

Beyond the UNESCO intangible/tangible cultural heritage duality: Islamic principles as an intangible heritage – the case of North African medinas

Para além da dualidade património cultural intangível/tangível da UNESCO: os princípios islâmicos como património imaterial – o caso das medinas do Norte de África

MUSTAPHA

BEN-HAMOUCHE ^{1*} BAHMED MOUSSELMAL ²

1. OVAMUS Laboratory, Institute of Architecture & Urbanism, University of Blida 1, Route de Soumaa, 9000, Blida, Algeria
2. Al-Manahidj Institute, Algiers, Algeria

*madinarch@gmail.com

Abstract

In old Muslim cities, community-based and individual building practices have long shaped the urban environment. These practices express the socio-cultural principles and values that historically guided urban formation and, thus constitute a key component of their intangible heritage. Yet contemporary preservation policies tend to prioritize the protection of physical urban fabrics, a fact that often overshadows the intangible dimensions that gave meaning and coherence to the urban environment. This paper argues that safeguarding the tangible heritage of old cities must thus be accompanied by the recognition and promotion of this intangible logic. It highlights the interactive and causal relationship between these two dimensions of heritage, with a geographic focus on North African cities. The study aims to contribute academically by articulating an Islamic perspective on urban form, and professionally by suggesting ways to refine current preservation policies through a more balanced integration of tangible and intangible values.

Resumo

Nas antigas cidades muçulmanas, as práticas de construção comunitárias e individuais moldaram durante muito tempo o ambiente urbano. Estas práticas expressam os princípios e valores socioculturais que historicamente orientaram a formação urbana e constituem, assim, uma componente fundamental do seu património imaterial. No entanto, as políticas de preservação contemporâneas tendem a dar prioridade à proteção do tecido urbano físico, facto que muitas vezes ofusca as dimensões imateriais que davam significado e coerência ao ambiente urbano. Este artigo defende que a salvaguarda do património tangível das cidades antigas deve ser acompanhada pelo reconhecimento e promoção desta lógica imaterial. Destaca a relação interativa e causal entre estas duas dimensões do património, focando-se nas cidades do Norte de África. O estudo visa contribuir academicamente, articulando uma perspetiva islâmica sobre a forma urbana, e profissionalmente, sugerindo formas de melhorar as atuais políticas de preservação através de uma integração mais equilibrada dos valores tangíveis e intangíveis.

KEYWORDS

Islamic principles
Muslim cities
Preservation policy
Incremental process
Intangible heritage
Tangible heritage

PALAVRAS-CHAVE

Princípios islâmicos
Cidades muçulmanas
Política de preservação
Processo incremental
Património imaterial
Património material

Introduction

The concept of heritage in Muslim countries has undergone significant evolution, shaped by changing social, cultural, and institutional conditions. While debates on heritage have been present for several decades, the past decades have seen a notable intensification of interest, during which heritage has increasingly been treated as a distinct paradigm in both research and professional practice.

From early 1960s and 1970s, a considerable number of old cities was subjected to *Tabula-Rasa* policies under the influence of the modernist doctrine and the general aspiration for progress and development. Old buildings and towns were considered a defect and were thought to remind communities of backwardness [1-2]. In the Arab Gulf, old cities such as Riyadh and Kuwait, have completely vanished, leaving only traces of their original street patterns. In other countries Middle Eastern countries, cities such as Baghdad, and Damascus, have undergone deep alterations in a way to improve vehicular accessibility, provide the basic services and improve the quality of life in old quarters. Large intersecting boulevards have been cut through their compact fabrics, and large open spaces were created. Their outer defensive walls were dismantled to accommodate modern urban extensions [3].

In the 1980s, the boom in oil revenues enabled most Arab countries to develop new cities and shift urban populations to the outskirts. Old cities that remained, such as Manama and Muscat lost their original populations that moved to the outskirts. Historical cores gradually turned into slums for low-wage classes and migrants. That is the case of rural migrants in Algiers, Tunis, and Fez, and Asian expatriates in Gulf cities such as Manama, Jeddah, and Dubai [4].

Paradoxically, Western countries – the birthplace of modernism – experienced a gradual return to historical references, a shift that indirectly influenced the growing cultural awareness in many Arab societies. As a result, heritage progressively gained significance as both a scholarly and public concern. The acute identity tensions generated by the coexistence of modernity and tradition further reinforced this interest, ultimately supporting the rise of heritage preservation as a means of cultural affirmation.

A direct consequence of this shift is the current increasing care for the past. The historic cores of old towns and the buildings that have survived demolition are increasingly attracting the attention of academics, professionals, and policymakers. Basic services such as water, electricity, telephone, and sewerage are introduced, and accessibility to social amenities are improved. Under the pressure of world heritage preservation and tourism, intermittent works of upgrading such as walls-painting, repairing of cracks, and the paving of the streets are being undertaken along the “tourists-walks” that are created in the degrading old towns [5].

Academic research, together with cultural-tourism interests and the growing involvement of international institutions such as UNESCO, ICOMOS, the World Bank, and the Aga Khan programs, has helped broaden preservation philosophy, gradually extending its scope to include not only monuments and historic buildings but also the surrounding urban fabric [6-7]. In planning, architectural theory and curricula, urban preservation has expanded in parallel with postmodernism, regionalism, and, more recently, with global calls for cultural sustainability.

The meaning of Heritage itself underwent a process of refinement through several revisions. It was first interested in famous buildings, monuments, and archaeological sites. One example can be seen in the case of the 1967, 2003, and 2005 Algerian legislation for preservation measures [8]. Castles, palaces, religious buildings, and large residences were transformed into historical symbols and heritage icons. It is only after decades that the isolated objects were meaningless without their contexts. Immediate surroundings were then considered as part of the heritage.

By the end of the twentieth century, heritage witnessed a finer redefinition. It was agreed that it should encompass both tangible and intangible assets. While the tangible cultural

heritage (TCH) concerns physical properties such as monuments, groups of buildings and historical sites, whether natural or man-made, the intangible cultural heritage (ICH), was defined as:

The practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artifacts, and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage. This intangible cultural heritage, transmitted from generation to generation, is constantly recreated by communities and groups in response to their environments, their interaction with nature, and their history, and provides them with a sense of identity and continuity, thus promoting respect for cultural diversity and human creativity. [9]

On highlighting the paradox under study, Dennis Rodwell considers that the increasing interest in intangible heritage and the anthropological vision of culture as a dynamic and an evolving course should reformulate the narrow concept of heritage as vestiges and records from and about the past [10].

