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Regional Trends and Grassroots Developments in the Cities of Roman North Africa

by

J. Andrew Dufton

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Book Chapters

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Figure 66. Ongoing roadworks, and propaganda, in the city of Providence, Rhode Island. 308

Chapter 1. Introduction

In his expansive synthetic history of the region, the historian Abdallah Laroui describes the Maghreb as a place moving from one colonialism to another (Laroui 1970, 32–34; D. J. Mattingly 1996). Phoenicians and Greeks, Carthage, Rome, the Vandals, the Byzantines, the Muslim Conquests, the Ottomans, the French and Italians—each occupied the lands of modern Morocco, Algeria, Tunisia, and Libya in turn, and each occupation resulted in major demographic and cultural changes to North African society.

The city in particular has played a central role in this colonial history. Early trading posts were the sites of the first commercial interactions between Phoenician colonists and indigenous peoples (Cañete and Vives-Ferrándiz 2011), and we see a continued importance for the town as a hub of trade in subsequent periods. Under Carthage and Rome the city became the centre of regional administration and taxation (Edmondson 2007, 254–55), for both urban populations and those living in the surrounding countryside; the town as sole tax centre continued into later periods, under various guises. New foundations by both imperial powers also served to establish and solidify territorial control (Février 1989, 106–13; Gascou 1972, 38–39). During the subsequent conquests of the Vandals, Byzantines, and Muslims the city served as an important place of refuge, as evidenced by both the physical remains of fortifications around the core of earlier settlements (Pringle 1981) and historical accounts such as Procopius' *Buildings* stressing the importance of urban defenses. Cities such as Carthage were the last bastion of Byzantine power, and the fall of the city—not the surrounding

countryside—often given as the "irretrievable end of Roman power" in the province (Kennedy 2007, 217). Military camps set up on the outskirts of existing cities—such as at Volubilis, Morocco—segregated Arab migrants from earlier populations (Fenwick 2013, 28–30), breaking from an earlier tradition of integration of colonists and indigenous peoples.

Yet the important role of the city in the colonial enterprise did not diminish after antiquity. The practice of segregating local and foreign communities continued into the Ottoman period, as we see with the separation of the elevated Casbah and its Kabylie populations from the lower city of merchants, administrators, and wealthy families at Algiers (Çelik 2008, 72). With a shift in occupation from Ottomans to the French—or Italians in the case of Libya—the North African city became a sort of laboratory for urban planning, exploring modernist ideas before importing them back to the European homeland (Rabinow 1989, 289). Grand plazas were inserted adjacent to historic districts, destroying earlier housing (Çelik 2008, 127); the necessary infrastructure, such as railways and a road network, was created to connect the towns of the territory (Çelik 2008, 25); physical barriers were erected separating the fabric of the older city from new, French quarters complete with modern amenities (Abu-Lughod 1980, 144–47; Rabinow 1989, 285). In some cases such as Bône (modern Annaba) these ambitious visions were celebrated by the French as a successful creation of a colonial culture abroad (Prochaska 1990, 206–9), while in other cities such as Algiers the continued resistance of indigenous populations resulted in a haphazard and organic city barely resembling the modernist plans intended for development (Çelik 1997, 71).

The cities of the Roman world also featured a rebirth of sorts under French and Italian rule. In Tripoli, streets were stripped of Ottoman influences to represent a more strictly historic colonial character—a character decided by archaeologists working for the Italian occupying forces, and drawing on a Roman past (Fuller 2007, 80). Many of the ancient cities populating UNESCO's list of World Heritage sites were excavated and reconstructed by French occupying forces—often using North African labour—as another way of creating connections between Roman heritage and French rule (Ford 2015). In a particularly blatant example the Algerian site of Lambaesis was excavated by the French military, the barracks reconstructed, and a rededication ceremony held for a monument to the commander of the Roman legion (van Dommelen 2006, 210) (Figure 1). In these cases, as with many others, modern European powers attempted to justify their occupation by connecting to a much longer colonial history, with the city at its centre.

How do you solve a problem like the Roman city?

At the heart of my approach is a study of the city as process, inspired by the world of urban sociology. In her seminal work *The Death and Life of Great American Cities* Jane Jacobs lists thinking about processes as one of the most important habits of thought for understanding and helping cities. According to Jacobs the objects in cities—buildings, streets, landmarks—can have drastically differing effects depending on context, and so there is little point in considering them in abstract terms. Urban processes can be understood by a wider public, and force us to think not only of change but also of the catalysts that are responsible (Jacobs 1961, 440–41). The urban sociologist Abdoumaliq



Figure 1. The barracks at Lambaesis (Algeria) reconstructed by French occupying forces.

Simone sees change as a way to view the built environment not as a linear history or a set of policies, but as a series of deliberate choices made by city inhabitants (Simone 2005, 1). Urban process, according to this reasoning, becomes a way to emphasize the resilience of the city. Ash Amin and Nigel Thrift, similarly, point to the ability of the city to create and recreate itself, and the need for theories of the city to account for both process and the potential for regeneration (Amin and Thrift 2002, 26–30).

In many modern contexts, then, the process matters. Yet for the Roman past we are more often fixated on a static urbanism that fails to fully account for this implicit dynamism. This is a dissertation about the urban processes underlying the colonial history of North Africa. In particular, I examine the cities of North Africa during the first

centuries of Roman control (146 BCE–193 CE) to situate our understanding of Roman developments within larger regional trends. This timescale covers the earliest Roman presence in Africa after Rome's victory in the Third Punic War and the destruction of Carthage, and continues until the reign of Septimius Severus, first of the North African emperors. It is during this period that the cities and towns of the region adopted many of the forms that have since been understood as 'Roman' urbanism. My geographic coverage includes the Roman province of Africa Proconsularis at its largest extent, in various periods during my study known as Africa Nova and Africa Vetus or simply Africa, and repeatedly divided in later eras into the four provinces of Numidia, Tripolitania, Africa Byzacena, and Africa Zeugitana.

I look not at the monuments constructed during this period, at civic administration or architectural plans, but at the dynamic changes occurring to the physical environment. My argument is structured around four urban processes: foundation, growth, monumentalization, and renewal. In each chapter I repurpose existing data—taken from archaeological atlases, historical itineraries, and the epigraphic record—and combine them into a comprehensive gazetteer of Roman sites and monuments. I use these data to complete a regional analysis that identifies trends such as where new sites are founded, which cities are growing the fastest, or if a certain type of monument is particularly popular in a given area.

Looking at the regional scale alone, however, can create a problematic picture of totalitarian Roman power that ignores much of the diversity of the cities. To challenge

this top-down perspective I integrate urban biographies into my work, aiding me to nuance some of the trends identified during macro-scale analysis. Each example traces the history and development of a different town, using municipal and physical changes to tease out ideas about the local population and their responses to colonial influences. To complete this micro-scale analysis I borrow ideas from contemporary and comparative scholarship on city life, looking to the fields of urban sociology, geography, and anthropology. The result is a set of narratives that decentre Rome and interrogate in its place local expressions and choices (Pieterse 2015), an analysis that plays off tensions between global and local forces in urban development (Laurence and Trifilò 2015). Rather than representing an abrupt shift in the urban landscape, these biographies demonstrate how alterations to the North African city under Roman rule follow from a much earlier developmental trajectory. This research also reveals that, in many cases, the process of change itself was as significant to the lived experiences of inhabitants as any individual buildings or monuments.

My approach to the city as a study in process brings out the shifting cityscapes and interacting influences that characterize city life, but are so rarely understood in an archaeological context. The result is not a conventional linear history of Roman developments. This work instead produces a series of overlapping narratives that touch on some of the ways North African cities functioned, and some of the ways a shift to Roman rule may have been experienced by their inhabitants.

