The history of the Portuguese city of Mazagão is also the history of a journey over the Atlantic. Figuratively speaking, this essay is structured as a ship’s voyage from the northwestern shore of Africa to the Amazon basin rain forest to follow the Portuguese contribution to the urban design and public space from the sixteenth to the eighteenth centuries along the coasts and islands of the Atlantic Ocean. Established as a castle in 1514 and confirmed as a fortress-town a few decades later, Mazagão had its population relocated to South America in 1769. Chronologically speaking, both original and subsequent urban plans in the different sites delimit Portuguese early modern experience as far as the evolution and the establishment of regular geometries to the city fabric are concerned.

A settlement in Africa

Hypotheses of prior occupation of Africa’s northwestern coast are vague for the region where Mazagão was established until the end of the fifteenth century. Probably a small fishing port and village existed in a place called Mazgan, compelling with the idea of an almost inhabited place before the arrival of the Portugueses. Today, the Boreja or
Bridja tower, which belonged to a series of watch posts along the coast, seems to be the only remaining evidence from that period. In the beginning of the sixteenth century, the Portuguese had already begun to conceive of erecting a small castle in the vicinity. However, only after the conquest of the neighbor town of Azemmour (15 kilometers north) in 1513, did the Portuguese finally establish a castle at the site of the former round tower the following year. Two renowned master builders and brothers, Diogo and Francisco de Arruda, composed a quadrangular plan with wall curtains linking four cylindrical towers, one of them being the primitive Boreja.

In 1541, the loss of Santa Cruz do Cabo de Guer, present day city of Agadir, to the conquering Saadi Cherif questioned and eventually caused the abandonment of several cities. The same year, the Portuguese decided to invest in a new settlement which would be a modern bastioned fortification with the establishment of a grid plan designed town in its interior. Mazagão, as it was designated, provided a solution to keeping some presence in the Moroccan southern geographical arch. The royal initiative was managed by a team of architects and military engineers lead by Benedetto da Ravenna, Diogo de Torralva and Miguel de Arruda and put into practice on the site by João de Castilho. For more than two and a half centuries, the impregnable Mazagão remained in Portuguese control due to its fortified perimeter defined by five big bastions, long inflected wall curtains and a surrounding moat. [Figure 1]

The location of the previous 1514 castle, now transformed into administrative headquarters in order to house a church, a hospital, store houses for cereals and munitions, a jail and a huge water reservoir, seems to have worked as a generatrix of the urban space of the projected town in 1541. To the west, a big public square was defined by the Governor’s palace, the town gate and main thoroughfare, Carreira street, representing the negative space of the surface occupied by the former square castle. Indeed, this quadrilateral building, measuring between 53 and 57 meters (approximately 26 braces), launched the diagonals that would define the position of the new fortified bastions, with the exception of São Sebastião (San Sebastian). It would also provide the metrical base for the grid planning of Mazagão. Regular blocks derived from the subdivision of the central square model in half rectangular portions.

The model is close to the one applied to the Portuguese city of Daman in India years later. In Daman, each unit was identified as the result of the subdivision of the primitive castle in four parts. However, in Mazagão the model was applied to focus on rectangles rather than squares, and it was used less inflexibly in the African city. Indeed,
A regular pattern based on rectangles is observable only in southern and eastern areas of the walled perimeter, thus not covering the whole surface due to adjustments made for irregular contour. Although this created its own difficulties from directional variance, nevertheless, the tendency towards geometrized configurations of the urban display in Mazagão was one of a greatest advance in urban design so far.

The year 1769 marks the evacuation of the town due to problems in military sustainability after yet another siege by sultan Sidi Mohamed ben Abdallah. The departure ordered by the Marquis of Pombal, in Lisbon, led to the strategic destruction of part of the walls and bastions in preparation for complete evacuation. Explosions were used to disable the citadel for appropriation by the besiegers. Two thousand inhabitants were transported to Brazil, where Vila Nova de Mazagão (New Mazagão) was settled.

