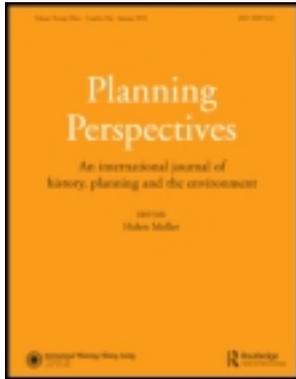


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Planning paradigm in the *madina*: order in randomness

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The sustainability of the current *madina* – despite its physical decay – reveals hidden dynamic urban mechanisms that have proved its reliability. Far from falling in the Orientalist synthesized urban images, and their counterparts, the very Islamic constructed ones, this paper seeks instead to argue on the planned aspects of a *madina*. The concept of planning shall be revisited in order to discern its intrinsic urban order. This implies no analogy with the contemporary urban planning. Its planning observed legal, urban and social ideals, creating neither an absolute *aestheticized* physical form nor dictating a totalizing function. The review of the planning paradigm in the *madina* would provide a genuine meaning of its name that had been altered to *médina* – a colonial term referring to a stagnant walled entity. Arguably, without a sense of order and planning, the sewer would flood its alleys, potable water would never reach its fountains, and one would never escape its twisty roads. It would be absurd to view *madina* as being totally random, and to assume that it did not generate a level of a pre-meditated planning. This paper poses decisive questions about the relevance of the *madina* in the age of modern urbanism, and deduces urban lessons for contemporary planners.

Keywords: *madina*; *médina*; planning; urban order; historic city; sustainability

Introduction

The use of the term planning may seem uncommon for the study of the *madina* or ‘Islamic city’. This is partly because innumerable studies have implied its urban randomness or unintentional sense of planning. However, if the term planning is defined within a larger perspective, it may help decipher the urban complexity of this particular city and reveal its well thought-out urban prototypes. This definition goes beyond the conventional modern definition, which is used by the very discipline of urban planning, to encompass all tangible and intangible elements that gave traditional cities a typical urban arrangement.

The planning or the organizational system of the *madina* was, accordingly, a complex process that overlaid political, religious, economic, and social parameters. This process was not solely a top-down process – which was exclusively guaranteed by the elite as asserted by Orientalists – key among them being Max Weber.¹ Such hypothesis has generated the notions of ‘created’ and ‘spontaneous’ urban fabrics. The ‘created’ ones were the result of the act of Sultans, and the ‘spontaneous’ ones were the result of the random act of community. This hypothesis seems currently very simplistic and outdated. It is more theoretical than a concrete reality. Any human settlement, regardless of its level of randomness, was governed by a typical social and ideological pattern. To describe the *madina* as a sheer labyrinth or maze is thus not a sound criterion to canonize any urban model for the complexity of human settlements.

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The concept and reality of the *madina* has reached a situation of chaos. The considerable amount of studies that have been produced in defining its myth,² and the academic discourse about what is Islamic or Arabic about it, has led us to abundant information, data, theories, concepts, and assumptions. This has created ambivalent conceptions that are lacking a clear holistic vision.³ In addition, the continuous gap between theorists and practitioners concerned with the understanding, conservation, and development of this *madina* has led to conflicting images that hinder its dynamic and sustainable nature.⁴

Instead of arguing, therefore, over the proper use of the planning concept within its context, I will focus on its urban structure that cannot be designated as merely spontaneous. To assess this city as fully spontaneous would be scholarly iniquitous and would purposely hide its planned or organized aspects.

Although Islam brought some normative common regulations to the *madina*, this is not to assert that all *madina(s)* from Morocco to China follow the same unchanging typologies. This paper is advocating neither homogeneity nor an essentialist view of the *madina*. It is rather a search for a meaning and significance of a certain inherent order that has been denied for too long. As Moroccan *madina(s)* are widely explored herein, the argument is to explore the author's acquired 'hands-on' and field knowledge in order to construe *madina's* complex urban organization.

While applying the planning concept within the current context of *madina* may sound peculiar, the modern planning – as a set of equations that narrowed its scope as an austere urban setting – is to be criticized. The lingering intrinsic urban mechanisms of this *madina* are worth investigating. This is essential today to support their urban conservation and development as well as to project their sustainable urban outcomes versus the modern planning that has proved its limits. To do so, I would *ab initio* revisit briefly the meaning of the concept of contemporary planning in contrast with the one implied to the *madina*.

Planning in the *madina*

Planning concept revisited

Contemporary planning entails the intervention of specialized planning institutions and individuals, following defined legal, economic, and political parameters in order to design an *a priori* city, and to fully control its territorial growth. The city form becomes, accordingly, an ensemble of static designed functional, aesthetic, and utilitarian urban systems. This determinism of contemporary planning is the result of 'anarchist roots' as well as a reactionary planning to change the unhealthy and chaotic nineteenth-century European historic city.⁵

Modern planning is, therefore, an invented technical apparatus of predetermined physical forms. All terms 'city', 'town', and 'urban' planning make it clear that the focus is the contemporary planning of the built environment.⁶ The *raison d'être* of such a planning is not to be imposed neither on the European nor Eastern historic city. The argument here is that the objectives, tools, and implementations of contemporary planning processes differ significantly from those of the pre-modern period. However, this does not insinuate that these latter had no planning or organization. Planning based on vision and visioning is an empirical practice.⁷

The failure of the modern planning invites us also to explore historic urban visioning mechanisms in order to grasp the comprehensive urban synergies that forged cities throughout history

as real life laboratories. Jane Jacobs, in her book *The Death and Life of Great American Cities*, echoed this argument. She reproached contemporary town planners for meagrely understanding the problems of real cities, and for they are fully preoccupied with their mere utopian images.⁸

Seeking other analytical means to understand the organization and the planning of the historic cities, the *madina* is, therefore, revisited as an empirical example in order to explore other concealed planning theories and concepts.

The concept of planning applied in this paper is, thus, deduced from the different inherent social, economic, and political mechanisms that took place not only at the macro-level of the city, but also at its micro-one. The house (family), neighbourhood (community), city (citizens), region (rural and urban populations), and territory (rural and urban settlements and cities) were all part of indirect or direct organizational microcosms.

These microcosms that cannot be ignored were a vehicle of a contextual urban expertise that stemmed from a time-lasting interaction with a certain locality – which engendered a cultural urban gist that identified this very locality. The term planning in the context of the *madina* implies consequently a process that departed from integrative actions. This process is primarily an accumulative urban course of interaction between space and human use following particular codes. These codes were the result of dialectical actions of builders, users, astrologers, ethnic groups, scholars, judges, and sultans.

While it would be absurd to make a direct analogy between this historic urban model and the contemporary one, the current urban planning is driven by highly specialized technical branches: transportation, hygiene, infrastructure, zoning and so forth. The traditional planning in the *madina* was rather a planning that sought to observe legal and social ideals creating neither an absolute *aestheticized* physical form nor dictating a sheer totalizing function.