Defining towns and cities

Even identifying cities is often a problem for archaeologists. Definitions often focus on the quantifiable aspects of settlements to distinguish between villages, towns, or cities, employing statistics such as total population, physical size, or population density. Many of these characteristics are lost to us in the archaeological record and so—following from V. Gordon Childe's 'The urban revolution' (Childe 1950)—many scholars have continued to propose checklists of city characteristics (e.g. de Coulanges 1963; Cowgill 2004; Morgan and Coulton 1997; Wheatley 1972; see also a discussion of this phenomenon in Osborne 2005). Some features, such as a concentration of population or some sort of fortification (Renfrew 2008, 47), may seem reasonable on the surface; others, such as the use of writing or naturalistic art (Childe 1950, 14–15), should result in a raised eyebrow at the very least. My aim here is not to address the strengths and weaknesses of each possible criterion, but simply to acknowledge that defining what is, and is not, a city can itself be a daunting undertaking.

In the case of the Roman world, we are lucky to have some idea of what the Romans themselves considered to be cities to guide the discussion. I introduce the varying degrees of civic status—*oppidum*, *pagus*, *civitas*, *municipium*, *colonia*—in Chapter 2. Each type of administration might have varying degrees of urbanism or different population sizes, there are considerable discrepancies between settlements of the same status across the Roman Empire, and many would not classify as a city in a modern context

(Wilson 2011). Yet each was given some significance in the Roman period that serves as a helpful aid in identification.

The search for North African cities is also limited, as becomes clear in the discussion to follow, by the nature of the surviving evidence. My work defines as a city those sites that appear in historical itineraries such as the *Tabula Peutingeriana* and that cannot be dismissed as forts, farms, villas, or wayposts; other places with a known Roman name and civic status; and sites with recorded monuments. Some of these settlements might be closer to villages or small towns, while others can make a stronger case for the degree of urbanism we might expect. Yet in all cases there is some evidence that the Romans felt these were spaces worthy of the name of city, and I take this evidence as enough for the purposes of my work. At final tally I have included 340 sites in the subsequent analysis, all of which can be found in Appendix 1 (see also Figure 2, p. 43).

In the following pages I use city and town interchangeably, acknowledging that most of the sites I discuss would be at best towns in many other contexts.

Chapter outlines

I divide the following pages into six chapters. In Chapter 2 I outline some of the perceptions that have shaped our current understanding of the city. Ancient works focus on the ideological importance of city foundations and urban life, but also address some of the practical concerns of architectural design, urban planning, and civic administration. Modern scholars of the Roman city have often followed similar themes, with a heavy focus on architectural or urban planning, but have also introduced a series

of theoretical dichotomies: continuity and change, Romanization and resistance, production and consumption. My approach moves past these texts on pragmatic concerns and chronologically flattened, binary takes on the dynamic city. I do this by drawing from modern urban studies, reusing existing data, and simultaneously considering both local and regional perspectives. This framework structures my subsequent chapters, each dedicated to a single urban process: foundation, growth, monumentalization, and renewal.

In Chapter 3 I begin to look at urban processes with a discussion of city foundation. Creating a new city arguably requires the greatest degree of centralized authority, as land is partitioned and colonist populations migrate to a new settlement. At the regional scale, this chapter shows the ways in which most Roman foundations took advantage of either earlier settlements or other types of activity, such as monumental burial, to tie new colonies into an already established urban network. An urban biography of the city of Madauros—a foundation of the late 1st century CE at the site of an earlier indigenous settlement—demonstrates the significance of not only the act of foundation but also of the years that follow. These later inhabitants, whom I call creole generations (after Dawdy 2008, 7), shape both the physical plan of the city and its social history.

I turn my attention in Chapter 4 to the process of urban growth. I define this phenomenon as the physical expansion of a city over time, as visible in the footprint of total area covered. Economic or population increases may accompany these physical

changes, of course, but a basic change in size is one of the most easily identifiable archaeological signatures of these larger shifts. Urban growth across North Africa occurs either in exponential bursts, what I refer to as sprawl, or through a series of piecemeal additions that I consider organic growth. Patterns of expansion are tied to a city's location, pre-Roman origins, civic status, and economic function, with the greatest growth occurring at sites along the coast, broadly speaking. A detailed look at one city displaying each trajectory—the Punic port of Utica for sprawl, the Numidian hilltop town of Tiddis for organic development—demonstrates the degrees to which new immigrant populations rely on earlier local practices, and indigenous peoples take advantage of larger global networks.

I address the monumentalization of the North African city in Chapter 5, namely the ongoing process of construction and renovation of monumental structures and spaces. A regional look at the distribution of monumental construction projects of different types shows how monuments were tied to questions of civic status or promotion, urban wealth, and regional prominence, and also connected to a city's earlier, pre-Roman history. In addition to reinforcing these regional trends, a biography of the Tunisian city of Thuburbo Maius shows the degree to which monumental construction projects were completed in a piecemeal, improvised fashion. I argue that North African populations continuously interacted with not only finished buildings but also the construction process itself; the latter was in many ways a more significant factor in both euergetism and city life.

Chapter 6 investigates the act of renewal, something I consider by examining the relationship between new construction projects and what they are replacing. I identify four large trends across regeneration efforts: the continuity of space and function; the deliberate restructuring of the cityscape; the displacement of urban production; and the consolidation of housing into larger, more elaborate elite residences. Although there are some restrictions to property ownership and urban development, these trends emerge primarily as the result of a bottom-up, grassroots effort. The many faces of decentralized renewal interact at both the regional and local scales to create a cityscape increasingly segmented along functional and, in at least some cases, socioeconomic lines.

The interplay between different types of renewal leads to questions about the relationships between each of my four urban processes, and I discuss these ideas in Chapter 7. If my approach can be loosely defined as a study of the Roman city as a series of processes, this framework presents a number of larger themes: the city as a 'glocal' phenomenon; the impacts of the movement of peoples on the built environment, and vice versa; the importance of lived experiences in understanding development; and the degree to which the study of any period must be seen as part of a longer history of urban change. These lessons establish the potential methodological and theoretical contributions of an interrogation of urban processes for other cities in the Roman empire, and to the towns of other periods and places.

Chapter 2. From perceptions to process in the Roman city

The North African city, as I have already demonstrated, has been subject to colonizing forces for millennia. From the earliest spread of Phoenician trading posts, to the rise of a Punic power based at Carthage, to a series of conquests by Romans, Vandals, Byzantines, and Arabs, the urban landscape has featured heavily in the negotiation of global power and local response. Before I move to the way that these negotiations were handled in the cities of the Roman period through a study of the urban processes at the heart of this work, a few basic questions need to be addressed. How did a limited segment of the ancient population think about cities scattered about the Roman word? How do modern scholars perceive these same cities? And how do I build on these ideas in creating a new approach?

In this chapter I look first at ancient perceptions of the city. There are considerably fewer detailed texts in the Roman period about the importance of urban life than are available for the Greek world, and yet these authors did have opinions ranging from the ideological importance of urban life within a wider civilizing mission to the pragmatic details of city planning, architecture, and administration. Modern scholarly discourses have built on these ancient concerns and, at the same time, introduced larger historical questions often tied to binary relationships between continuity or change, Romanization or resistance, and consumption or production. Each of these ideas helps to explain some ways in which the Roman-era city may have functioned. They also, however, produce competing visions about what a city means, or how it should be defined. The results of these tensions is a picture of 'Romans' and 'locals' that overlooks

the diversity of North African communities and the dynamism of the city more generally.