The art of city-making and the local building know-how represent one of the most underrated aspects of intangible cultural heritage in contemporary discourse. The outdated view that treated the urban fabric of medinas as merely spontaneous physical entities should give way to anthropological and socio-cultural approaches that recognize and value the actions of individuals and communities.

The present study relies on two main hypotheses. First, beyond the UNESCO's classical subdivision of heritage into TCH and ICH, the urban fabric of old Muslim cities emerges from the continuous interaction between these two dimensions. Second, while the physical structures – built environment, urban layouts, and architecture – constitute the tangible component, the underlying Islamic principles function as the intangible mechanisms shaping them. ICH and TCH are linked through a causal relationship: TCH is the output of ICH.

The aim of the paper is therefore to highlight the simultaneous presence of both Tangible and Intangible heritage in old Muslim cities, and the causal relationships between the two parts of heritage. It then transcends from tangibility to intangibility via the unseen but practiced mechanisms that shape urban fabrics in the old cities (Figure 1).



Figure 1. A diagram showing the three levels of heritage, the tangible, the deep structure and the intangible.

Methodology and materials

The present study examines the physical components of historic Muslim cities, collectively understood as TCH. It then highlights the underlying principles that shaped these urban forms. These principles – rooted largely in Islamic doctrine – evolved into norms of conduct and practical traditions that guided the behaviour of individuals and communities in old Muslim cities, thereby constituting their ICH.

Regarding data, the study draws on two complementary sets of information: (1) the geometry and morphology of urban fabrics in historic cities; and (2) the system of rules and mechanisms established in the author's previous works, as well as those developed by other scholars over the past four decades (1981-2023). The urban fabric of Melika (X = 564498, Y = 3594300), a historic town in the Algerian desert within the M'zab region, serves as the empirical basis for this dual analysis. Most of the material was sourced from the fieldwork of the Office de protection et de promotion de la Vallée du M'zab (OPVM) [11], the institution responsible for the city's Preservation Plan. Melika was selected primarily due to the availability of detailed graphic documentation, the coherence of its physical and social fabric, and its manageable scale compared with larger coastal Muslim cities.

Describing the tangible urban heritage

A significant number of Western scholars have studied urban and architectural heritage in the Muslim world under various terms, including “Islamic city”, “Muslim urbanism”, “Muslim city”, “Middle Eastern city”, “Near Eastern city”, and “Arab-Muslim city” [12]. On retracing the historiography of the concept, Al-Sayyad [12] and Allahham [13] overviewed the works of Georges Marçais, Max Weber, Ira Lapidus, Jean Sauvaget and Albert Hourani in which the structure and morphology of the Islamic city interpreted. In most of these studies, the focus was predominantly on the physical aspects of the city, including the urban fabric and key components such as the winding streets, the centrality of the mosque and the market, and the governor's residence.

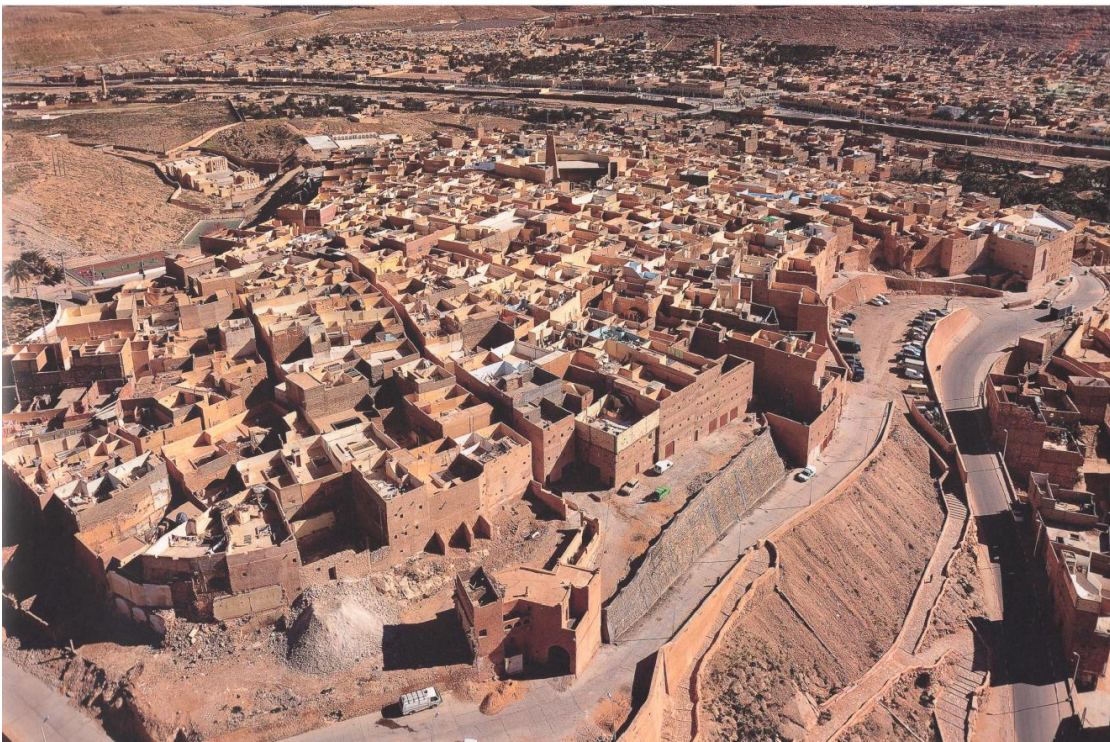


Figure 2. An aerial view of Melika, the old Muslim city in M'zab region, 2009 (sources: a-OPVM, b-Kais Djilali, Ministry of Culture).

At the domestic scale, the spatial organisation of houses and other buildings turns around the courtyard. Beyond its climatic and social functions, the courtyard allows the external envelope of the house to remain free of openings while enabling its four sides to connect with adjacent houses. Shared walls constitute another key component of the built environment, reflecting the grouping patterns of dwellings. Besides the religious recommendations that recommend privacy and mutual care, the permanence of the two components may also be argued by the economic motivations that regard building materials, time-consuming, and land-use economy. The scarcity of openings gives rise to blind elevations, which characterize the façades along streets. This can be seen as a direct outcome of the inward-oriented organisation of houses, itself resulting from the interplay between courtyards and shared walls (Figure 2).