These were the cornerstones in the making of a *madina*. This city embodied a sound communal fabric within a territory, which guaranteed its sustainability. Whenever a political power suppressed this fabric, community life dwindled, and was replaced by totalitarian political forms that seldom persisted through time. This is due to the ephemeral nature of political authority that cannot substitute fully a grassroots social structure, which sustained through living urban microcosms. Planning was hence not always dictatorial and normative as claimed, but inductive as well. The whole Orientalist attitude of comparing systems of ruling of the West and East, and criticizing the East for not having an autonomous social system in cities should be reviewed. A certain internal planning existed and exists regardless of the common stereotype of *unplanned madina*.

This attitude towards understanding the complex *madina* has imposed several external urban models on its model that cannot be merely synthesized through easy ready theoretical formulae. On the other hand, some Muslim scholars, in their attempt to prove the opposite, have worsened this systemization. Their attitude towards the subject remains merely subjective rather than objective, archaeological and empirical. They pursued an easy path of proving the ‘Islamicity’ of the city regardless of its universal genuine architectural and urban patterns.

The planning concept presents, therefore, the *madina* as an established manual of premediated and practiced social, cultural, and urban orders, which had generated through centuries successful regional spatial typologies. Despite that some of these urban typologies might be identical, the purpose here is, by no means, freezing the *madina* in one or two essentialist models. The argument is centred on reviewing the philosophy of producing the urban and the social space order in different cultures.

'Unplanned' madina

The Orientalists studied most the Maghrebi *madina* because of its closeness to Europe as well as its particular compact urban morphology. They generalized its model as representative of all *madina(s)* throughout the vast Islamic world. They stressed intentionally its fully unplanned nature to question its urban reliability and social autonomy versus the Greco-Roman model in order to justify the rational orthogonal colonial city.

Initiated chiefly by Max Weber, Orientalism tended to create primarily a logical political and social model of the *madina* in contrast with a superior European city model. Weber and brothers Marçais, who widely contributed to coin the concept of an Islamic City, did not intend to deduce neither its spatial nor organizational significance. William Marçais was among the first to stress the link of its urban life to Islam – not for the sake to prove its success, but to underline its urban failure following Weber's footprint.⁹

Georges Marçais presented its morphology, but as accidental urban districts and individual key facilities without any hint to its inherent communal or spatial order.¹⁰ Although Jean Sauvaget and Louis Massignon questioned the organizational level of the *madina* (especially the Syrian model), and tried to find explanations to some Orientalists' critics, they did not recognize fully its structural model.

While Massignon's identification of its autonomous and structured guilds¹¹ was unprecedented to reflect a certain social order, which had a particular spatial order, Sauvaget addressed clearly the plan of the *madina* but in comparison with the European ideal model in the Weberian manner.¹² However, Sauvaget's key argument was to prove that the *madina* had no rigorous social and authority structure so that to reach the ideal European urban model, which he defined *a priori*.

Any partial or full order or planning of the *madina* was, thus, always secondary in most Orientalists' arguments. Almost all agreed on a prime description: the *madina* was a random organization of scattered self-contained neighbourhoods. In some cases, key monuments were glorified underlying scantily their overall role in the structural formation of the *madina*.

The enduring argument about the link between Islam and some particular urban patterns in the *madina* remains sound though continuous denial and concern about its normative impact. Robert Brunschvig exposed further such an argument through examining the Maliki law particularly in North Africa. Using judicial textual references such as the one written by the fourteenth-century notorious master-builder who became a judge, Ibn Rami, Brunschvig recognizes a certain urban order. The 'private/public' spaces, as an instance, had an impact on structuring the form of the *madina*.¹³ Brunschvig underlined the fact that the *madina's* topography is not fully random, and its spaces could be understood through Islamic codes and norms.

The weak element of centuries of Orientalists' work is, nonetheless, the intentional undermining of Islamic urban norms as well as the fervent tendency to prove the inferiority of the *madina vis-à-vis* a Greco-Roman (European) model. This made it almost impossible, even today, to move further to discuss the possible intentional urban or social planning. This paper is a plea to further research the existing fabrics of the *madina*, not through an ideologically biased literature medium, but rather through 'hands-on' field architectural, urban, and archeological investigations.

Although some scholars such as Ashtor-Straus, Claude Cahen, Samuel Stern, and Ira Lapidus questioned an ideal type of a *madina* to challenge the common established stereotype,

their counter-arguments felt short to produce a plausible image to be widely disseminated as their predecessors. Lapidus revolutionized, principally, this field of research by standing firm to the stereotype, at least in proposing new methodologies to decipher the myth of a *madina*. His major contribution is contained in his *Muslim Cities in the Latter Middle Ages* in which he recognized the Islamic urban phenomenon that expanded and revived the urban experience of its preceding civilizations.¹⁴

Lapidus challenged vigorously the Weberian ideological model, and attempted to find the institutional urban hierarchy of actors who influenced the urbanism of the *madina*. This has opened new venues for its comprehensive understanding as not confined, but integrated and organized within its rural surrounding with a sense of territoriality. It is indeed a bold attempt to study Eastern cities within their peculiar cultural, social and historic environment. Lapidus' approach is, thus, unique as it exposes for the first time the *madina* by using its own analytical tools without being disrupted by an external model. This has allowed accordingly presenting its sense of an institutional order that mediated a sense of an intrinsic urban order.

Most scholars after Lapidus, though poignant in their methodology, tended to digest the abundant materials or tackle the unfathomable topic of the *madina*, from a specific angle or detail, for the sake of a mere deconstruction without being able to shape a holistic vision. Eugen Wirth, Dale Eickelman, Hugh Kennedy, and Oleg Grabar are key examples.

With Edward Said's Orientalism,¹⁵ the act of simply relying or defending the heavy Orientalist literature has become a suspicious matter with all the damage made to the image of Oriental cultures and cities. The model of Gustave Von Grunebaum, which summarizes all Orientalist negative images in one ideal disordered prototype, is no longer attractive.

Hichem Djait, a native Tunisian historian, added much to the concept of planning the *madina*. In his *al-Kufa: Naissance de la Ville Islamique*,¹⁶ he proved the planning of Kufa and its sense of order that was pre-meditated. He questions the disorder of the *madina*, and resituates its value vis-à-vis the devaluating arguments of Orientalists. Djait's discussion of the influence of the planning of Kufa on other *madina(s)* such as Baghdad and Basra is indeed revealing of a transmission of an Islamic urbanism, which was not stagnant or relevant to one place. Although he dealt with early and medieval *madina(s)*, his methodology is worth exploring in other historic periods as well as regions of the Islamic world.

Research should emanate, therefore, from the inside of the Muslim world that presents a practical and intrinsic image of the *madina* not for the sake of endless speculation, but for building *in situ* knowledge in order to grasp the user's understanding and exploration of the *madina's* space.