I give these ancient and modern ideas a brief, schematic treatment as a means of situating my own approach. I draw direct inspiration from modern scholarship both in terms of my thematic coverage of concepts such as urban sprawl or gentrification, and through the use of a methodology of urban biography at select sites. My work makes extensive use of existing data to allow a regional coverage of areas not easily accessible in the current geopolitical climate and to more efficiently map the many cites in my study area. I outline here the various data sources that form the basis of my analysis. Finally, I highlight the importance of a concurrently regional *and* site-based approach to understanding the interplay between global trends and local developments, between top-down and bottom-up forces. These three key elements—modern influences, data harvesting, and multi-scalar analysis—help me to build on ancient and previous scholarly perceptions of the Roman city while avoiding their frequently reductionist qualities; the result is a story of the Roman city centred on local, North African experiences.

Ancient perceptions of the Roman city

A first step in addressing the Roman city in North Africa is to consider the ways that the city was perceived in ancient thought. Any such attempt is limited by the nature of the sources, which will necessarily represent primarily the perspective of an urban, male, educated elite. Without burrowing too deeply into this literature, a few key themes can

be discussed here that are particularly relevant in the following analysis: the symbolic importance of both the act of foundation and of the urban lifestyle more generally; a deep concern with the rules of architecture and urban planning ranging in scale from individual buildings to the city as a whole; and the practical side of civic administration, from taxes and citizenship to rules about construction. Or, to paraphrase these ideas by asking a series of questions: what does a city mean? How is it built? And how is it administered after its initial construction? These queries form the basis of many of the modern, scholarly investigations of the Roman city, and each connects in some way to the various physical processes of urban change that form the chapters that follow.

What does the city mean?

A common theme emerging in mentions of the city by authors writing during the Roman period is the importance of the urban ideal to Roman civilization more generally. Great attention was paid to the moment of city foundation. Rykwert's anthropological take on urban form, *The Idea of a Town* (1976), remains one of the best summaries of the foundational process drawn directly from historical sources. In it, he collates evidence for the necessary processes of augury prior to selecting a site (Rykwert 1976, 51–58); the methods of survey of the urban plan (Rykwert 1976, 49–50, 59–62); the ploughing of the first furrow delineating the area of the future city (Rykwert 1976, 65–68); and the creation of foundational deposits (Rykwert 1976, 58–59; see Chapter 3). The ideological importance of this originating act is also seen in the prominence of founder mythology to many cities. The most obvious example is the physical

preservation for centuries of the supposed hut of Romulus on Rome's Palatine Hill, but the persistence of founder myths can also be seen elsewhere—the story of Dido's foundation of Carthage by marking out a territory from the king Iarbus using the hide of an oxen is but a single North African reference.

Beyond the moment of foundation the city was treated as a centre for the political and administrative spheres (Goodman 2007, 8–13; Perkins and Nevett 2000, 214–15), as an important ideological concept and perhaps even as a global symbol of Roman culture (Hingley 2005, 77; Laurence and Trifilò 2015, 103). Revell effectively demonstrates the ways in which, both directly and in passing, many Roman authors relied on a narrative of rural savagery at odds with the social institutions that could only be provided through urban, communal living (Revell 2009, 44–49). This underlying assumption of urban life as good, non-agglomerated settlement as bad is most obvious when an author such as Tacitus describes the practices of non-Roman populations, as when he equates many uncivilized characteristics of the Germans tribes with their living separated and scattered (Tac. *Germ.* 16; discussed in Revell 2009, 46; Goodman 2007, 10). Tacitus' account of the importance of the city to Roman culture in Britain—specifically aspects of urban life like fora, the toga, Latin language, Roman temples, baths, or porticoes—follows a similar trope (Tac. *Agr*. 19–21; discussed in Laurence and Trifilò 2015, 103; Laurence *et al.* 2011, 253). Yet even passing comments often point to the communal, urban living as the correct way of life—Revell notes, for example, that Aeneas is pushed onward in his flight from Troy by a need not to settle his followers in a

rural paradise, but rather to found a new city to equal and surpass the greatness of Troy (Revell 2009, 45).

The interaction between Romans and local populations also points to the perceived importance of the city to Rome's colonial enterprise. The earliest colonial foundations of the western Mediterranean, first Greek and Phoenician and later Roman and Punic, were urban in nature (van Dommelen 2005, 144). The Romans created cities in locations that were perceived to be under military or ideological threat; in the case of North Africa, the foundations along the *limes* have been directly connected to a desire to control nomadic tribes and assert the superiority of a sedentary lifestyle (see Cherry 1998; Fentress 1979; Février 1982), especially after the revolt of the Numidian deserter Tacfarinas in 15 CE (Gascou 1972, 38; Shaw 1982, 41). I return to this idea of the city as a force against a rurally-oriented or nomadic way of life in a discussion of Romanization and resistance, below, and again in Chapter 3.

The city of Rome itself also held an important conceptual space in the Roman imaginary. Edwards and Woolf summarize a number of literary references to Rome as a world city, either through the direct use of the word *cosmotrophos* (nurturer of the world) or, more frequently, through the direct discussion of the importance of the city (*urbs*) to the rest of the Mediterranean world (*orbis*) (C. Edwards and Woolf 2003a, 2–6). The significance of the connection between the capital and the Roman world can be seen not only in historic sources but also in practices such as the triumph and in the physical fabric of the city, for example the mound of imported amphorae fragments

that would become Monte Testaccio. Reversing our gaze from Rome out to the provinces and, in particular, the frontiers, the idea of Rome as a microcosm of empire is equally prevalent (C. Edwards 2003; C. Edwards and Woolf 2003a), as we see in the assumed recreation of smaller 'Romes' in recently conquered provincial settings (Jiménez 2010b). This last idea, of Rome the cosmopolis expressed in architecture and urban development both in Italy and in the provinces, links both to ancient perceptions of architecture and to recent scholarship on the capital itself (C. Edwards and Woolf 2003a, 6–10). These beliefs about planning and construction, or how a city is built, are my next focus.

How is the city built?

An interest by ancient writers in the proper methods of construction and urban planning is undeniable, even if the topic has perhaps generated the lion's share of the attention of modern scholars. There is no surviving textual equivalent in the Roman world to the Greek conception of the ideal city form, the formal orthogonal planning most often associated with Hippodamus of Miletus (J. B. Ward-Perkins 1974, 33). Roman architectural proscriptions for the city tend to be, from what we can gather from a relatively small array of sources, more concerned with pragmatic aspects of construction—the technical description and maintenance needs of water infrastructure in Frontinus' *De aquaeductu* or the rules for site selection, surveying, materials, and monuments presented in Vitruvius' *De architectura*.

In *De architectura*—to use the most lasting and direct example of Roman architectural practices—the author Vitruvius covers not only the important symbolic steps necessary when choosing a site but also a number of practical considerations for the urban plan and its associated plazas, houses, and monuments. Fortification walls, we are told, should be built on foundations slightly thicker than walls (Vitr. *De arch.* 1.5.1). Towns should not be square but circular or polygonal to allow views of enemies from many points (Vitr. *De arch.* 1.5.2). Streets should be positioned in relation to the various winds to ensure that gusts hit only the angles of houses, and thus their disagreeable forces are diverted away from the rooms within (Vitr. *De arch.* 1.6.8). The width of the forum should be two-thirds of its length, giving it an oblong shape (Vitr. *De arch.* 5.1.2), and the width of the adjoining basilica greater than one-third, but less than one-half, its total length (Vitr. *De arch.* 5.1.4).