*Al-mahdouma*, meaning “the destroyed,” was the local denomination for Mazagão after the Portuguese abandonment. For almost half a century, the once-Christian stronghold, now considered as unfaithful, was uninhabited, accentuating its ruined state. Eventually, after the 1820s reconstruction, *mellah* became the designation for the walled area, which was first occupied by the Jewish community. By 1861 descriptions mention 1500 inhabitants divided into foreigner, Arab and Jew populations, showing that the reconstructed fortress started slowly to house religious buildings of different creeds such as a synagogue and a mosque. The stronger symbol of this ecumenical atmosphere was the replacement of the former *Rebate* tower, one of the four corners of the Portuguese primitive castle, by a minaret.

During the French protectorate (1912-1956), this fortified neighborhood was called *Cité Portugaise*, a name that invoked the Portuguese past, in a clearly French colonial effort to enhance its European roots, heritage and culture. Eventually, *mellah* and *Cité Portugaise* remained as the denominations by which this citadel is known today within the city of El Jadida, “the new one.” In the twenty-first century the citadel represents a backwater quarter although it remains densely populated with more than three thousand residents, many of them living in basic conditions. The centre of the city has moved outside to the “medina” area formed from the nineteenth century onwards. [Figure 2]

Today, nearly two and half centuries after the Portuguese evacuation, one can observe daily changes in Mazagão’s urban fabric. The original orthogonal plan has been
suffering an “islamization” process: streets are interrupted or shortened, alignments become inflected, and broad perspectives are replaced by privacy and shadow.

**Transferring a town to the Americas**

After this 250-year period another urban history was taking place in a homonymous town in South America. Retaining the same African name of Mazagão signaled a clear reference to a memory of conquests and a glorious past that the crown, through its Pombaline administration, thought it crucial to convey to a region under dispute by several European powers, the French being the closest rivals with their establishment in Cayenne around 1676. Mazagão, together with its neighboring, more important town of Macapá, would assure consolidation of the Portuguese northern territories in the continent, a dispute only completely sorted out with the Iberian rivals, the Spanish crown in 1750 by the Treaty of Madrid.

Domingos Sambucetti, an engineer of Italian origin, together with Captain Ignácio de Castro de Moraes Sarmento, formed the pair responsible for the establishment of this new town over an indigenous site called *Santa Ana do Rio Mutuacá*. [Figure 3] The urban plan shows a grid pattern of quadrangular units of 56 braces, four braces for the width of each street and, consequently, 64 braces for the open squares. However, houses would only occupy two sides of each block, allowing different combinations and encouraging dynamic compositions. The plan was disposed according to intercardinal directions and incorporated only the chapel of the former indigenous village.

The population resilience to the transfer from Morocco to South America was an early sign of the condemned future of this new establishment. The “rebuilt” and “reformed” New Mazagão soon suffered from critical climate and public health issues, the most common problems being flooding and malaria. From 1783 onwards another removal was increasingly debated, and during the nineteenth (after Brazil’s independence) and early twentieth centuries New Mazagão became progressively “Old Mazagão” (*Mazagão Velho*) with yet another “New” town being settled along the road towards Macapá, the state capital of Amapá, in northwest Brazil.

The urban mark left by *Vila Nova de Mazagão* and *São José de Macapá*, is for both the structuring matrix of the grid with its filled or empty square units that constitutes the city’s core and allows for its urban present expansion.
The North Atlantic triangular experience

A question emerges: how can both African and South American settlements be related since their original planning are separated by more than two centuries? Indeed, no direct connection should be undertaken in that sense, even though both are characterized by a grid matrix and New Mazagão shows propensity to double the sixteenth-century African plan dimensions. Nevertheless, this urban transfer across the Atlantic allows us to extrapolate notions of public space organization because the geographical translation and historical interval involved are consistent with Early Modern Portuguese urban experience.

Notions of regularity have been present in the Iberian Peninsula long before the sixteenth century. Roman occupation provides the foundation of several grid-planning cities. Along the Santiago Path in the low Middle Ages, for example, the establishment of some bastides (fortified new settlements), locally designated as vilas novas or póvoas, certify by their design urban concepts articulating regularity. Cities such as Viana or Caminha, built by the river Minho in the north of the country to defend Portugal’s fragile borders, strongly opposed the organic paradigm present on the majority of cities evolution by also displaying urban perpendicularity or parallelism.