In this context, Henri Lefebvre's *The Production of Space* is pertinent to our discussion. Using Lefebvre's dichotomy, it is important to distinguish between the *mental space* fabricated by Orientalists, and the *real space* of the *madina* as lived and practiced by its own people. Orientalists have hence never found an order of space in this *madina* because their main focus was to find the orthogonal and geometrical space of the Greco-Roman model that is not forcibly the only order to be found universally throughout the history of mankind. Regarding the definition of space, Lefebvre states the following:

Not so many years ago, the word 'space' had a strictly geometrical meaning: the idea it evoked was simply that of an empty area. In scholarly use it was generally accompanied by some such epithet as

‘Euclidean’, ‘isotropic’, or ‘infinite’, and the general feeling was that the concept of space was ultimately a mathematical one. To speak of ‘social space’, therefore, would have sounded strange.¹⁷

The social order of space in the *madina* that was translated physically in a very expressive way, as witnessed today for example in the living urban patterns of Fez, is not regarded anymore as a maze. The number of Europeans fleeing the orthogonal European city, and seeking the organic and environmental space of the *madina* is an utter proof of its urban viability. The disorder is thus an order for its user, and what might be perceived as a sheer randomness is rather a mental construct of a subjective perception. Lefebvre questions thus the history of space:

... we should have to look at history itself in a new light. We should have to study not only the history of space, but also the history of representations, along with that of their relationships – with each other, with practice, and with ideology ... We may be sure that representations of space have a practical impact, that they intervene in and modify spatial textures, which are informed by effective knowledge and ideology. Representations of space must therefore have a substantial role and a specific influence in the production of space.¹⁸

The social logic of the lived space gives it a certain meaning and sense of order (Figure 1).

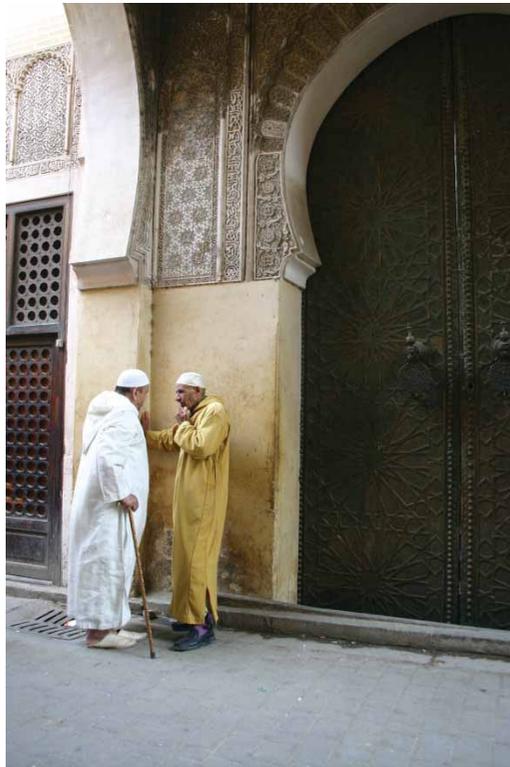


Figure 1. The human factor impact on the *madina*'s sense of order (photograph: author, Fez *madina*, 2008).

Objectives of planning in the *madina*

Planning the *madina* implies not here a discipline of its own or as discussed neither the contemporary urban planning nor its philosophy. It is rather an investigation of intentional or practical acts for visioning and organizing the *madina*'s space. This planning or intentional sense of order or disorder created a typical urban legacy that engendered a sustainable functioning form and use with a peculiar urban representation. The key hypothesis is that the formation of the *madina*'s space could not be merely accidental, and if so, chaos would end immediately its urban life. The durability of the *madina* throughout time demonstrates that its sustainable social and spatial synergy resides in both its conceived and lived spaces (Figure 2).

The quest for the well being of the community in short and long term was an essential ideal in the *madina*. As clearly prescribed by scholars of *fiqh* (Islamic jurisprudence), it was 'the quest for common benefit [*maṣlaḥa*] of the community in the near and far future, and its protection from forthcoming harms [*maḥāsīd*]'.¹⁹ This key ideal is important to decipher the *madina*'s premeditated structure.

How such a compact and dense urban fabric enabled its users to reside or work in overlapped buildings without being exposed to human or physical harm.²⁰ Although aesthetically the *madina*'s external spaces might be seen as simple or austere, the intricacy of its functions as well as the optimization of its land use within its walls reflects an intended sense of order that is not to be merely geometrical or orthogonal.

For the *madina* to reach the level of a proper city, where people come to settle with their families and establish their trade for a period of time, a sense of planning was thus necessary

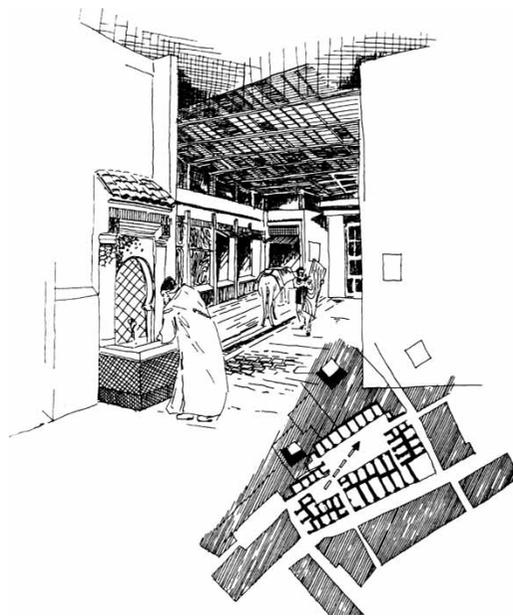


Figure 2. A plan and a view of a specialized garment market (*suq al hayk*) in Fez *madina* (drawing: author).

for its urban maturity. To reach this end, scholars debated, accordingly, its defence, demography, administration, religion, and labour objectives.

For example, in order that an urban settlement to be identified as a *madina* its inhabitants should 'feel protected, and if they are attacked by an enemy, could defend themselves. Thus, they are permitted to establish their *madina* on the condition that they appoint a just ruler'.²¹ Demographic conditions and administrative structure were therefore essential for the establishment of an urban system. On the other hand, some scholars reckoned that labour opportunities and conditions for subsistence were crucial for sustaining it, '... every worker could live with his craft in it [*madina*], without shifting to another'.²² The religious condition is continuously stressed, especially the role of Friday congregational and neighbourhoods' mosques in assembling and unifying spatially the community around the *madina*.²³

To crystallize this sense of organization or planning, Ibn al-Rāmī, a fifteenth-century Tunisian master-builder who became a judge, presented a more practical view. Through his outstanding treatise on the building process in the *madina*,²⁴ he provided an expert's image on its space production. Being a master builder, he conveyed how its physical realm was shaped following community principles as well as *nawazil*, the solved contentious building cases among neighbours.

On the notion of 'harm' or '*darar*', he affirms 'that all conditions creating harm are to be removed except the obstruction of air movement and sunlight due to the increase in height of an adjacent wall or building. However, if such an obstruction was created to inflict harm, it should be removed as well'.²⁵ Avoiding harm (*darar*) was primordial to assure common and individual benefit (*maṣlaḥa*) while living together in an intricate and compact space. According to Ibn al-Rāmī, planning could be interpreted therefore as a set of measures undertaken in the near and distant future to avoid malfunctions in the building process in a *madina* in order to build a sound physical environment from bottom-up.

Ranging from the individual house to the strategic defensive fortifications, the different urban units of the *madina* could not be managed without certain levels of planning exercised by numerous known or unknown actors. These levels of planning were vertically supervised through individuals and institutions concerned with the strategic elements of the city, and horizontally through individuals and private initiatives at the neighbourhood level.