Of course the actual techniques of foundation and construction rarely meet all of the rules set out in such authors as Vitruvius or Fronto. Some are selectively followed and others completely abandoned or ignored—depending on the local topography and the interventions of local communities—as I explore in Chapter 4. Yet there was, nonetheless, a perceived 'right' way of doing things held by the educated classes at the heart of Roman empire, and these perceptions I argue did contribute to the way that planning and construction unfolded, even at a grassroots level in the North African city.

In addition to an interest in foundation, planning, and construction, there is also evidence for a Roman concern with how the city is maintained over time. A number of

legal statutes impose penalties for the ruination or unlawful destruction of city blocks; the *Senatus Consultum Hosidianum*, to give one example, conceived under Claudius and codified by the senate under Nero, served as the basic restriction on building demolition until the Severan period (Garnsey 1998, 72). These restrictions served multiple purposes, including preventing the reduction of available housing to drive up rental prices and limiting the robbing of materials (Garnsey 1998, 73–75). Perhaps more significantly, laws penalizing extended periods of urban decay also demonstrate a desire by the Roman authorities to keep the cityscape vibrant and active, reflecting an underlying idea that abandonment reflects poorly on the finances, dignity, and reputation of a city (Lomas 2003, 30). This need for not only construction but also reconstruction only intensified in later periods, as we can see in additional restrictions on demolition or limits on building in public spaces recorded in later legal compendia like the *Codex Theodosianus* or the *Digesta seu Pandectae* of the fifth and sixth centuries, respectively (Leone 2007, 208–13; Lepelley 1981, 62–65; Lomas 2003).

I return to these ideas of urban maintenance in Chapter 6. The important point to note at present is the degree to which contemporary opinions on architecture and planning in the Roman period included not only the foundation of cities, but also their upkeep; this second concern ties directly my last theme, civic administration.

How is the city administered?[1]

Beyond practical questions of why and how cities should be built, evidence in ancient sources attests directly to concern over the various statuses afforded to municipalities and their resulting systems of civic administration—that is, how cities should be managed. Epigraphic and historical sources alike list a number of different civic classifications for both the towns in North Africa, and the cities of the Roman world more broadly. The administrative distinctions between many of these terms—what distinguishes a *castellum* from an *oppidum*, or makes the citizens of a *civitas* different from those living in a *pagus* or *vicus*—are often far from obvious (Février 1989, 168–69; Dufton and Fentress, forthcoming). Broadly speaking, however, self-governing civic communities (*civitates*) controlled a surrounding territory (*ager* or *territorium*) which may or may not have included smaller villages or communities (*vici*, *castella*) (Edmondson 2007, 254).

Among the variety of different civic statuses and administrations in North Africa, outlined only briefly here, there are two distinctions that carry particularly significant implications for the city and its inhabitants. The first, the *municipium*, awarded the full Latin rights to its citizens, thus matching the rights assigned to many of the cities of Italy during the first century BCE (Edmondson 2007, 257). The second, the *colonia*, provided full Roman citizenship, matching the status of the inhabitants of Rome itself and offering the highest level of legal standing (Février 1989, 170–72). Communities of

[1] A truncated version of this discussion appears in the forthcoming Dufton and Fentress contribution to the *Blackwell Companion to North Africa in Antiquity*.

both types were administered by the Roman magistracies common to cities across the empire, namely the *duumviri*, *aediles* and *quaestores* that remained in use in North Africa until the Vandal conquest (Lepelley 1979, 150). The title of *colonia* was not reserved solely for new foundations, contrary to popular modern thoughts on the colony, and could correspond either to the installation of a new population of Roman veteran colonists or to the rewarding of an existing city with Roman citizenship; I discuss these differences more in Chapter 3.

The city in its various forms served as the primary locale of taxation and was responsible for maintenance of roads in its wider territory (Edmondson 2007, 254–55). Civic elites held a series of administrative positions, giving them a chance to establish and maintain their difference but also often requiring donations matching the honour of the office (Duncan-Jones 1962; 1963; Edmondson 2007, 272–75; Lassère 2015, 401–11). The populations of the North African *civitates* consisted most frequently of non-citizens, or *perigrini*, paying some form of tribute to the Roman province (Edmondson 2007, 256). Many towns that existed before the Roman conquest maintained an earlier system of civic administration in the first centuries of Roman rule. Some have even argued for the increased popularity of the Punic *sufetes*, a type of local magistrate, after the fall of Carthage as a means of establishing or reinventing a new 'local' regional identity in contrast to foreign, Roman control (Belkahia and Vita-Évrard 1995; Crawley Quinn 2003, 32; Crawley Quinn and McCarty 2015, 181).

There were also groups, called *oppida* or *pagi civium Romanorum*, installed within otherwise indigenous settlements, and these established communities held Roman citizenship but fulfilled no specific administrative status at the local level (Shaw 1981, 451). At many sites with this type of dual-citizenry there was a long-held assumption that Roman and non-Roman populations were somehow spatially segregated (see the examples of Thuburbo Maius in Chapter 5, Thugga in Chapter 6). There is little direct archaeological evidence in support of this claim, and it seems more reasonable that citizens, even if governed by different bodies, were nonetheless mostly integrated in their daily life.

The degree to which the dissimilarities between statuses and administrative roles were also muddy to the residents of the ancient world, and the critical differences between municipal or colonial designations for citizens, are central to my current focus. Aulus Gellius, in his *Noctes Atticae*, recounts a great deal of confusion, by Hadrian in particular, over the practical differences between *municipia* and *coloniae.* The emperor expressed surprise that the citizens of provincial *municipia*—including a direct mention of the North African city of Utica—would rather receive a status upgrade to *colonia* even though this change would require them to abandon their traditional customs and laws for those of the Roman state (Gell. *NA* 16.13; discussed in Février 1989, 170; Revell 2009, 57). Yet citizens and non-citizens alike campaigned for status upgrades through building programmes and the pursuit of appropriate, usually imperial, patrons (Dufton and Fentress, forthcoming). Civic status was clearly a valuable concept in ancient perceptions of city life for symbolic reasons beyond taxation alone.

Scholarly treatment of the Roman city

Scholarly perceptions of the Roman city unsurprisingly follow many of the themes of ancient writers. The symbolic nature of the city and its structures is a frequent topic (e.g. Zanker 1988; 2000).The rules of architecture are often featured, both at the scale of individual buildings or building complexes (e.g. MacDonald 1982; Thomas 2007; Wilson Jones 2000a), and of the city as a whole (e.g. MacDonald 1986; Ward-Perkins 1974). Questions of civic status and administration feature heavily, particularly regarding the cities of North Africa (e.g. Aounallah 2001; 2010; Gascou 1972; 1982; Shaw 1981).

The Roman city is also often studied, however, through the lens of a series of intellectual dichotomies. In each case, a hypothesis for one possible function of the Roman city—as a key tool in the spread of Roman culture, for example—takes hold, only to be eventually dismissed by an emerging contrary strand of thinking that claims the opposite. Much time has been spent on questions of urban continuity or change under Rome, of Romanization versus local resistance, and of models of economic consumption or production. Yet asking questions of the Roman city according to such forced binary relationships results in a number of limitations. It is rarely considered, for example, at different spatial scales, instead treating all neighbourhoods or communities within the city as a single unitary population consuming or producing goods, and adopting or appropriating Roman culture. Either/or propositions also tend to flatten chronological changes into a single, Roman phase used in contrast to what came before and after the sway of Roman rule. Yet cities are dynamic places, and the complexities of urban life are influenced by both local and imperial influences. A quick

look at certain scholarly treatments of the Roman city shows the ways in which these works have succeeded, and areas where we can say something different about the numerous communities contributing to urban development. This review serves as a necessary precursor to my process-driven approach and its modern anthropological and sociological inspirations.