Decoding the deep structure

The second stage of this analysis, of highlighting some common features that are shared among Medinas and help understand their morphologic order. This systematic enumeration reflects the deep structure physical structure will pave the way to a better understanding of the intangible character in the medinas, a theme that will be developed below.

Urban geometry in medinas would not be understood without some major characteristics that are seldom described in studies on heritage. Away from the conventional rules of the Euclidian geometry such as the axiomaticity, the symmetry, the platonic forms, and straightness of lines, urban fabrics in Muslim cities present complex features that have been recently decoded thanks to new advancement in computational geometry [14]. Sections below give key features that help decipher this physical complexity.

Compactness of urban fabrics

There is an emerging interest in compact cities in the last 30 years [15-16] this feature has been defined and measured in various ways. It mostly relates to density, saturation, mass, mix, concentration, and connectivity. In its simplest aspect, it consists of the domination of the built-up area over the open spaces, such as streets and public places.

In the case of old Muslim cities, it results from the contiguity of buildings with each other, the dominance of solids over voids, the intensity of land use, and the high density of the buildings. At a bloc scale, compactness may be identified through the ratio of the open-to-sky surface in the bloc mass, and the exposure of buildings to outside. In terms of calculation, the ratio of mass to void ranges from 60 %, up to 80 % depending on the geographic location [17].

Urban compactness results from the assemblage of buildings according to specific topological rules, whereby houses relate to one another side-by-side and/or back-to-back. This topology arises directly from the principles of shared walls and inward-looking domestic architecture. Together, courtyards and shared walls form the cornerstone of the urban morphology and typology of historic cities. Consequently, there are no stand-alone or detached houses; each dwelling is physically connected to its neighbours. This interdependence is such that the collapse of one structure can lead to the deterioration of the adjoining buildings (Figure 3).



Figure 3. A compact urban fabric in Melika in which the built-up area dominates the out-door spaces (source: OPVM).

Subdivision and fragmentation

The subdivision of properties and assets is a staple in the urban morphology of Muslim towns. It incessantly shapes buildings, plots forms, and morphology. It is a fragmentation process that generates micro-properties that continue to be until it reaches a stage of usage of the resulting portions, below which the asset should either be sold and subdivided as cash, or left as an integral entity.

The conditions for proper subdivision require adherence to the legal principles of Islamic inheritance, while ensuring functionality, accessibility, adequate lighting, and autonomy of the resulting units. Shares are generally assessed on the basis of net area and monetary value, and in some cases also according to turnover or income potential, reflecting differences in location and commercial exposure. Tangible assets such as buildings, plants, and equipment pose greater constraints to subdivision than vacant land because their configuration, usability, and context are already fixed. Consequently, treating subdivision as a purely geometric exercise often results in irregular, interlocking portions.

The block plans provide numerous examples of such processes (Figure 4). A focused examination of their geometry, following a recurrent pattern of transformation, allows the reconstruction of earlier property configurations. Many houses reveal evidence of having once formed parts of larger dwellings. The presence of long, narrow, and irregular internal corridors is often the result of efforts to ensure access to sub-properties located toward the rear of the block.



Figure 4. The dead-end streets and the partition walls, as direct results of the succession law and the subdivision of assets (source: the authors based on OPVM drawings).

Subdivision is also undertaken vertically in multi-story buildings. The initial house turns into two or more superimposed but autonomous properties, each with an independent entrance that is directly reached from a common staircase or from outside. And while the upper owner typically benefits from access to the terrace and the possibility of future extensions, the ground floor owner enjoys the direct contact with the street and the commercial potential offered by the frontage. In many cases, the allocation of these advantages is decided cordially.

Geometric regularity and irregularity

At the urban scale, the grid that goes back to the Greco-Roman city planning model has been considered the model of regularity [18]. In the case of the old Muslim cities, one of the literature milestones of confrontation between regularity and irregularity that seduced scholars is the early works of Sauvaget [19-20]. The discovery of the regular grid in the Roman Damascus that was overwhelmed by the irregular pattern of the early Islamic conquests has long been considered as a witness of such a lag. Similarly, archaeological sites of Cherchell and Old Algiers present some of this overlapping between the two opposite geometric patterns as well as the process of complexity and overlying.

The gradual complexity that leads to geometric irregularity is thus an essential character of medinas that results from the natural process of urban growth. It is the outcome of many factors among which are, the specific response to site conditions, the incremental progression of houses and buildings outward, and the continuous portioning of properties that was discussed earlier.

Evolutivity and incrementality

Mostly, medinas have not been created or erected at once. They underwent many stages of growth and development that are often reflected in their morphology. That is the same process that also takes place at the house level. Without considering this process, their geometry and spatial organisation, if analysed as an intact bloc, would be mysterious and puzzling (Figure 5).

Streets patterns and forms of blocs that were thoroughly analysed by Petroccioli [21] were also subjected to continuous shaping. A grabbing process of left-over spaces that were considered by residents as redundant spaces took place continuously, away from the eyes of the rulers, but under the control or the *Hisbah*, and the social surveillance. It resulted from the outwards expansion of houses and stopped at an optimum space left for traffic fluidity. Consequently, opposite to their seeming permanence over ages, streets networks, and public spaces underwent many stages of remodelling before they reach their final shapes that we see in plans.