This could be understood through the conditions that made a *madina* mature. Ibn Khaldūn was among the very few scholars who tackled closely the requirements for a mature and comprehensive *madina*. His arguments about the *madina*'s formation, and its sustainable '*umrārn* (a mature and encompassing urbanism), echo the intentional political and social sense of organizing and planning its space.

Towns are dwelling places that nations use when they have reached the desired goal of luxury and of the things that go with it ... The purpose of (building towns) is to have places for dwelling and shelter. Therefore, it is necessary in this connection to see to it that harmful things are kept away from the towns ... and that useful features are introduced and all the conveniences are made available in them ... In connection with the protection of towns against harm that might arise from atmospheric phenomena, one should see to it that the air where the town is (to be situated) is good, in order to be safe from illness ... Towns where no attention is paid to good air, have, as a rule, much illness ... The ruler of Tunis besieged Gabes and cut down the palm grove that surrounded the town. Part of (the town) was thus opened up, and the surrounding air could circulate and the winds could get into it ... In connection with the importation of useful things and conveniences into towns, one must see to a number of matters. There is the water (problem) ... The existence of water near the place simplifies the water problem for the inhabitants, which is urgent ... All

the (requirements) mentioned differ in importance according to the different needs and the necessity that exists for them on the part of the inhabitants. The founder (of a town) sometimes fails to make a good natural selection, or he sees only to what seems most important to him or his people, and does not think of the needs of others . . .²⁶

The use of treatises such as Ibn al-Rāmī's and Ibn Khaldun's is pertinent for the study of the attitudes of planning in the *madina* from within a contextual perspective. To rely only on Orientalists' physical description per se without primary authentic sources or archaeological scientific investigation would be insufficient to deduce the methods of producing the social, cultural, and economic space of the *madina*. When the *madina* is assessed only on the basis of aesthetic typologies, which discard its religious, social, ethnic, and economic objectives and structures, an altered image is often the possible outcome.

Levels of planning in the *madina*

Planning intentions or actions were exercised by ruling individuals or community representatives/members in order to contribute partially or fully to *madina*'s urban organization. As this planning differed in scope – for not having precise institutions as today – it covered different levels of the *madina*. The neighbourhood, market, crafts, and so forth could not survive without a local spatial and administrative structure as well as the city as a whole could not sustain without a strategic structure that oversaw its general urban elements. The strategic one covers, therefore, the strategic peripheral and internal needs of the *madina*, and the internal local one embodied more its residential, commercial, or industrial neighbourhoods' level. The local level of planning was problematic in the *madina* as to the geographical size of districts as well as the community representation that was not always in tandem with the top power holding individuals and institutions.

The strategic planning is substantially determined by the ruling system and its nature as well as the military, political, or civic events that were the driving forces behind the establishment of the spaces of the *madina*. The rulers had often the responsibility of organizing the strategic urban structure through political, administrative, financial, jurisprudential, and military institutions.²⁷ For example, the financial planning in a *madina* was indispensable at finding resources without unnecessarily over-taxing (*mukus*) its inhabitants in order to seek a certain economic equilibrium between its financial incomes and expenditures.²⁸ The efficiency of financial planning cannot be divorced from the required strategic urban requirements to keep the *madina* functional in all levels.

Accordingly, the strategic planning of the *madina* consists of two levels: peripheral and internal. The peripheral level had a tremendous effect on its development or decline since the choice of its site was decisive in determining its future. This choice was governed by geographical, defensive, economical, and environmental criteria. Defensive considerations consisted of having a strategic location such as ' . . . being on an inaccessible hill in mountains or overlooking a sea or river, and its access should be only through a bridge, in order to be unreachable by the enemy, and hence its defence is doubled . . .'²⁹ (Figure 3). The economic criteria were realized by means of its peripheral network of cities, trade routes, coastal position, and accessibility. On the other hand, the environmental criteria determined its sustainability through its agricultural surroundings and its resourceful geographical site.

The planning at the internal level of the *madina* dealt with its main urban corpus. Ideally it managed its immediate environmental surroundings and its internal strategic urban layout to



Figure 3. The strategic defensive fortifications espousing the mountainous site topography of Chefchaouen's *madina* (photograph: author, Morocco, 2009).

keep its districts functioning. Without this planning, the *madina* could not function properly, particularly, if they were over populated. In addition, the importance of planning became apparent when the *madina* was experiencing a decline. In the case of Fez, under the Wattasids during the fifteenth-century CE, the financial resources derived from taxes and *waqf* shrank drastically, and this affected the urbanization of the city. Since the Wattasid rulers had weak urban governance, their strategic planning for improving cities was ineffectual.³⁰



Figure 4. The colossal main gate to Mulay Ismail's royal city in Meknes (photograph: author, Morocco 2006).

Nevertheless, the achievements of this planning in the *madina* should be critically analysed. Was it a planning of rulers who exclusively used it to build their palaces and protect themselves by fortifications, or was it a planning that served the well being of the masses? Mulāy Ismā'īl's royal city in Meknès is an example of planning that aimed rather at the manipulation of the urban layout of the *madina* for royal ends (Figure 4).

Conversely, the most successful dynasties in terms of planning cities, and endowing them with a planned urban layout, were those of the Almoravids and the Almohads. Their ties with urban Spain, and territorial unifications, resulted in having sound spatial arrangements for cities such as in the cases of Marrakesh and Rabat. In the Almohad dynasty, al-Manşūr projected the extension of Rabat through the expansion of its walls based on a pre-planned layout, and launched the implementation of its strategic monuments such as the monumental mosque and tour of Ḥassān. These strategic decisions of ruling powers influenced deeply the development or decline of cities, and reflected the purpose of planning that was either targeting at prospering the urban life in the *madina*, or creating elite royal fortresses. The urban development of the *madina* should not be only viewed through the number and size of royal palaces, but also on how prosperity reached its different urban spaces and territories.

What are the physical elements of the strategic planning (strategic peripheral and internal) and the local planning (internal neighbourhoods and districts level)? How did it affect the *madina*? Who were the actors? However, emphasis will be made on strategic peripheral and internal planning for the scope of one paper cannot permit us to elaborate extensively the local planning which will be a subject of another research paper.

Peripheral planning

The *madina* is often viewed as confined within a wall, but its urban perimeter was not solely the wall. My examination of major written primary sources reveals that the *madina* was always portrayed with its close and far peripheral environs. The jurisprudence sources used specific terminology to determine the different peripheral zones of the *madina*, which could be divided into two: The environmental zones (*zāhir*, *finā'*, and *sawād*); and the extension zones (*istiṭālāt*, *arbād*, and *tawābi'*).³¹ This division might seem extraordinary for a contemporary planner, especially in the manner that how scholars and users dealt with the *madina's* territories in the past. They described them thoroughly in their sources using accurate terminology that originated from their jurisprudential urban and territorial concerns.

Scholars described the peripheral zones of a city based on its agricultural, defensive, or commercial needs. The Friday prayer was also a key criterion as far as distance to the mosque is concerned.³² For instance, this decision determined the size of a community or neighbourhood, and it can be considered an early urban norm as in contemporary planning but within a different context (Figure 5).