Continuity/change

A first strand of scholarship centres on the basic question of whether the Roman period witnessed continuity or change in any pre-existing towns and cities of the provinces. Debates over continuity and change are particularly pronounced for chronological periods later than the focus of my argument here, usually revolving around the persistence (after Brown 1971) or complete failure (after Gibbon) of the 'Classical' city. The two poles of this debate persist in discussions both of the cities of late antiquity (Leone 2007), and of those after the Muslim conquests (Fenwick 2013; forthcoming; Kennedy 1985). Yet in terms of the Roman city there is often an implicit acceptance of change in those provinces without a well-documented, pre-Roman urban tradition. Thus we see an assumed drastic departure in urban life in much of the scholarship on Britain, Gaul, or Iberia where we know less of the first settlements (e.g. Edmondson 2011; Hanson 1994; Jones 2008; Keay 1997; 2006), compared to a much longer discussion of continuity in the cities of Greece, Anatolia, or the Near East (Raja 2012; see Perkins and Nevett 2000, in particular, for a dialogue implying continuity in the east and change in all but the Greek colonies of the west).

This topic of urbanization has received recent attention in Italy and the western Mediterranean. To briefly summarize, a growing consensus advocates for the importance of situating the Roman city within a much longer chronological context (e.g. Attema *et al.* 1998; Riva 2005; van Dommelen 2005). The symbolic importance of the act of foundation is highlighted in ancient accounts, as I outline above; thus there are numerous reasons why Romans might stress their own intervention as a significant moment of rupture. Yet in many cases the archaeological evidence seems to contradict any idea of a blank slate, pointing both to earlier settlements at the site of later, Roman towns and to a much earlier tradition of urban settlement in the western Mediterranean divorced from Roman, or indeed other colonial, concerns (Riva 2005; van Dommelen 2005). Recent works have also highlighted how populations of the Roman world interacted with the past, and the importance of existing traditions (and not only textual accounts of origins) in shaping local histories (Rojas 2013; Rojas and Sergueenkova 2014). It is interesting to note the push for this type of continuity or memory in areas with a long history of scholarship on earlier peoples—Etruscans, Greeks, Persians, Hittites—rather than those with a more fragmentary record of Iron Age urban centres. I touch upon a continuity of Iron Age to Roman landscapes in a discussion of megalithic burials in Chapter 3.

In North Africa, the normative approach falls heavily on the side of assuming urban change under Roman rule. This can be seen in historical narratives that focus on the emergence of a new, densely urban landscape under Rome; although a pre-Roman landscape of nucleated settlement is accepted, it is also assumed that these earlier sites

were, at best, a series of clustered villages (e.g. Février 1982, 328–35; Lassère 2015, 367). The traditional focus of fieldwork has remained, until recently, on the Roman phases of urban sites—even taking this periodization at its broadest to mean anything from the 2nd century BCE to the Vandal conquests of the early 5th century CE—at the expense of both earlier and later materials. More recent fieldwork has adopted an explicitly Iron Age research agenda that warrants excavation to well below Roman levels. The results provide evidence for greater continuity, with increasingly early signs of urban settlement at sites such as Althiburos (Kallala *et al.* 2008; Kallala and Sanmartí 2011; Sanmartí *et al.* 2012) or Utica (López Castro *et al.* 2016), and earlier signs of iron metallurgy at Carthage (Kaufman *et al.* 2016). We can assume that an increasing research focus at pre-Roman levels in other cities will continue this trend toward identifying earlier and earlier city life.

Yet evidence for continuity should not be treated as a repudiation of change, and it is a mistake to deny the meaningful shifts in town life in North Africa or beyond. Urban change occurs during the period of Roman control, in other words, but this change cannot automatically be connected to Rome and only Rome (Woolf 1995), and it must be positioned equally alongside evidence for the longevity of urban practices. This tension between two seemingly diametrically opposed developments is mirrored in the debate over Romanization or resistance that is my next theme.

Romanization/resistance

A second dominant binary across much scholarship on the Roman city is that of Romanization and resistance. The transition from Iron Age cultures to the Roman way of life, stereotypically referred to as a process of Romanization, has traditionally been considered "one of the clearest examples of cultural change in the history of Europe" (Keay 1997, 192). Taking a lead from an emphasis on the urban ideal in our historical sources, dialogues on Romanization have often centred on the city as one of the key spaces in which a Roman culture is created and communicated to the inhabitants of the provinces (Fentress 2000a, 12; Hanson 1994, 154–56; Keay 2001, 118; 2010; Millett 2010). A heavy emphasis is placed upon certain types of urban furniture as key elements of Roman identity—theatres, baths, basilica—and upon the central role of Roman towns as active agents in the processes of provincial urbanization (Hingley 2005; Keay 1998; 2001; 2006; Laurence *et al.* 2011; Revell 2009; Wallace-Hadrill 2008). The loss of these same structures is considered to result in the end of the Roman city, and the rupture with later periods mentioned above. The Roman way of life is, according to this thinking, inherently urban. Provincial society, therefore, adopts Roman ideals with a movement of populations into the city and the acculturation of citizens through daily interactions with the architecture and urbanism so key to the creation of Roman citizens (Revell 2009, 43).

Such a straightforward acceptance of Romanization is problematic, and has been subject to extensive—and often acrimonious—scholarly debate. The term has been

criticized for the dominant position awarded to Roman culture, a lack of agency of indigenous populations, the ties between Romanization and modern colonial interests, and an overwhelming concentration on the elites (see Alcock 2001; Barrett 1997; Gardner 2013; Hingley 1996; Mattingly 1996). Yet the concept of Romanization has largely persisted in the scholarship of the Roman provinces, particularly in the work of continental European authors, and particularly in reference to the Roman city (e.g. Fontana 2001; López and Soler 2001; Palmieri 2010). Even attempts at reframing the question to one of globalization, using the theoretical framework provided by much recent work on this phenomenon in the modern world, can accidentally fall back upon the same underlying assumptions (Hingley 2005; Hitchner 2008) rather than fulfilling globalization's potential to move beyond historical narratives to a study of archaeological materials (Versluys 2014). In the cities of North Africa, in particular, both the direct use of the concept of Romanization (Ben Akacha 2011a; Ben Akacha 2011b) and more indirect discussions of imperial power (Février 1989; 1990) imply the spread of a uniquely Roman urbanism that has in many ways been delegitimized in the wider scholarship.

Pushing back against this narrative of urban Romanization is the conception of local resistance to imperial forces. In his seminal work on indigenous resistance of North African populations to Roman rule, Bénabou identifies two methods by which Romans created or shaped communities; both rely on the city as the most elaborate and efficient means of Roman domination (Bénabou 1976, 395). In the first method, the town serves equally as goal, technique, and result of the Roman civilizing mission,

usually through the foundation of new colonies. These colonies, discussed in further detail in Chapter 3, mark a significant change in the living conditions of local populations, a transformation Bénabou connects more with repression than Romanization (Bénabou 1976, 396). In the second method, towns and cities are used as a means of exposing local populations to Roman norms, providing indigenous peoples with the necessities of 'civilization'. For these indigenous towns, gaining full civic status was often an outcome of a long period of political machination and urban monumentalization, not a starting point as with new colonial foundations (Bénabou 1976, 397).