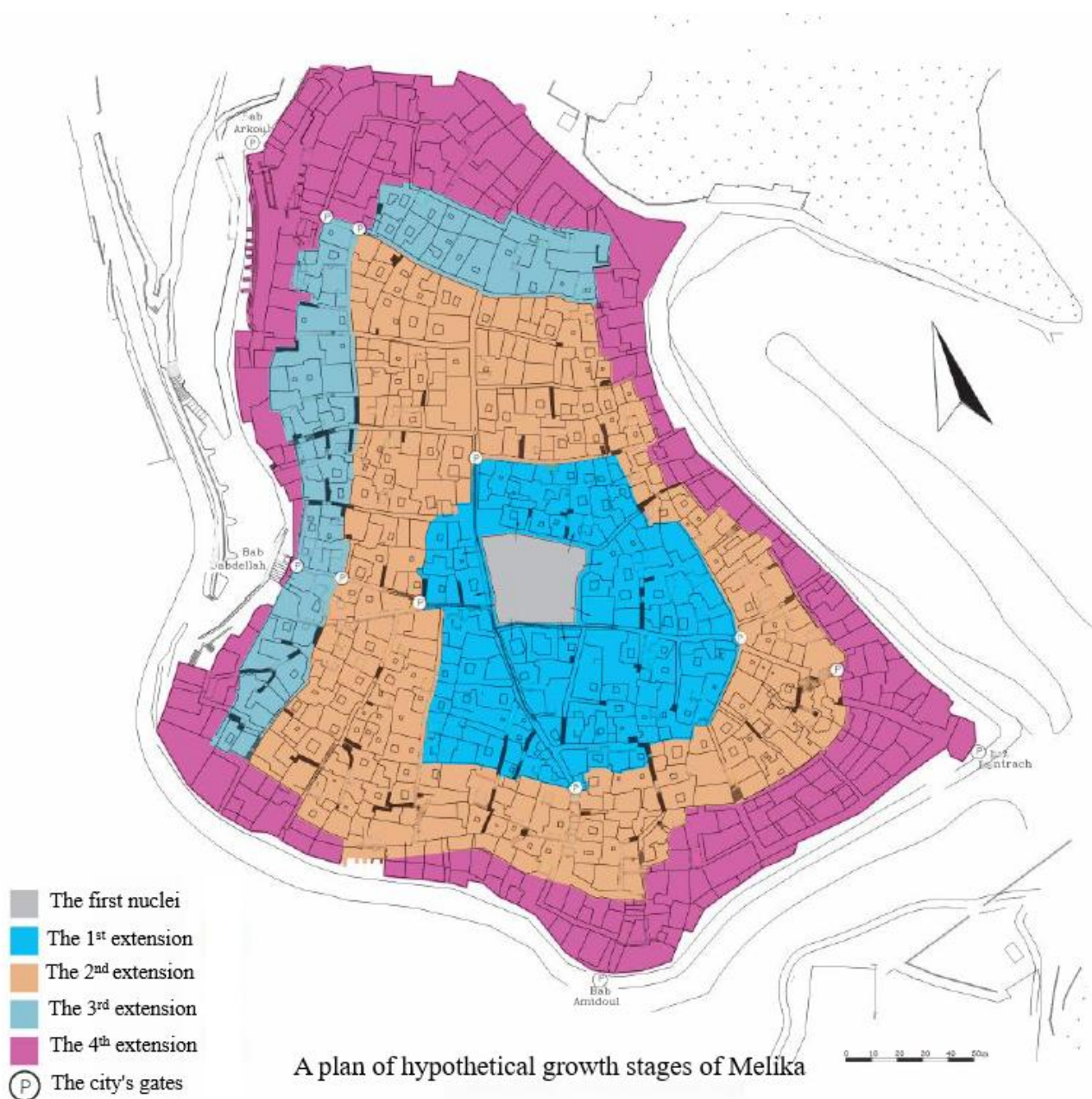


Figure 5. Hypothetical growth stages of Melika (source: OPVM).

Dead-ends that appear at the bottom of the streets are also not preplanned. Rather, they emerged as a natural outcome of the incremental growth process. In many instances, houses facing each others along a street gradually advanced towards one another following a consensus between neighbours to close off an existing alley or a footpath. In other cases, opposite houses eventually met at the upper level through elevated structures – known as *janāh*, *sabāt*, or *rawshan* –, creating an overhead bridge while leaving a channel-like passage beneath. According to Raymond [22], the number of dead-end streets in a town often reflects its age. The older the town is, the more it had dead-ends that resulted from the gradual consumption of outdoor spaces. A comparison between Manama’s old town – founded around 1700 – and a much older city such as Cairo, whose urban fabric dates back to the 900s AD, provides a useful illustration of this point.

Decoding the intangible cultural heritage

Previous works addressing the mechanisms and principles that correspond to such intangible heritage include those of Christopher [23-24] who focussed on building patterns and their role in the formation of human settlements, and Hakim [25-26] who worked on codes and generative process in Mediterranean cities. Uncovering such rules does not only reflect a better understanding of ICH but also provides the principles that would help preserve and promote heritage.