The environmental zones: zāhir, finā', and sawād were as a sort of natural reservoir to the *madina*. (1) *zāhir* is the immediate vicinity of the wall that was a *non-aedificandi* zone in order to keep a strategic defensive zone with fortifications. (2) *finā'* is different from the first, and is defined according to distance and function. It is the surrounding area of *zāhir* in which the *madina* expands its functions. Scholars determined it by its distance from the walls, and argued an estimate of one to two *farsakh* or three miles.³³ This distance was estimated following the size of the *umrār*, the whole urbanized site of a city. Thus, it ought to be proportional to the

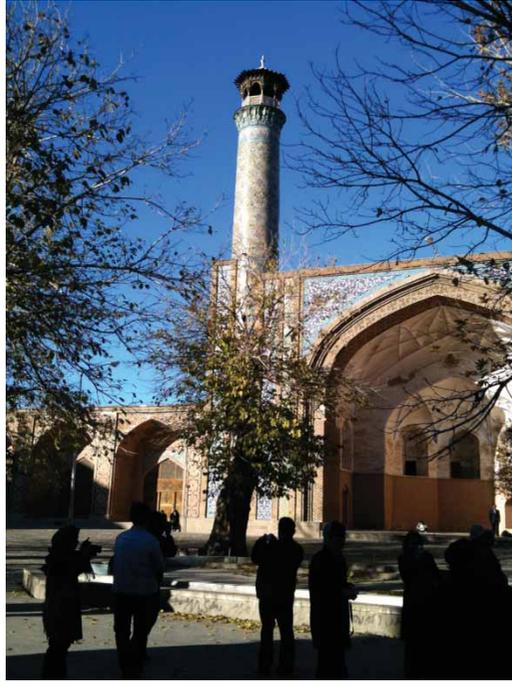


Figure 5. The *Jameh kabir*, congregational mosque, of Qazvin had a great impact on sizing its urban territory through different extensions (photograph: author, Iran 2010).

size of the *madina*. It was also determined according to functions since it was an area destined for the collective public use by the inhabitants of the *madina*.³⁴ This public use considered the presence of a *muşallá* (open air praying ground), cemeteries, military training grounds as well as departing sites for pilgrims, and tanneries. (3) *sawād* is mainly a vast agricultural vast zone outside the *finā*?. It might enclose forests, meadows, mountains, or arable lands. It posits the *madina* in its geographical context, and provides accessibility through routes with other urban settlements.

The extension zones: *istiṭālāt*, *arbāḍ*, and *tawābi*⁶ were the physical extensions of the *madina* outside its walls. While its urban growth was internally and externally managed throughout time, the *madina* had taken different shapes following its natural site and optimizing the use of its available *intramuros* lands. Ibn Khaldūn states:

... if the life of the state is long and its period is open, manufactories are still erected, spacious houses are still increasing, and distance to markets is still expanding [in *madina*] to the point its plan is extended, its distance is longer, and its area is prolonged, as what occurred in Baghdad and other cities ...³⁵

Therefore, the *madina* was not a fixed walled static entity. The studies conducted on the extension of the *madina* have been exceedingly descriptive of its different functions, in different 'Islamic cities', without attempts to address its physical extensions. For instance,

André Raymond in his meticulous study on ‘Grandes villes Arabes à l’époque Ottomane’ displays a myriad of connotations used to describe the peripheral economic functions of the *madina*, but rarely organizes them through legal or spatial guidelines or categories, which were well established as argued earlier. Raymond uses the term *catalogue* to describe randomly peripheral activities. ‘Le catalogue des activités périphériques est facile à établir et la liste qu’on est amené à dresser se retrouve, sans grands changements, d’une ville à l’autre’.³⁶

His description is exhaustive as a narration of accurate images, yet it would be hard to find a clear assessment of what was a peripheral extension of the *madina* in as far as an urban organization is concerned.

- (1) *istiṭālāt* (sing. *istiṭālāh*, it is derived from the Arabic verb *istaṭāla*, to expand) were the different extension areas of the *madina* outside its walls. Many cities such as the early Kūfa suffered from these extensions. It was divided into seven parts, each with its *istiṭālāt*, which made it difficult to manage. The *istiṭālāt* were different from the *arbāḍ*. The first was an extension zone of multi-functional purposes, and the second was a more residential extension of the *madina*.
- (2) *Arbāḍ* (sing. *rabaḍ*, it is derived from the Arabic verb *rabaḍa*, to settle or to halt). They were the different residential districts that were built adjacent to the walls, and were a kind of urban tentacles. These areas were gradually integrated into the walled body. The case of Tunis is pertinent in this regard; the *arbāḍ* expanded in size almost equal to the main core of the *madina*.³⁷ The *arbāḍ* were always under the protection of the city.
- (3) *tawābi‘* (sing. *tābi‘a*, it is derived from the Arabic verb *taba‘a*, to belong to or to follow). *tawābi‘* could be seen as satellite settlements in contemporary planning. They were the peripheral settlements such as the rural neighbourhoods. They can be considered as the extensions of the *arbāḍ*. They could not be called *tawābi‘* if they were not so. The *madina* protected these satellite settlements in the vicinity of its *arbāḍ*.

The jurisprudential literature dealing with the *madina* provided, therefore, a sort of an urban typology as summarized in this diagram (Figure 6). The emphasis in this diagram is made on urban functions according to the terminology used to describe the *madina* with a planning paradigm lens. The purpose is not to draw an ideal type of a *madina*, but to prove that it consisted of different parts within its territory, and not as commonly described as the walled confined city.

Internal planning

Without a strategic internal planning, the streets could never lead anywhere, and one never escapes from the supposed maze of the *madina*. It would deliberately obstinate, after centuries of urban existence, to assume that this city did not develop a certain sense of internal planning. If supposedly there was no planning, one wonders how potable water reached its fountains, how sewers connected its houses, how roads led to its gates, and how crafts provided its markets with goods.

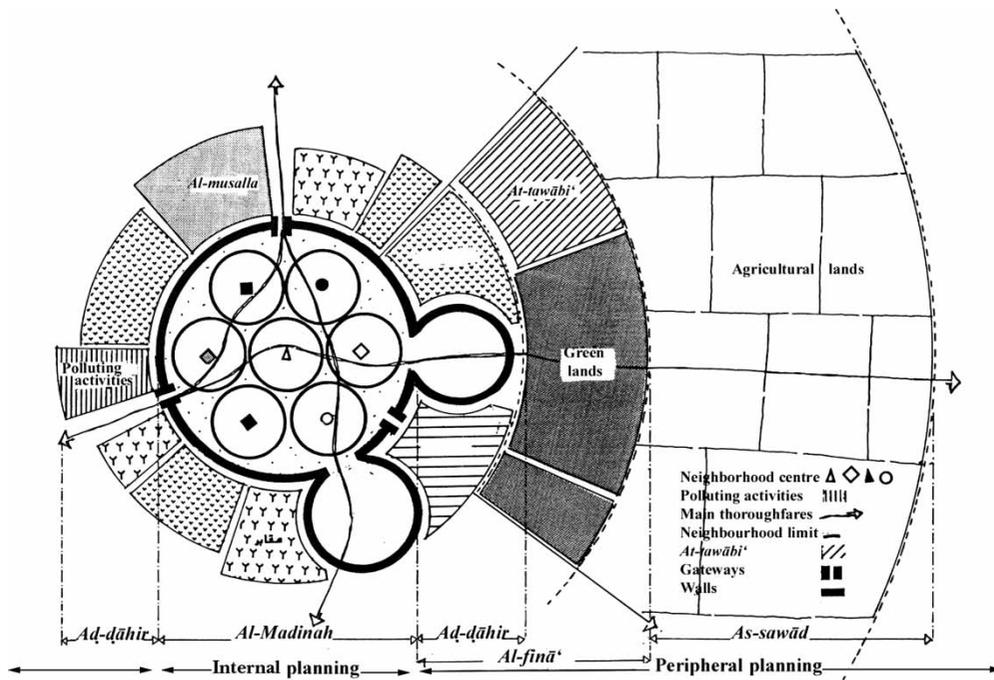


Figure 6. The comprehensive *madina* layout and its levels of planning (schema: author).