The idea of resistance also relies on a non-existent Roman/local binary (Versluys 2014; Woolf 2014). The local populations, in Bénabou's reasoning, are all uniformly 'African', and all united in pushing back against imperial control. Yet the complex history of colonization of North Africa shows that a number of different populations occupied the region during the Roman period, including the Punic descendants of first millennium Phoenician colonists; Numidians assumed to descend from earlier, nomadic populations; and Libyan populations connected to the Garamantes of the Fazzan. These populations also do not represent pure or distinct identities, with Punic populations interacting with Numidians and Libyans for centuries prior to the area falling under Roman rule. Within each of these populations there was also difference based on characteristics such as wealth, gender, or age. All of these facets would lead both individuals and larger communities to react differently to the spread of new architectural forms or urban ideals.

Explanations of Romanization/resistance, or subtler distinctions between adoption or imposition (Revell 2009, 77), based on the assumed powers of the city are significantly flawed in two ways. First, there is an underlying assumption of a single accepted shape for the city that is implicit in the exaggerated importance of 'Roman' cities in a provincial setting. Evidence for cities in other parts of the Roman empire, and indeed Rome itself, suggests no such monolithic urban ideal exists. As Woolf succinctly states, "there was no standard Roman civilization against which provincial cultures might be measured" (Woolf 1998, 7). Cities instead demonstrate a continuing evolution from Iron Age origins, into the Early Republic, through the height of the empire, and after the fall of the Roman west—as evidenced by the wealth of individual works and edited volumes tracking the evolution of urban settings over time (e.g. Abad Casal *et al.* 2006; Bullo 2002; Cunliffe and Keay 1995; Fentress 2000b; Jiménez 2010a; Leone 2007; Parkins 1997). The use of the city of Rome itself as a template for the cities of the provinces has also been called into question (Jiménez 2010b).

This second problem—an assumption of monolithic native versus colonial populations—shares similarities with many of the specific critiques levelled at the study of hybridity in archaeological contexts (Silliman 2013; 2015), and with issues raised by postcolonial approaches to archaeology more generally (van Dommelen 1997; 2006; 2011). If archaeologists have begun to make greater use of the context in which elements of material culture are employed in colonial situations—relying on terms such as entanglement (Dietler 2010) or hybrid practices (Tronchetti and van Dommelen 2005; van Dommelen 2006)—I argue that the study of the Roman city, in particular, has

remained tied to more static ideas of Roman/indigenous architectural tropes. To some extent this might be excused by the fact that hybrid practices are easier to spot on the level of the object. With the right methods we can say much about how a ceramic form may be created or the ways in which its context of use combines elements of different traditions. These types of hybrid actions are less obvious at the level of the city or, at an even larger scale, that of the settlement network. However, there is also a need for our examinations of the Roman city to consider questions of both the global and local scale, and to look specifically at the moments of urban change that equate most closely to the contexts of use we consider with smaller, portable objects—two topics that I return to with my own approach, below.

Production/consumption

A final dichotomy used in investigations of Roman cities relies heavily on economic activities, particularly whether cities are centres of economic production or consumption. Economic models of the city have been heavily influenced by the work of Moses Finley and his idea of the 'consumer city' (Finley 1973), a work itself based upon Weber's (1958) earlier writing on the emergence of capitalism (Whittaker 1995, 11). Debate surrounding this simplified characterization between passive cities and the active countryside has provided fodder for countless papers, conferences, and edited volumes looking either at the ways in which the city exploited its surrounding territory (Rich and Wallace-Hadrill 1991), or for evidence of urban industry to disprove the purely consumptive powers of Rome or other larger centres (Bowman and Wilson 2009;

Jongman 1988; Morley 2002; Parkins 1997). The result of these works, generally speaking, has been the rejection of Finley's claim, and a more nuanced understanding of the urban economy.

The study of patterns of consumption or production can present a useful look at some of the different economic facets of city life (e.g. Ellis 2011; Fentress 1990; 2013; Leone 2003; Wilson 2001; 2002). In North Africa, in particular, economic works focus on the urban production of textiles (Wilson 2001; 2004); garum (Slim *et al.* 2007); ceramics, particularly in later periods (Leone 2003b; Leone 2003a); murex (Wilson 2002); or agricultural processing, usually of olives (Bermejo Tirado 2010). The social elements of production and consumption are less frequently discussed, and could certainly be explored further. Such an approach—although not the explicit focus of my work—could look at the interaction between commercial and productive landscapes with other types of activity (see Chapter 6 for an interaction between urban production and residential construction), or the connection between economic change and other demographic and settlement shifts (see in particular Chapter 4 on coastal growth).

The production/consumption divide also extends to a broader, long-assumed binary division between urban and rural landscapes. Urban elites are concerned with the monuments that connect to ideas of Romanization and resistance, while rural peasants work to produce the materials shipped to Carthage, to Rome, or across the Roman world. In other words, too often both urban and rural are discussed in abstract terms rather than as mobile, active populations. Yet an increasing body of work points to the

importance of breaking down urban/rural boundaries of the ancient city (see M. L. Smith 2014). Rural populations regularly move into and out of the city for seasonal markets, to attend events, or to conduct other business. Agrotowns are filled with citizens living in the city but working in the surrounding countryside. Urban elites may own rural property where they spend time away from city life, and rely on agricultural landholdings as a primary source of wealth and status. The area between the urban and rural, the suburbs, is also increasingly seen as an active and permeable zone for production, farming perishable crops, housing, and ritual or entertainment activity (e.g. Mattingly *et al.* 2001; Stone and Mattingly 2010; Berenfeld *et al.* 2016; see Goodman 2007 for a comprehensive take on Roman peri-urban development). Any forced division between city and country, or between consumption and production, blocks any attempt to represent the dynamism of urban change.

From perceptions to processes

The above summary of both ancient and modern scholarly perceptions of the Roman city focusses on the tension between a number of competing visions for what the city is, what the city means, and how the city impacts the lives of those who live there or visit. The focus on symbolism, architecture, and civic status of the ancient sources ignores many of the more mundane aspects that actually typify city life. Modern scholarship builds upon these existing themes, but also often devolved into a series of either/or questions that equally cannot accurately capture the dynamic developments of urban places. All of these cases, I argue, are looking into larger, top-down urban change at the expense of understanding the ways in which this transformation is both created and

mitigated at the local level. Rather than the city as buildings or armatures (MacDonald 1982; 1986), or the city as ideology (Revell 2009, 76; Zanker 2000), I see the Roman city as an ongoing process of improvisation and negotiation that mediates the daily life of its inhabitants.

The city as improvisation is best studied archaeologically by looking at the ways in which the physical characteristics of the urban landscape evolve over time, or what I define as urban processes. Although others are possible, I focus my work on four such processes: the creation of new settlements under Rome (foundation); the physical expansion of existing cities (growth); the construction of new monuments (monumentalization); and the ongoing reconstruction and reshaping of the cityscape as a whole (renewal). I elaborate on my definitions for these four terms in the chapters that follow. It is important to note at this stage, however, the degree to which each may operate at different spatial scales, or reflect differing levels of imperial control or interference. The foundation of a new settlement, for example, can impact an overall urban network—the connecting routes and rural populations—of an entire region and, as such, often requires an expression of centralized power to partition land or make use of military engineers. The replacing of an active kiln or other productive site by a new elite residence shifts the nature of a neighbourhood, potentially contributing to a new character to the city as a whole, but this type of change can start at an extremely local level.

My goal is to consider the changes brought about by foundation, growth, monumentalization, and renewal, not only to the physical landscape of the North African city but also to the populations living within. In practical terms, my look at urban process relies on three key ideas: the relevance of writings on the modern city to the Roman past; the importance of reusing existing data; and the need for any successful method to find a balance between the global and local influences competing within the streets and spaces of North African settlements. I outline each of these ideas, and their implications for my subsequent analysis.