Fifteenth century witnessed Portugal’s opening to the world through a maritime and mercantile expansion, carrying with it the need for the settling of new urban nuclei in the recently discovered islands of the Madeira and Azores archipelagos. Henry the navigator, the most important developer of Tomar’s reticular plan in central Portugal (northeast of Lisbon), was also grand-maters of the Order of Christ. In 1456, a papal edict determined spiritual jurisdiction of this Order over all discovered or conquered lands. Unsurprisingly, urban fabrics with a propensity to orthogonal angles can be observed in harboring bays. Both Funchal, in Madeira Island, [Figure 4] and Ponta Delgada, in the Azores, clearly show there was no obsession for the 90 degree angle, or for the abstract perfect geometry. What proved to be the key element of the project was a pragmatic determination to line streets as parallel or perpendicular as possible, in a case-by-case basis, according to topography, political, social or economic conditions. The main axis was structured parallel to the seashore, usually linking primitive religious
hermitages. Taking this seafront street as main reference, blocks would be organized in parallel rings or they would expand perpendicularly inland. Public squares would be the result of shortened built units, placed either in front of a civil or religious edifice.

Application of geometrical patterns overseas were inspired by new legal mandates in Lisbon that included king Manuel I’s insistence on new linear connections—ruas novas (new streets)—between key points of the city. These urban interventions were intended to rescue Lisbon from its medieval Islamic and Christian densities and built obstacles in the late fifteenth and early sixteenth centuries. In fact, this “Manueline hygienism” would be the basis for the establishment of Bairro Alto, a new reticular neighborhood outside the western walls of the capital. Although Mazagão represented an epistemological shift from previous military architecture, the motivation for its grid layout may be interpreted as a compromise between the urban tradition developed in neighboring examples of occupation by conquest and the aspiration of an “ideal” model inspired by the recent urban renewal in the capital and elsewhere in the kingdom.

The urban plan of Mazagão as a fortress city was, nevertheless, conditioned by the physical pre-existence of the 1514 castle; a pioneer project on the field of military architecture, the realization of urbanizing action was hereby defined. However, till now, it has been unclear how much Benedetto da Ravenna or any other member of the planning team contributed to such a rational program of street design. Invited to the project for his military skills, the Italian engineer’s prior projects had not included important urban contributions. Therefore, Mazagão must be read as the summit of an urban tradition centered in the first half of the sixteenth century. The closest examples of vilas novas (bastides or new settlements) were prior to this in Azemmour and Asilah. Built in the beginning of the 1500s, both towns display formal resemblance through a more regular and geometrical urbanism that is less attached to the Islamic pattern inherited from the past. The propensity for rectangular blocks is present in all three towns, even though those of Asilah are a bit larger. [Figure 5] Asilah and Azemmour become pertinent due to their location respectively in the northern and southern groups of Portuguese settlements in Morocco, thus indicating that neither the proximity of Mazagão to other experiences, nor the presence of different master-builders in these towns, prevented the emergence of urban concepts and models from evolving and circulating. Theoretically speaking, design preceded any direct agent or matrix and was
becoming, by the early decades of the sixteenth century, a common practice of urban display in conquered or discovered lands.

Representing a shift in urban conception, this operative method was the basis for a local interpretation of royal documents—*regimento*—containing orders related to the urban and political management of a growing empire. Indeed, a new praxis was being developed by a group of well-educated workers close to the crown, whose action articulated concepts of arithmetic and geometry with an abstract capacity of space provision. Gaspar Nycolas and his 1519 treaty entitled “Tratado da Prática Darismetyca Ordenada por Gaspar Nycolas” are the main example of this pragmatic thought where architecture and cities result from a fair balance between science and experience.¹⁸

Urban renewal in Lisbon and urban planning in Mazagão represent a new pre-Renaissance approach to designing cities. The same can be said regarding the first extension to Angra, again a city in the Azores archipelago, where a tendency for quadrangular units, rather than rectangular ones, can be seen. Blocks in square shapes could be then thought as empty spaces for the establishment of a regular public space or occupied by the main church or cathedral whose presence in the city would be undeniably reinforced. Taking into account considerations previously discussed, Portuguese influence in North Atlantic presents two models of settling, both preceding from shared experience of planning and urban morphology in the triangular geography based on the metropolis, the Northern African enclaves and the North Atlantic insular spaces. On the one hand, there was a linear scheme anchored on a seafront line coast that connected important religious or administrative structures in an empirical interpretation of landscape and its topography. This is particularly visible in Madeira and Azores archipelagos where there was no pre-existence on the built environment. The linear model should also be considered when an artery was opened in dense fabric and conducted synergies towards the new public canal. On the other hand, the reticular diagram served as the perfect expansionist model when new additions were envisioned for fast growing urban assemblages, or for new establishments like Mazagão. Approximate grid plans were also considered and pursued whenever a complete revision of inherited fabrics was concerned. These were the models that travelled south, to other islands and continents such as South America. A very operative and dialectical relation between both models was entertained in the search for new habitable, unfamiliar and un-urbanized territory.
Colonial urban space in Brazil