What was an internal planning in the *madina*? It was both preventive and visionary actions, which sought to spatially organize the residential, political, commercial, industrial, and technical activities. In order to maintain a private and public balance, measures derived from legal, social, and political orders were sought. This provided arguably a means to establish the *madina*'s strategic urban elements: the division of districts (residential, commercial, or industrial); the strategic urban facilities and infrastructure; thoroughfares and avenues; and accessibility.

The most strategic element was the division of the *madina* into districts or *khūṭaṭ*, which was essential for its formation and evolution, and that which we connote as the 'internal local planning'. The organization of the residential neighbourhoods was at the core of this planning as residing and settling was a primordial need. All activities were organized accordingly to meet the other needs of the inhabitants, which were known as *maṣāliḥ al-ʿamma* (public interests).³⁸ The residential vocation of the *madina*, which was indispensable to the establishment of the *ʿumrān*, an ideal functional and sustainable urban whole, could not have thus existed without an established and active community. *ʿUmrān* defined the purpose of the *madina* as a structured civilized urban environment, which was called *ḥadhāra* by Ibn Khaldūn. This is why a city is still today called in some Arab regions: *al-Ḥadhariyya*. *Ḥadhāra* was not limited to a physical urban body. It was rather a community's mode of being that established itself in a particular refined and mature urban and social realm.

What transforms the *ʿumrān* (comprehensive urbanism) into the *ḥadhārā* (a refined urban civilization) level? It was the manner in which a settlement was transformed from a nomadic

or rural setting to a sustainable organized one. The shelter was first found and subsequently 'luxuries of life' were sought.³⁹ Thus, the crafts came to meet this end in order to give the 'umrān its 'physical life' which was the sedentary life or the 'umrān al-ḥadharī. 'Physical life' was defined by Ibn Khaldūn in *Muqqaddimah* as the following: '... and that any civilization, be it a Bedouin civilization or sedentary culture, whether it concerns ruler or commoner, has a physical life, just as an individual has a physical life ...'.⁴⁰

The 'umrān al-ḥadharī provided an urban structure with a certain order that distinguished it from the *badawa* (nomadic setting). This structure could not occur without an established urban community. The chief element of this spatial experience was the gradual shift from the private to the public realm and vice versa. This shift was canonized *De Jure*, and physically translated to plan a livelihood in a public arena without stepping over the private needs.

How could such an aim be achieved without an intended planning? The private territory expanded to a public one through spatial codes that revealed clear signals to their users on how to function. This is a language that needs all its components to be read and spoken; Ibn Khaldūn coined the term 'umrān to eloquently describe this urban phenomenon. Why not state that the Khaldunian's *kamal al-umrān* (a comprehensive one), which was but a mature and planned urban body, versus *kharab al-umrān* (a declining disorganized one) was an unprecedented urban measure in history that assess the order and sustainability of cities.

For a *madina* to encompass a large number of neighbourhoods in its territory, circulation networks were taken into consideration. The first noticeable planning of thoroughfares in the *madina* was reflected through their hierarchical importance that dictated their dimensions. Following these dimensions, the user was notified about the privacy level of the frequented space. Subsequently, the main avenues influenced the urban structure by providing connections within its major parts, and the dead-end alleys served as a unifying urban factor for individual houses. The first and the second were connected through intermediary streets (Figure 7).

Commercial activities on a street of a certain size were prohibited as far as calmness of residential parts was concerned. The passerby is thereby alerted through urban physical parameters to the fact that a given zone was residential and therefore there should be no disturbance. From the noisy and polluting industrial and commercial areas to the tranquilised residential areas, boundaries of narrowing and twisting streets were established in order to stop any *darar*, harm, from intruding into the living space of neighbourhoods (Figure 8). Was this a random layout without intentional planned ideals?

To further justify our argument, let us cast our glance at the historical precedents of streets network planning in the *madina*. The case of Basra is very pertinent here. When 'Ataba ibn Ghazwān was its governor, during the Caliphate of 'Umar ibn al-Khattāb, a major dimensioning of streets took place as al-Māwārdī points out:

... They planned its avenues by making the size of the main one (street) sixty cubits, that of its next in size twenty cubits, and the size of each *zuqāq* (a small street) seven cubits. They planned that based on a consortium between them and on a text [legal] that should not be violated ...⁴¹

Therefore, the dimensioning, use, classification, and design of streets were of utmost importance in the *madina* in order to keep its urbanization efficient and accessible. The planning of main streets was not feasible without the legal structure. In modern times, this is similar to the current law regarding land use in urbanism.



Figure 7. An example of an intermediary street that connects commercial streets and residential ones (photograph: author, Fez *madina*, 2005).

What the *madina* has given to urban history is the advanced regularization concerning the use of public spaces in a city. Two major Islamic laws concerning street planning and the use given to it are: *ḥaqq al-intifāʿ* (usufruct) and *ḥaqq al-irtifāq* (servitude). Both rights defined the street as a public property and, therefore, anyone could freely use it since it was a common territory. Being permissible caused other legal issues about the individual's private use of public property. Thus, many prohibitions were set to regulate the private use of the public arena. These prohibitions include: building for private purpose on the street, wall's water drainage, plantation of trees, slaughter of animals, and dumping of garbage.⁴² The legal structure together with strategic connections between different gates and neighbourhoods created a typical street network, which was peculiar to the *madina*.