The pertinence of modern urban scholarship

There is a need in comparative urban studies to balance the detail of individual, historical trajectories with the ability to make meaningful generalizations that do not overlook the man-made histories of individual places (Abu-Lughod 1976, 38). This line of inquiry has resulted in three distinct bodies of literature: comparisons amongst the cities of the ancient world; direct application of modern metrics to archaeological contexts; and analogies between the cities of the present-day.

A number of recent edited works in this vein have brought together scholars studying the cities of past societies across the globe, in the hope that discussing places as chronologically or geographically diverse as ancient Babylon and Inkan Cuzco, pre-Imperial China and sub-Saharan Africa, might provide new perspectives on both the archaeological study of the city and its social dimensions (Marcus and Sabloff 2008; M. L. Smith 2003; Yoffee 2015). These examples attempt to balance the poles of

individuality and comparison, of moving across regions without losing cultural or historical specificity, to varying degrees of success.

Less frequent, however, are interactions between modern urban studies and archaeological approaches to the city. One of the most frequent proponents for dialogue between these disciplines has been the anthropologist Michael E. Smith, usually advocating for the use of empirical, mid-range theories to quantify the object of study (M. E. Smith 2010b). Efforts have been made at bringing comparative geographical techniques along these lines to the study of neighbourhoods (M. E. Smith 2010a; M. E. Smith *et al.* 2014), open space (Stanley *et al.* 2012), and even social inequality (M. E. Smith *et al.* 2016). The use of quantitative methods allows the direct comparison of calculated values relating to class mobility, ethnic clustering, or low-density urbanism in different areas of a single settlement, and between settlements of different regions or periods. However the extreme abstraction of such practices results in a discussion too often devoid of any human element and places too great a demand on the archaeological data employed. We can say, for example, that the governance and class mobility 'domains' include variables such as tax revenue source, a governance code, or a strongly differentiated elite class (M. E. Smith *et al.* 2016, 5)—whether the ability to 'code' these variables using archaeological information actually leads to a meaningful discussion of local experiences of city life remains to be seen, and I do not adopt this method.

Modern studies are also torn between quantitative and qualitative analyses. Theoretical writing on the modern city—beyond those directly applying the quantitative techniques originating in the urban geography of the mid-20th century—have been used less frequently by archaeologists. These ideas also inform my thinking on Roman materials. Examples of titles of particular relevance to my work include discussions of the rhythm of city life such as de Certeau's *The Practice of Everyday Life* (1984) or Amin and Thrift's *Cities: Reimagining the Urban* (2002); considerations of the meanings communicated by cityscapes like Rapoport's *The Meaning of the Built Environment* (1990); or more recent debates on the negotiation of culture in urban contexts like Zukin's *The Cultures of Cities* (1995) or Low's *On the Plaza: The Politics of Public Space and Culture* (2000). The use of biography to trace the development of an individual city—usually through the lens of a specific thematic interest or focussing on a single neighbourhood—is also a common trope of urban cultural history that I use as inspiration, and will return to below.

I argue that the cities of the Roman world can benefit—if not necessarily from direct comparison to other places and periods—at least from an influx of new ideas or insights provided by integrating the classical city into the study of the city more generally. Works integrating the Classical past in a discussion of urban form (e.g. Kostof 1991; 1992) focus almost exclusively on the static plans of cities from different periods rather than on their development over time or the lived experiences of their inhabitants. The ancient city is also invoked only as a means of understanding later developments. Conversely, scholars of the ancient world are not, generally speaking, as interested in making direct use of writings on the cities of later periods—nor are scholars of the

modern city especially invested in using examples from a Roman past. Yet urban processes such as sprawl or gentrification have an established body of literature, taking advantage of which can be beneficial to the study of the Roman world. We cannot of course directly retroject the effects of modern developments onto past populations. We can, however, use modern examples as a means of understanding the potential impacts of certain changes to an urban landscape, and also look specifically for evidence of these types of impacts in past contexts. We can also tweak terminology and ideas from the present to ask questions of the Roman world.

My project serves as an exploration in applying modern ideas to ancient contexts. To underscore the utility of this approach I open each of my chapters with a vignette from a modern, American example: New Orleans, Phoenix, Washington, and New York. Each city could easily be replaced with locations elsewhere in the global west, from the developing world, or from specifically pre-industrial historical examples. I have chosen to focus exclusively on connections to the American city for a number of reasons. For one, we often have a much better idea of the direct social impacts of urban processes in the modern city than we do in pre-industrial examples. While the latter cities may appear more appropriate as direct comparanda to the Roman world, the 20th and 21st century city exemplars feature heavily in a number of modern disciplines such as anthropology, sociology, or American Studies that can take advantage of present-day observation, living memory, and the extensive historical archives of the last two–three centuries to create richer social narratives.

As for the specifically American city, these owe much to the Classical tradition, from the architecture of individual buildings or monuments to ideas of urban planning and the importance of the cityscape to the portrayal of American imperial power (Dyson 2001); by including the history of American cities into a discussion of the Roman past, I make this link that much more explicit. More than that, given the tendency to treat the city in North Africa too often as an oriental other, such a tactic provides a sense of immediacy by making direct connections to a potentially shared experience of modern life. The use of American vignettes is thus an additional way to reach broader audiences.

I close here with a blanket caveat. While I appreciate that there is a vast body of literature from modern urban studies, the overview provided for each of the processes that I cover in the pages that follow is limited to those sources that are most directly relevant to the Roman context. In each case much more could be said on the impacts of these developments on the modern world.

Repurpose, reuse, recycle

The Roman cities of North Africa have long been a focus of archaeological reconnaissance, cultural preservation, and tourism. As a result the initial task of finding and identifying sites and monuments has been completed in many areas, and the data needed for a regional understanding of urban change are available. My work repurposes and combines these data to ask the questions of long-term urban change and local experiences often omitted from what are, in the majority of cases, a series of

site gazetteers. I briefly summarize here the key data sources used, and will return to them in the chapters to follow.

A number of works document the archaeological remains of both urban and rural landscapes at a regional level. The first, according to date of publication, is Stéphane Gsell's two-volume *Les monuments antiques de l'Algérie* (1901a; 1901b). Each monument is recorded in considerable detail—including its dimensions, construction techniques, and conservation—and considering the manifold changes to the landscape in the last century, many descriptions include details and sometimes entire sites no longer visible or accessible in present-day Algeria. The focus is primarily on built structures or megaliths rather than settlements. Gsell's subsequent *Atlas archeologique de l'Algérie* (Gsell 1911) elaborates further, moving across Algeria on a site-by-site basis. The two volume *Atlas archéologiques de la Tunisie* (Babelon 1893; Cagnat and Merlin 1932) fulfils a similar role in Tunisia and includes detailed maps and descriptive texts listed by site across the country. The multi-volume *Atlas préhistorique de la Tunisie* (1985–present), although still incomplete, fulfils a similar function for chronologically earlier materials.

More recent publications present a similarly detailed background on the Roman cities in their respective regions. Claude Lepelley's two-volume *Les cités de l'Afrique romaine au bas-empire* (1979; 1981) provides both a detailed administrative history of the cities of the Roman provinces and an extensive gazetteer of well-known and smaller towns in the later empire. When available, entries provide details of the political development of

each town, its leading families through time, and precise details of the municipal administration. Similar detail is presented in the excellent *Carte des routes et des cités de l'est de l'Africa à la fin de l'antiquité* (Desanges *et al.* 2010; this work is a revision of Salama's 1951 work *Vois romaines de l'Afrique du Nord*). Each site entry includes geographic location and modern state-mapping references, municipal history, site description, and bibliography.

