacle facing destitute to work, which is hunger, is eliminated. These are few examples of how Islamic hukuk jointly create higher quality environments by employing the maximum through supporting them by eliminating hunger. Let us not forget that famine is often caused by misusing power and not shortage of resources as Malthus claimed.

Previous descriptions imply that Western epistemology was used to understand Islamic *hukuk*, but not to invent a new paradigm of rights. The reason is that, scientifically, researchers should understand first what is already there. If such exercise is exhausted and anomalies appeared, then the suggestion for inventing a new paradigm of rights is logical. Inventing new paradigms of rights is not a possible task as it is beyond mankind capacity to read long term future-consequences of one single right, let alone a whole system. Unfortunately, Western rationality is not trying to understand wisdom in other cultures beyond art and customs; but rather, trying to pull others to its pattern of rights which it keeps inventing. Logically, fans of Western modes of rights do not have the right to do so unless scholars exhausted exploring all paradigms in all cultures. Indeed, if it is one world we are sharing and polluting, we should all join to find the proper paradigm of rights no matter where it comes from.

This essay showed that I accepted Islamic *hukuk*; however, after continuous refutation. This is the reason for defending it. My belief is that I should continue until it is proven wrong; a task which I am constantly exercising to be more convinced that it is the answer to human's misery. As long as Islamic *hukuk* is standing against scrutiny, it should be adopted by other cultures. This is the reason at the outset I noted the use of the research-program method of Lakatos in which I kept holding on to the Islamic *hukuk* as a hard-core. Moreover, the reason of creating the protective-belt, which is based largely on basic human tendencies, is to prove the validity of Islamic *hukuk* to all cultures as most if not all people share those tendencies (mentioned in the protective-belt) which could be directed properly by rights.

What is really amazing is how Islamic *hukuk* invests in people's self-interest while pulling the society to justice, prosperity, sustainability, dignity, decency and innovations without tyranny, poverty, pollution, and above all, without current capitalism's and globalization's plights that are produced by the two conundrums.

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