The *madina* provided as well a myriad of strategic spaces. These spaces, known for their commercial or ceremonial purposes, were accessible through primary thoroughfares. The massive monuments such as mosques, caravanserais, mausoleums, *zawāyā*, covered markets (*qaysāriyya*), and palaces engendered eventful spaces through their encounter with the thoroughfares. These buildings were made noticeable through their enlarged volume or through their gates, which were made special by increasing their size and ornamenting their frame. Beyond the aesthetic level, these monuments, and their gates, had the functional role of

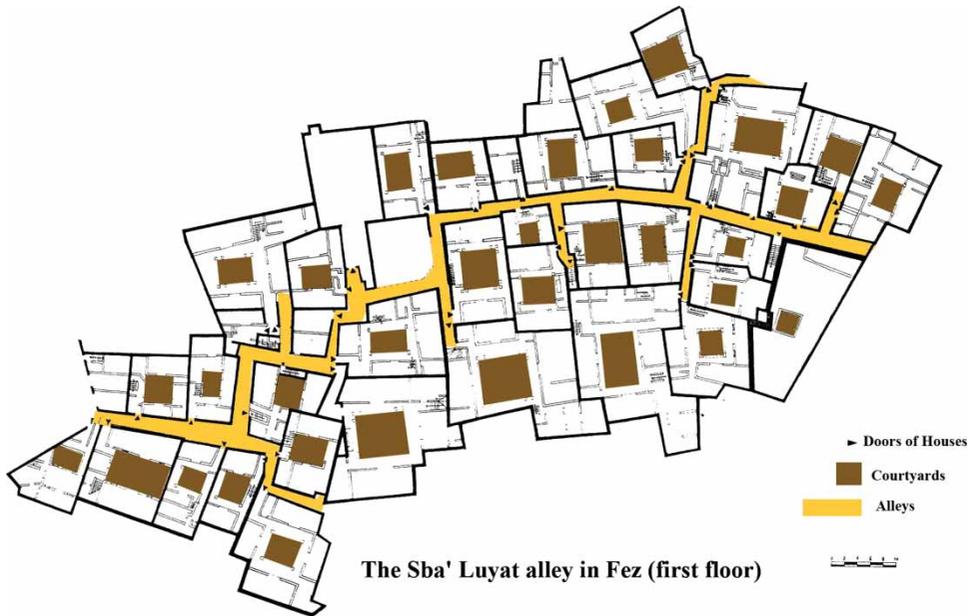


Figure 8. An example of spatial organization in a residential alley with geometrical courtyards and cul-de-sac alleys in the Sba' Luyat neighbourhood, Fez *madina* (plan: author).

connecting neighbouring spaces as urban poles. Thus, the main urban facilities and their network of streets were a major element in planning the *madina* (Figure 9).

Another factor, which should be taken into consideration when approaching strategic internal planning in the *madina*, was that of the infrastructure, particularly the potable water channels and the sewers. If the *madina* reached a population of 100,000 at different periods in history, how could one imagine that such a dense compact city existed without planning its water supply and cleaning its sewage? Fez, Aleppo, Damascus, Tunis, and Marrakesh were all examples of advanced water planning systems. In the case of Fez, there were four types of water networks. The first was water from the rivers that was distributed throughout the site of the *madina* in order to clean its streets and individual houses. The second was that of spring water spouting all over and channelled to be distributed equally on houses and monuments. The third was rainwater that was managed by slanting terraces and streets to reach the sewers. The fourth was sewage that was managed through advanced underground structures, which were in some cases very wide (Figure 10).

Why was water provision a strategic planning component? Since technical solutions were often costly and construction was massive, it would be impossible for individuals to meet this end. Consequently, while the rulers frequently sought to bring water to the *madina* through strategic systems such as aqueducts, the *muhtasib* supervised its distribution (*qisma*) among buildings and districts in an equitable way.

On the other hand, many cities, like Cairo, suffered from the lack of water. Its water supply was maintained through a system of *saqqā'in* (water-carriers) organized through guilds.⁴³ They

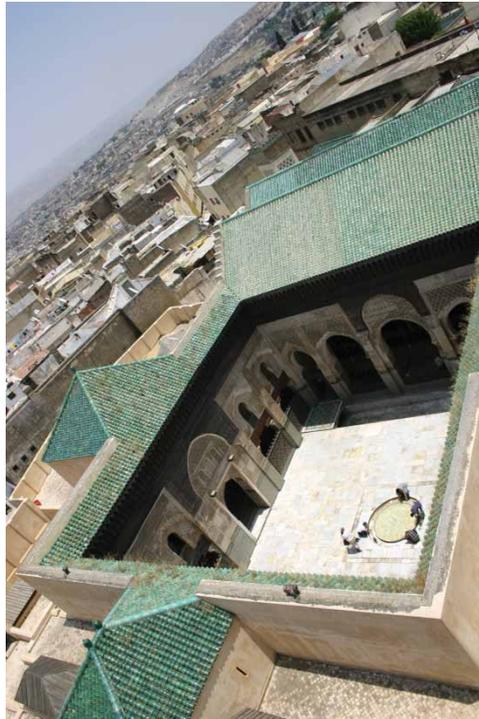


Figure 9. Madrasa Bu'inaniyya's geometrical order and its impact on the surrounding urban layout (photograph: author, 2001).

carried water from the Nile River in order to distribute the water to houses and public facilities. This occurred due to a lack of a planning which failed to connect the city to the Nile with aqueducts. 'It seems that it was never decided to remedy this situation by the construction of aqueducts . . . The aqueduct anciently constructed, and reconstructed in 1508, served only the citadel; yet maintained with some negligence'.⁴⁴

The other domain of internal strategic planning that ought to be addressed is the distribution of functions in the city. They were not well defined in the sense of zones as devised by the current urban planning, but they were organized on an interactive basis. Specific functions were exposed more than others and some were distanced for security, topography, or pollution matters. Examples of these functions were: the palatial units, religious and scientific units, industrial units, and commercial units.

The internal planning in the *madina* took many forms so as to establish a functional city. Planning was thus not only based on projection, but also on prevention. This ability to foresee things before their occurrence was first acquired by establishing a record about legal cases in cities, and secondly by using the expertise supplied by different disciplines such as astrology, medicine, geography, engineering, mathematics, and economics. Legal cases should not be understood as only a court affair for scholars of Islamic merely religious

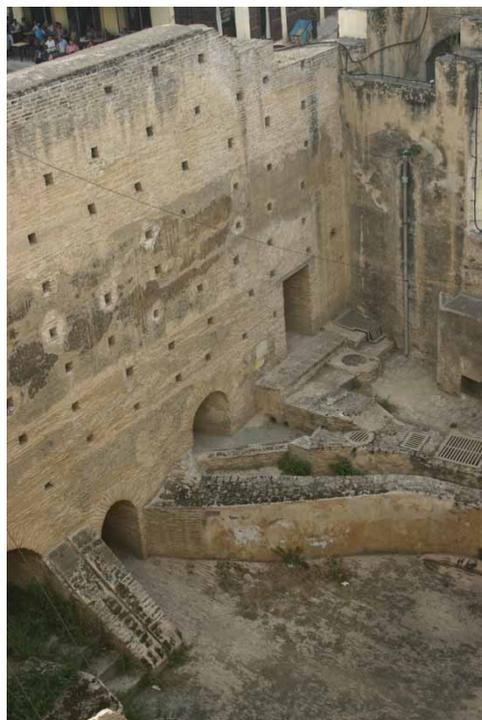


Figure 10. The general distributor of river waters to different districts in Fez *madina* (photograph: author, 1998).

jurisprudence. For example, among the criteria for a judge to be nominated as a judge was his scholarship, which included religious and secular matters.⁴⁵

These cases were embedded into social and urban matters, which created functional urban environments. Advisors, ministers, experts, scientists, *qāḍī al-mazālim* (the head of the judges of the city), guilds leaders, and notables were part of this process. This is not to say that these categories of people or institutions were gathered in an urban planning authority as today. However, it is crucial not to neglect that there were considerations to make the city as viable as possible without making it a benign place. The *madina* is not presented herein as a paradise like world. It was also the place of earthquakes, political unrests, inundations, destructions, and so forth. The planning lens argument ought to be addressed in order not to neglect its organized and intentionally planned sides. This paper shed light on this line of research that needs to be explored further.