The Portuguese urbanization experience in Brazil has, for too long, been characterized as organic vis-à-vis the orthogonal *damero* of the Hispanic world cities. This idea falls apart when the four new settlements in sixteenth-century Brazil are studied. It is true that Olinda, established in 1535 in Pernambuco, represents the failed colonial project of the Portuguese crown to administrate and explore this new territory; indeed, its urban display was the result of topography and the establishment of religious convents with no previous urban project.

However, in 1549, a new capital for the general government of Brazil was determined for Salvador. The similarity to Portuguese landscape conditions—uptown for palaces and convents and downtown for commercial activities—did not prevent Salvador from being built according to a plan designed in Lisbon and exported to the New World, with quadrangular blocks and squares as its key elements. [Figure 6]

A few years later and by private initiative, Rio de Janeiro was planned according to orthogonal patterns, although taking the maritime shore along the bay as the spinal axe. Finally, *Filipeia de Nossa Senhora das Neves* (now, João Pessoa in Paraíba), already under the patronage of Philip II (I of Portugal), confirms the capacity for conceptual regularity by offering a religious yard (St. Francis) where three streets concur. So, out of the four foundational cases in sixteenth-century Brazil, three were regular, in a territory where colonial expansion inland would progress only when spontaneous rural and urban assemblages followed mining resources, as in the Hispanic world. The main difference, however, was the absence of a territorial empire in this mainly maritime Portuguese empire, made of harbors, commercial outposts and islands.

The Portuguese urban experience through the 1500s must be assessed by examining cities in a case-by-case evaluation of the conditions for design regularity, and not through an abstract plan as in the “Laws of the Indies.” Legal regulation did persist through an urban expression of “*arruar*” in the design of streets and an action of agents of urbanism.\(^{19}\) The term implied a tendency to favor alignments and right drawings without necessarily resulting in orthogonal schemes.

The seventeenth century was difficult, a century of war with the Netherlands in South Atlantic and Indian oceans that reduced the urban initiative while fostering the building of military architecture. Despite this, Belém and São Luis plans show the maintenance of a rational approach to urban planning. The eighteenth century brought a
much more attentive look to the definition of South American borders between Spanish and Portuguese dominations. When this happened, a large territorial strategy was considered for the Amazon basin and the establishment of several new towns, either over virgin soil, indigenous agglomerations or religious missions. Named after Portuguese toponyms, these new villages or towns received orthogonal plans sketched by Casa do Risco, the royal designing cabinet where abstract plans were sent to the South American jungle. Thus, when the articulation of a territorial design was questioned, the answer was identical to that of the Spanish world. Regular urbanism or the art of ruação became the current practice. This was the case of New Mazagão, in 1769, following Belém and Macapá in the mouth of the mighty Amazon River, where both a geometrical regular plan and African religious traditions were brought by those colonists, and can still be seen in the twenty-first century.

The transfer of a memory

Although the urban image was not directly transferred from Africa to South America, some aspects of urban identity were. Obviously, a city could not be packed in the ships that carried the population from Morocco to Lisbon and then to Brazil, between 1769 and 1771. Houses, churches or streets were abandoned, but objects and memories were transported in the belongings and imagination of a group of people calling themselves not Portuguese but “Mazaganists”. And they were. It is quite striking to see religious artifacts from the church of Our Lady of Assumption in African Mazagão still in use thousands of miles away and two and a half centuries later. It is even more interesting to register a religious festival called Festa de Santiago (Saint Jacob’s festival), celebrated each year in late July. This saint, traditionally invoked by Iberian armies during the Christian Reconquest, together with Saint George, patron of the cavalry, leads one of the sides of an African battle against the Moors. [Figure 7] Seven scenes describe a poisoning attempt of the Portuguese community, the stealing of the Arab flag, the kidnapping of Christian children, among other episodes, until the ultimate confrontation dictates the final victory of Christianity over the “unfaithful”! But, still now, this happens in the Amazon forest, very far away from the Maghreb.