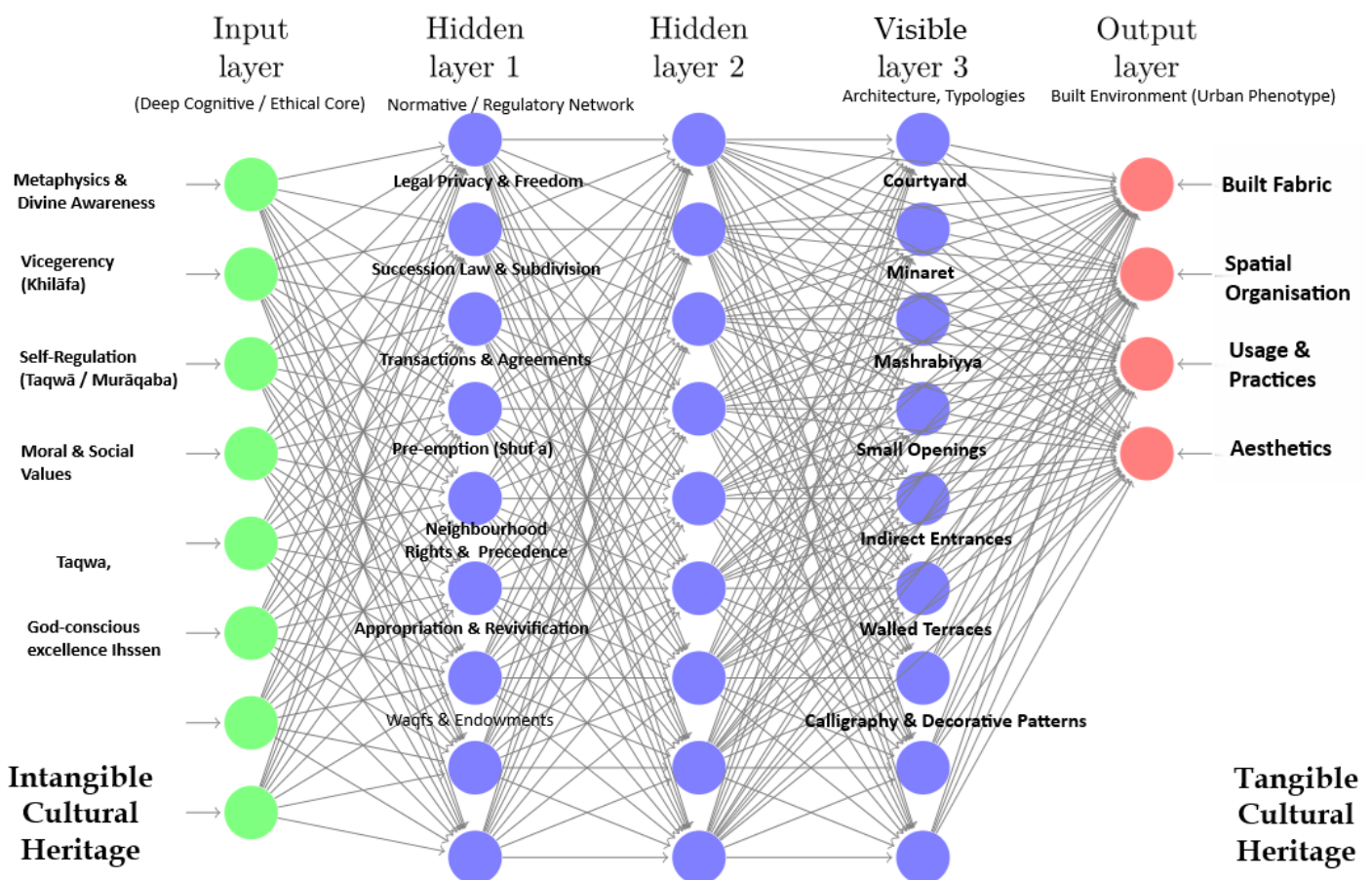


Figure 6. Principles governing the people’s actions and generating urban fabric, space, usage and architecture in the old towns.

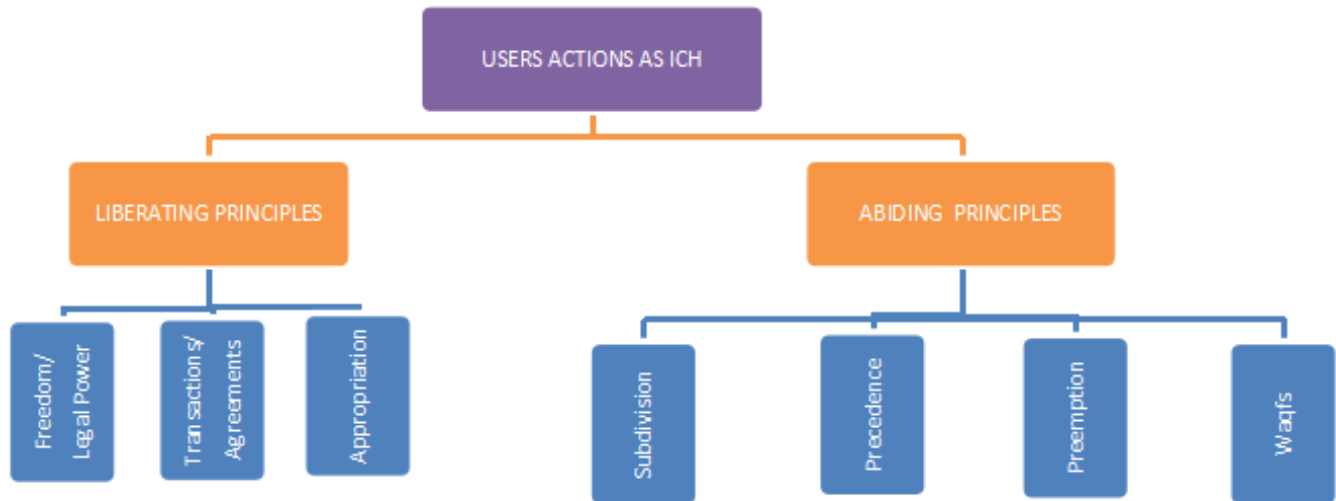


Figure 7. Principles governing the people's actions in the old towns.

The social rules and cultural norms that mostly stand on a thorough set of metaphysical beliefs, moral values and self-accountability (God, Angles, Vicegerency, Day of Judgment, Ethics, *taqwa*, *Ihssan*, etc), turned into endogenous principles that ruled the people's actions, within which are building and space uses. Exogenous rules that are dictated by either the rulers or the community, although they existed, were occasional or rare. These building actions that relied on the local know-how technology and these unwritten rules, were thus the hidden generator of the built environment that we now consider as a TCH (Figure 6).

One of the challenges that faces immateriality is however its discretion. IAS 38 (paragraph 8) for instance defines an intangible asset as “an identifiable non-monetary asset without physical substance” [27]. Sections below will highlight some, and not all, of these rules and principles on which the immaterial heritage in the medinas relied.

Early works on this set of discrete rules and principles would go back to Brunschvig [28]. This pioneering work itself draws on an old, unpublished manuscript attributed to Ibn al-Imām (died between 991 and 997 AD) titled (the book of jurisdiction and the elimination of harm regarding houses, streets, walls, buildings, public squares, trees, etc.) [29, pp. 39-48]. Other recent works that broadened this emerging field are those of [30-38]. For practical purposes that help incorporate these rules and principles in the new preservation regulations, they are classified into two major categories that are related to the building actions; the liberating and motivating principles on the one hand, and the abiding and constraining ones, on the other (Figure 7).

The liberating and motivating principles

Building, demolishing, renovating and transforming one's property in old Muslim cities were considered together an integral part of one's freedom and an inviolable right, and a prolongation of the ownership right. However, this right is legally inactive unless it is sanctioned with the Legal Power, called *wilaya* [39]. In theory, an individual may hold a property right yet be prevented from exercising it due to mental incapacity or legal disability. Such cases, however, were rare within the community, as most people enjoyed full legal capacity and thus the freedom to build. Consequently, houses plans and architectural varied greatly from a house to another as in (Figure 8).