An additional emphasis on the neighbourhoods' organization level that is an inclusive part of the internal local planning in the *madina* is needed, and it will be as previously stated the subject of another paper. The neighbourhoods were as units for planning in the *madina*. Since early Islamic periods, these neighbourhoods played a major role in the unification of tribes and communities through an urbanization, which sought to resolve ethnic differences through particular

urban spatial organization in a *madina*.⁴⁶ On this basis, cities like Kūfa, Baṣra, Fustāt, Qayrawīn, Baghdād, Samurrā', and Qāhira were divided through *khiṭaṭ* or districts.⁴⁷

The essential element of the internal local planning in the *madina* lied in the formation and evolution of its neighbourhoods or *khiṭaṭ*, which embodied its sustainable social and cultural core. The strategic peripheral and internal planning with the internal local planning might not be often in tandem because the top-down and down-top power dichotomy, but *madina*'s space maintained throughout time a certain balance according to different regions and typologies. This balance was also assured by certain actors who played a major role either in the education of the community or orienting the organization of its districts. The key examples are: the 'ālim (scholar), qāḍī (the judge), *muḥatasib* (controller of social and commercial conducts), *a'yān* (notables), *umanā'* *al-ḥiraf* (guilds' trustees), and *shurṭa* (police). They all contributed variably to generate a certain urban order in neighbourhoods, and their powers in influencing the space production were key to a consequent social order.

These neighbourhoods were, therefore, defined through social, administrative, geographical, and environmental criteria. This resulted in different complex spatial territories in the *madina* representing families, guildsmen, ethnic groups, multi-religious groups,⁴⁸ army groups, Sufi brotherhoods, royal and administrative groups, and foreign residents (consuls and merchants). Nonetheless, these territories were not confined, and the transition between their reciprocal neighbourhoods provided an interactive environment, which was a momentum for the rich urbanization of many cities in North Africa and the Middle East. These factors if they were not managed through a certain spatial and social order or a sense of planning could trigger the decline of the urban system of a *madina*.

Conclusion

In this paper, I have discussed the paradigm of planning in the *madina* in order to expose its intrinsic urban order that is not merely orthogonal or geometrical. This is argued by revisiting the concept of planning as an intention and action, in its historic context, while being prudent so as to not create confusion with the current urban planning, the objectives and tools of which are totally different. However, the lessons gained from inquiring into *madina*'s urban mechanisms, and their sustainable synergies, may support the current planners to bridge the gaps in the making of current chaotic cities – which are void of sound communal constructs and rely heavily on aesthetic orders.

Before embarking on presenting the planning paradigm of the *madina*, a brief review of its persistent Orientalist images was essential in order to expose their deliberate emphasis on its unplanned nature. While intentionally disregarding the apparent social and cultural order of the *madina*, which manifested a typical sustainable urban pattern throughout its history, these images were driven by using widely external aesthetic and form typologies.

To prove the attitudes of planning in the *madina*, a review of different actions of organizing or making order was necessary so as to reveal its comprehensive urbanism, and distance it from the colonial notion of a confined *médina*. This has led to the discussion on its different levels of planning and what constitutes its urban parts following the jurisprudential and functional archetypes. While the *madina* is presented as not a merely totalitarian and authoritative territory, its consistent social and spatial microcosmical order through its strategic corpus' internal and neighbourhoods' local planning is explored.

The notion of order behind its compact urban fabric is also substantiated through different meanings that stem from a user's experience in a beehive urban fabric. However, the modern planning practices have come to vindicate the relevance of such a beehive urban structure that places the human being at the centre of an urban space, which creates a sense of belonging and memory in a city that several current living *madina(s)* have proved.

The main strength of the current *madina* is its sustainability as a city capable of encountering the challenges of twentieth-century urbanism, particularly in developing countries. This paper argues that the historic urban experience and deduced lessons of planning from historic cities could open a new horizon for contemporary planners to assimilate the complexity of human space without being biased to a certain orthogonal order that is merely aesthetically geometrical or culturally superior.

Notes on contributor

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 38. E. Rosenthal, 'The Role of the State in Islam: Theory and the Medieval Practice', *Der Islam* 50, no. 1 (1973): 1–28.
 39. Ibn Khaldun, *The Muqaddimah*, 285–8.
 40. *Ibid.*, 285.
 41. Abū al-Ḥasan 'Ali ibn Muḥammad al-Māwārdī (974–1058), *Ta'jil an-nazar wa-ta'jil az-zafar* (Taḥqīq Radwan Said: Dār al-'Ulūm al-'Arabiyya liṭ-Ṭibā'a wan-Nashr, 1987), 203.
 42. Ibn al-Rāmī, *Kitāb al-Bunyan*, 151.
 43. Raymond, *Grandes Villes Arabes*, 157–8.
 44. *Ibid.*, 157–8 (my translation from French).
 45. Al-Māwārdī, *Tajil an-nazar az-zafar*, 82.
 46. 'Abd al-Ḥayy b. 'Abd al-Kabīr Kattānī, *at-Tarātib al-idāriyya* (Beirut: Dār Iḥya' at-Turāth al-'Arabī, V.4, 1971), 77–87.
 47. The plural term *khīṭaṭ* (sing. *Khīṭa*) means an urban district. However, this term is derived from the Arabic verb *khtṭaṭa* that literally signifies to plan or to project for an action before its occurrence. The case of planning the city of Kūfa is pertinent in terms of documentation. For more information about the origin of *khīṭaṭ*, see the following sources:
 Abū Ja'far Muḥammad b. Jarār at-Ṭabarī (838–923 AD) *Tarīkh al-Umam wal-Mulūk* (Beirut: Dār al-Kutub al-'Ilmiyya, V.2, 1997), p. 249.
 Ahmed Ibn 'Ali Maqrīzī (1364–1442), *al-Mawā'iz Wa'l-I'tibār fī dhikr al-Khīṭaṭ Wa'l-Athār*, Buq ed., V.1, 1853, p. 297.
 Al-Māwārdī, *op. cit.*, 203.
 Aḥmad ibn Yaḥyá Balādhūrī (892 CE), *Kitāb futūḥ al-buldān* (al-Qāhira: Maktabat al-Nahḍa al-Miṣriyya, 1956), 387.
 48. As an example, Daverdun asserts that, in the case of Marrakesh, a Christian neighbourhood was established for a Christian community that served voluntarily the Almoravid Caliph 'Ali. This neighbourhood situated in the proximity of Yūsuf's Qaṣba. Under the Almohads, Honorius III (1216–1227) decided to create a Moroccan bishopric in Fez.
 G. Deverdun, *Marrakech: des origines à 1912* (Rabat: Editions Techniques Nord-Africaines, 1959), Tome 1, pp. 138, 139 ... 290, 300.