The history of this town’s journey over the Atlantic can be told as an urban transfer, rather than an urban translation. In fact, important cultural flows were the key element for maintaining urban activities throughout transatlantic territorial spheres in
Early Modernity. European overseas expansions provided particularly intense scenarios as far as the questioning of geographical transfers of architectural and urban agency or designs are concerned. Through the case studies shown in this chapter, the Portuguese urban practice associated with regularity can be defined by both a laboratorial application of mathematical concepts and an exportation of a precise model in the age of the Lights. In each case there was clearly a close relation of regularity with land border, or with expansion in unsettled territories. In North Africa, the walls of each city or town were identified with the Portuguese frontier, and faced a constant hostile environment, whereas the suburbs of Lisbon, the North Atlantic archipelagos and Brazil provided an unexplored terrain for rational regularity to be developed.

The latter can also be analyzed through an Early Modern ideological scope since the new South American colonial territory was originally divided in horizontal strips, each one ceded to a captain for exploration between 1532 and 1536. The idea of a grid applied not only to a city but to a found land, underlining the consolidation of geometrized patterns in aiding design. Furthermore, since 1479 the Iberian crowns of Portugal and Castile had divided the world horizontally by a parallel line just south of the Canary Islands by the Treaty of Alcáçovas. Twenty-five years later, the known and unknown world and waters were again alienated between the Portuguese kingdom and the newly formed Spanish kingdom by the Treaty of Tordesillas of 1494. This time a vertical line sectioned the planet in two halves by a meridian drawn in the middle of the Atlantic Ocean. Therefore, the sixteenth century would inherit an orthogonal map for the Atlantic expansion from late Quattrocento. Future urbanization would definitely be intertwined with the mental picture of this space organization.

Summing up, the Atlantic world worked as the crossroads of pioneering experiences and praxis consolidation for the urban design and the display of the public space. The fundamental principles developed in the purposeful design and construction of cities provided the necessary conceptual skills for the energetic response to Lisbon’s huge earthquake and tsunami of 1755 and consequent (and internationally acclaimed) redesigning of the city’s downtown area.
References


Fernandes, José M. *Cidade e Casas da Macaronésia*. Porto: FAUPpublicações, 1996.


1 Letter from Francisco de Diogo de Arruda to Manuel I, Azemmour, Mars 31, 1514, in Arquivo Nacional da Torre do Tombo (ANTT), Corpo Cronológico, 1ª parte, m. 15, no. 14.

2 Letter from Luis de Loureiro to João III, Mazagão, August 25, 1541, in Idem, m. 70, no. 75.


4 Walter Rossa, Cidades Indo-Portuguesas / Indo-Portuguese Cities (Lisbon: CNCDP, 1998), 78.

5 Renata M. Araújo, As Cidades da Amazónia no séc. XVIII (Porto: FAUPpublicações, 1998).


7 The city of Cayenne is today the capital of French Guyana.

8 For further information on the bi-lateral negotiations and geographical details, please consult Jaime Cortesão, Alexandre de Gusmão e o Tratado de Madrid (Lisbon: Seara Nova, 1950).

9 Manuel Teixeira and Margarida Valla, O Urbanismo Português (Lisbon: Livros Horizonte, 1999), 264.

10 Araújo, As Cidades da Amazónia no séc. XVIII, 277.

11 For a deeper understanding of the Roman presence in the territory to become Portugal, please address to Jorge Alarcão, Portugal Romano (Lisbon: Verbo, 1987).


16 Named Vila Nova de Andrade in 1498, it was also known as Santa Catarina suburb and later as Bairro Alto de São Roque. For further details, see: Hélder Carita, Lisboa Manuelina e a formação dos modelos urbanísticos da época moderna (1495-1521) (Lisbon: Livros Horizonte, 1999); chapters 3, 4 and 5 provide a thorough study of this period’s urban changes in Lisbon.


21 The festival is described in detail in Laurent Vidal, Mazagão, a cidade que atravessou o Atlântico, Lisbon: Teorema, 2007) 269-280.