In the light of this principle, the town turns into a field for continuous residents' actions of building, demolitions and transformations that were undertaken without the request for authorities' permits. Daily needs continuously nurtured the urban dynamics and shape urban morphology and architecture.

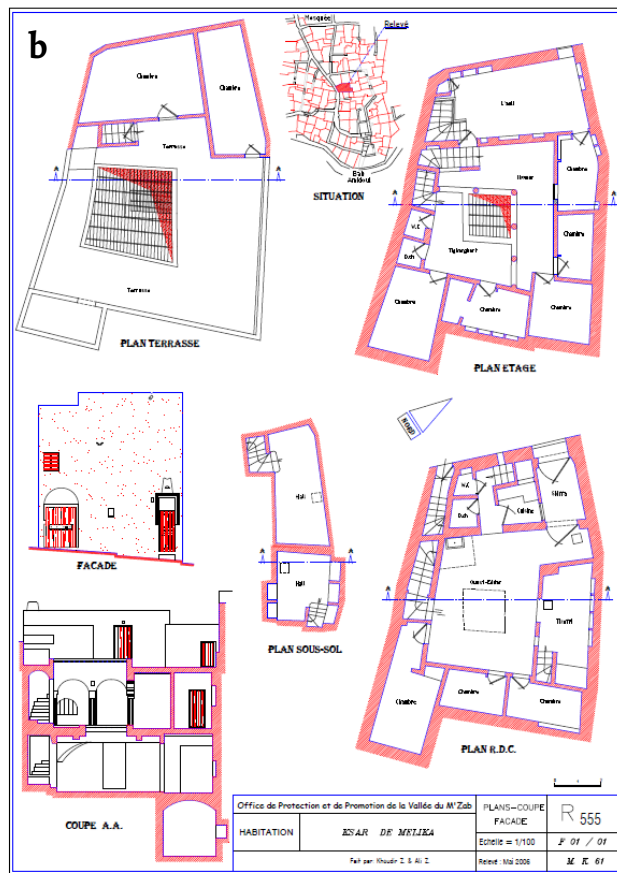
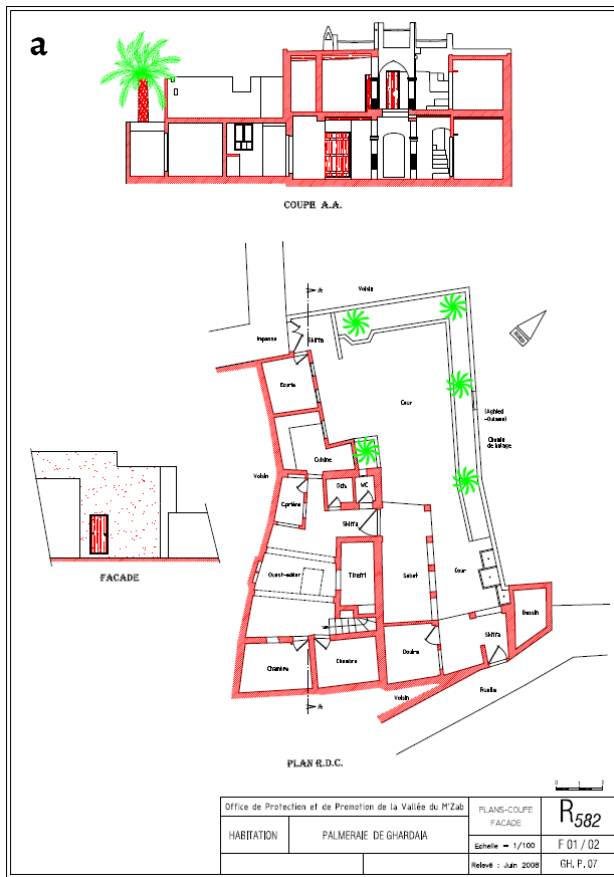


Figure 8. Forms of houses (a-d) resulting from the building freedom derived from *Private Legal Power (Wilaya)*. On comparing the four houses we find that they differ in their spatial configurations, their main entrances, their courtyards, the internal distribution of rooms and architectural details (source: OPVM).

As an extension of individual freedom, residents also possess the right to establish transactions, agreements, and exchanges of services with their neighbours without the need to authorization. Each of these transactions that also applied in other aspects of daily life, such as marriage and divorce, sales, rentals, and loans- had a tangible impact on the built environment. Hiring or granting a right-of-way to another person, by allowing passage through one's property could occur in counterpart of a right of support on a neighbour's wall. At the micro-scale, these arrangements may involve acquiring portions of another's property, such as a wall, a passage, a well, or even a room, in return for services or financial compensation. Such transactions are classified by jurists into conventional and unconventional categories, are often preceded by lengthy negotiations, driven either by moral considerations such as keeping good neighbourly relations, or by the need to resolve an existing dispute.

However, agreements and easements rights that were mostly unwritten, sometimes became a source of disagreements as a result of a building collapse, or after the decease of the parents who established them at an immemorial time. In such cases, a new series of agreements were made in order to overcome the conflict and regain reciprocal benefits.

The Appropriation of dead land and residual spaces constituted another guiding principle that motivated individuals and regulated competitive dynamics among residents. Reviving abandoned or unowned land (*mawāt*) and incorporating leftover spaces were the two central expressions of this principle. In Islamic jurisprudence, the revival of a dead land was not merely permitted but actively encouraged, as it transformed neglected or unclaimed plots into usable and productive assets and added value to the built environment [40]. It was also a legal way that led to appropriation and ownership of land and assets, and operated through building, development, redevelopment, and cultivation acts.

Most Muslim jurists, in the early times of Islam, agree that this act may be undertaken without the authorisation and consent of the ruler. However, scholars state some prerequisites that limit the scope of such initiatives and incentives. For instance, a revival act concerns mostly remote lands such as deserts and vestiges of ancient civilisations, but not lands surrounding towns and human settlements.

At the domestic scale, leftover spaces that emerged due to land neglect, abandonment, the disappearance of owners, or the extinction of heirs were subject to appropriation. Overhead spaces above streets – positioned beyond the height of pedestrians, animals, and mounted riders – also offered opportunities for revival and appropriation. The jurist Al-Qarafi (1228-1285 AD) [40], in his 112th rule, considers that the status of the “air” above the ground surface has legally, the same status as the ground itself. Residual spaces and leftover voids in the town may thus be regarded as dead land subject to revivification. The appropriation of overhead spaces above streets, as an application of the Revivification principle, became widespread in many old Muslim cities. The resulting tunnel-like streets stand as visible manifestations of these social practices.

The concept of *finā'* that referred to the narrow strip of space immediately in front of a property, and forming a transitional zone between the private dwelling and the public street, may be considered as a partial appropriation. Functioning within these customary practices and Islamic legal principles, the *finā'* played a crucial role in mediating between individual needs and collective rights, thus contributing to the flexible and adaptive character of the historic urban fabric.

The abiding and constraining principles

The sphere of freedom in building has limits that generally concern the others' realm, whether public, collective or individuals' ones. One of the obligations that emanates from Islamic law is the compulsory subdivision. Properties are often subjected to partitioning according to a set of rules that emanate from the Islamic law, *sharia*. The inheritance law is a system that describes with scrutiny the nature and categories of heirs, shares, and rules of subdivision. In basic cases, heirs who are considered are those alive at the time of the proprietor's death. They are namely;

the father, the mother, and the wife(ves) or the husband, sons, and daughters. Shares that are described as fractions and are textually stated in the Quran are: $1/2$, $1/3$, $1/4$, $1/6$, $1/8$, $2/3$, and $1/3$, that have together, 24 as a Greatest Common Dominator. Subdivision of assets depends on the combination mode of the prescribed heirs and the household structure. A second category of heirs called residuary, may have shares depending on the remaining parts from the first subdivision [41].

The basic fractions that are stated above may also develop into highly complex fractions according to the number of ascendant and descendant heirs. Shares often turns into complex numbers according to the number of heirs and generations. The subdivision process may in the latter case, turn into iterative operations that include a sequence of subdivisions. For instance, if heirs initially have inherited a $1/3$ of a house, and proceed to a subdivision, this fraction would be subjected to a further slicing that gives the shares of each heir, regardless of their number, provided that resulting shares are autonomous and usable (Figure 9).

Subdivision action also depends on the nature of the property. Baths, *Hammam*, wells, mills and stairs, are considered as un-subdivided and are thus, either kept in co-property and/or in common use or sold out in favour of heirs. Unless the geometry of the urban fabrics in old cities is deciphered in the light of the subdivision process, its high complexity that results from the successive subdivision actions, cannot be understood. A given plan of an urban fabric that we could have on a housing cluster is consequently just a momentary drawing that is taken at a certain time that is then left behind.

Among the many neighbours' rights that constrain building freedom is the right of precedence. This principle grants priority to older constructions and pre-existing conditions, recognizing that long-established building elements acquire tacit rights over time. In the event of a dispute, the right of precedence is determined based on neighbours' testimony, written records, or technical investigations. Components such as doors, windows, gutters, and cantilevers that existed from an earlier period must be preserved as they are, regardless of their impact on subsequent constructions or the surrounding environment.

For researchers and professionals, the precedence principle is one of the tools that permits to understand the incremental aspect of buildings and the sequence of components' locations along the street such as windows and doors. In streets, the urban façades on both sides are more than elevations that comprises openings and protect houses privacy. They are rather, a chain of mutual precedence rights and a chronologic order of elements.

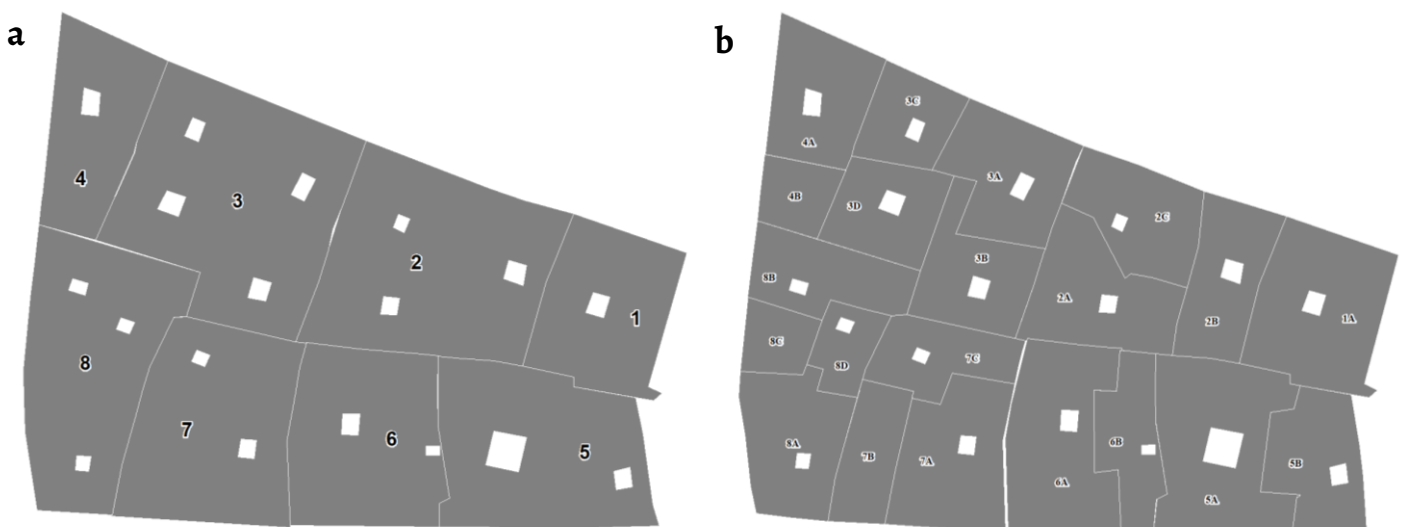


Figure 9. Smaller and irregular parcels and buildings result from the continuous subdivisions of assets as a result of the Muslim Succession Law. A case of subdivision based on a block in Melika: a) is a hypothetical earlier state; b) is the present state.

Freedom of building action is further constrained by Pre-emption rights. This restriction functions as a protective measure, preventing potential harm that could result from the misuse of individual rights within an association or partnership. In cases of co-ownership, shareholders are obliged to respect their partners' and associates' rights by offering them the opportunity to acquire shares before they are sold to an outsider. This right also allows co-owners to reclaim a share sold to a third party, provided that they compensate the purchaser fairly.

Pre-emption has the important merit of maintaining social cohesion and preventing mutual harm. Over time, it has evolved into a custom and a community practice that regulates individual building actions. Co-owners, neighbours, and other stakeholders were usually informed before any transaction with outsiders, ensuring that local interests are protected. In geometry, pre-emption can be seen as a unifying mechanism that operates in counteracting with subdivision.

Waqf, known in North Africa as *habus*, is another constraining principle to the freedom of building that acted in favour of the public and social groups. It consisted of persuading an owner to renounce his property for charitable purposes. Overall, it encouraged individuals to prioritize community interests and the collective welfare [42]. At the town level, the donated properties serve the large public or a specific social group in accordance to the owners' prescriptions and convictions. In most cases, waqf income covered public services and social amenities, such as healthcare, religious institutions, educational facilities, and housing for the poor. It was also used to support infrastructure and utilities, such as street paving, bridge construction, and water supply.

As tangible heritage, waqf (or *habus*) properties exerted a direct influence on urban geometry and the cityscape. As protected assets, both in form and function, they were safeguarded against alteration, demolition or appropriation.

At last, Public Interest is the other bounding principle that confined individuals' actions. In case of an evident necessity, the public realm was always given priority over private actions. The early stated liberating principles, i.e. the freedom of building actions, the appropriation, the transactions, and agreements may all be halted or cancelled if imminent damage or prejudice to the public or others realm arise.

These principles did not operate in isolation neither with the same frequency. They interacted continuously with each other, forming an integrated system that governed both private and communal actions. For example, the right of Pre-emption, which often worked to reunify fragmented properties, sometimes functioned in tension with inheritance laws that produced subdivision. Similarly, Appropriation which enabled the recovery of unused spaces, could be constrained by other property rights and by the Waqf measures. Consequently, the geometric configurations observed in the urban fabric frequently emerged from the combined influence of two or more of these interacting principles.

Operating as a self-regulating system, this body of daily customs and unwritten rules was transmitted across generations and, in most cases, applied independently of rulers and public authorities. Nevertheless, old Muslim cities maintained a light administrative apparatus that ensured the implementation of Islamic law in the public realm. Urban inspection, for example, was entrusted to the *muhtasib*, an official responsible for regulating markets, maintaining public order, and ensuring safety along main roads and in public spaces. In judicial matters, the judge - *qāḍī* - who evolved into a formalized institution during the Ottoman period – represented the legal authority empowered to adjudicate disputes concerning property boundaries, water rights, inheritance, and neighbourhood relations. Other agents, such as managers of waqf properties (*wakīl*), together with representatives of guilds (*Amīn*), ethnic groups, and neighbourhood communities, also formed essential components of this administrative framework.

Incorporating Islamic principles in the intangible heritage

From its inception, the field of heritage preservation was dominated by a materialist paradigm, with a primary emphasis on the protection of tangible heritage. Early efforts were largely object-centred, focusing on isolated monuments or artefacts. This object-oriented and folklorist perspective gradually expanded to encompass broader contextual frameworks, including urban and natural settings. Only in recent decades has the concept of heritage evolved to formally integrate intangible dimensions.

Due to the vagueness of immateriality, intangible heritage parameters and criteria of inscription have always been in arrears to those TCH and continuously under refinement. The successive versions; from the Venice Chart (1964) to ICOMOS, adopted in 1978, to the UNESCO Convention for the Safeguarding of the Intangible Cultural Heritage adopted in 1999, are milestones of such a progress.

On the ground, despite the scope of ICH that encompasses “the practices, representations, knowledge, skills – as well as the instruments, objects, artifacts and cultural spaces associated therewith – that communities, groups and, in some cases, individuals recognize as part of their cultural heritage”, it is not yet sufficiently incorporated in the preservation policies when this regards old Muslim cities and urban fabrics [43].

Statistically, the number of registered items in both categories reflects the significant lag between TCH and ICH lists. According to the UNESCO site, while the total number of the TCH is 1121 assets corresponding to 127 countries [44], there are only 549 elements in ICH, i.e. nearly half. And while many urban sites, historic buildings, monuments, and vestiges have been classified, the Intangible Heritage in the same domain of architecture, urbanism, and cities, building technology, and local Know-How is disregarded.

In Algeria, the national ICH inventory remains modest, with no reference to the deeply rooted cultural practices of desert towns (ksour), the Casbah, or the traditional processes of Medina-making. Until 2018, the only element recognized on UNESCO's ICH list was the *Knowledge and skills of the water measurers of Touat and Tidikelt*, associated with the *foggara* irrigation system. In Morocco, among the nine registered ICH elements, the Cultural Space of *Jemaa el-Fna Square* -inscribed in 2008- remains the only item on the World Intangible Heritage List that directly relates to urban preservation [45].

Identifiability and Recognition in the domain of intangible heritage in architecture and urbanism, within which are the Islamic principles, is however still problematic. The local know-how and the social skills and practices that regard building and construction, are not yet elaborated, let alone recognised by the policy-makers. Any preservation policy in medinas should thus renounce to the dissociation of TCH and ICH, and highlight the judicious symbiosis between the tangible and the intangible aspects. In other words, it should preserve the process as well as the product.

Conclusion

Policies of preservation in old Muslim cities are often overwhelmed by the tangible aspects that regards architecture, monuments, important buildings, urban fabrics and the built environment. This protective attitude often leads to “museification” of old cities and disregards the intangible aspects that stand behind this tangible character. Unwritten and endogenous principles that stood behind the formation and dynamics of these cities, constitute together, the immaterial heritage of the medinas.

Preservation policies should therefore be grounded in the correlation between the tangible aspects and the intangible dimensions of heritage. Principles that mostly derived from the Islamic doctrine and turned into customs, must be given a place within the legislative framework that accompanies preservation plans.

Professionals should highlight such principles in a systematic way and operationalize them in preservation policies. These principles -long applied but now weakened by top-down and prescriptive approaches- should be revitalized and promoted, as a way to enable communities to participate into preservation.

A reconciliation between the rigid, museum-oriented and conventional preservation, and the dynamic, community-based processes entails embodying these principles and bridges the divide between the TCH and ICH domains. As a transitory stage, this may be achieved through the spread of public awareness, the revival of the building culture, and the assistance of local authorities and professionals as enablers.

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