I use the works of Lepelley and Desanges *et al.* as a baseline list of sites, but supplement and adjust this baseline using a number of additional sources for specific monument types, specifically Jouffroy (1986) for total monumental projects attested in the epigraphic record; Thébert (2003) on baths; Lachaux (1979) on amphitheatres and theatres; Crawley Quinn and Wilson (2013) on *capitolia*; and de Ruyt (1983) on markets. More details on these sources, including both their strengths and possible limitations, are provided in Chapter 5.

Existing digital data sources provide a final source of valuable spatial information. The Pleiades Project—a joint venture of the Ancient World Mapping Center and the Institute for the Study of the Ancient World—provides extensive coverage of sites taken mostly from the *Barrington Atlas of the Greek and Roman World* (Talbert 2000) and updated by a dedicated community of users.[2] The spatial information is available for use and repurposing on a Creative Commons license, and I link all sites in this dissertation to Pleiades coordinates using the unique six-digit identifier provided. I

[2] http://pleiades.stoa.org

augment these basic spatial data with additional details from both the Digital Atlas of the Roman Empire of Johan Åhlfeldt[3] and the Ancient World Mapping Center of the University of North Carolina, Chapel Hill.[4] Both sources include additional settlement information, detailed road networks, and provincial boundaries available for download and reuse.

There are acknowledged issues with these various sources, inconsistencies I have mitigated wherever possible during my research. For one, the *Carte des routes* is constructed primarily based on earlier itineraries, most notably the *Tabula Peutingeriana* (Desanges *et al.* 2010, 15–23). As such this work both misses sites not included as itinerary stops and includes places such as forts, large farms, or other waypoints that should not be considered urban settlements. These sites were all removed from my final list of cities. The available digital gazetteers, while adding sites not mentioned in various itineraries or those discovered by more recent fieldwork, also often include many 'settlements' that cannot be regarded as towns or cities. The crowd-sourced nature of these online projects also introduces the possibility of further user errors, particularly regarding site coordinates, chronologies, or classifications. By compiling information across multiple sources, I have been able to weed out non-urban sites and to focus on those locations that have multiple sources of information on location, civic status, monumental construction, or urban development.

[3] http://imperium.ahlfeldt.se/
[4] http://awmc.unc.edu

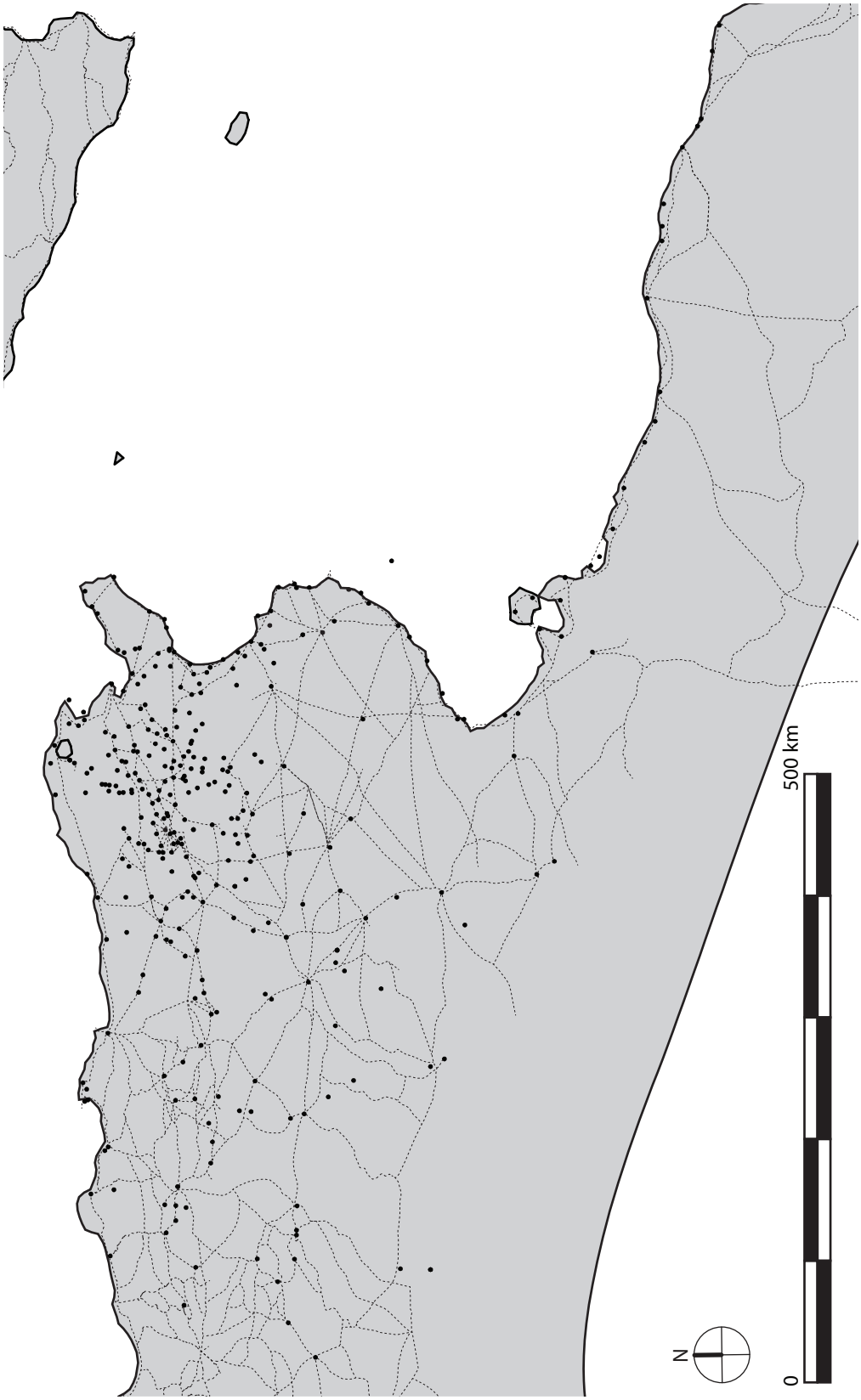


Figure 2. Map of all sites (see also Appendix 1).

In all, after removing non-urban sites, post-Roman foundations, and those cities with no known spatial information, the resulting data set contains 340 settlements (Figure 2). I have included these data in Appendix 1. This gazetteer, if not necessarily exhaustive, provides a robust foundation for the regional analysis that I complete in the following chapters.

100% global, 100% local, 200% urban

Imperial power can be expressed differently at diverse geographic scales, from the patterns of new foundations across a region to the construction of a monument where no previous buildings had stood. Yet gazing from the level of global empire only disregards the different experiences of local communities at the level of the site, or even amongst the inhabitants of a single household. At the same time, focussing only on the local can create interpretations divorced from larger historical narratives, from scholars working in different regions, and from widely shared forms of material culture. The Roman empire must be understood not as top-down power *or* bottom-up response, but as the combination of both.

It is necessary to avoid this binary thinking. As Laurence and Triflò recently noted—themselves quoting a recent seminar on globalization in the cities of the modern world (Koolhaas *et al.* 2000)—the Roman city works at a level that is simultaneously both 100% global and 100% local. An analytical framework is needed that can move beyond dichotomies to adequately account for this 200%, that is to recognise the contradictory trends that "are the very substance of the archaeological record of the Roman empire"

(Laurence and Trifilò 2015, 117). To straddle these contradictions, I adopt a mixed methodology of quantitative mapping and qualitative biography to address the relationship between the global and the local in the North African city. Thus, as already noted, the chapter for each urban process thus includes both a regional analysis and an urban biography of a single site.

A regional-level appreciation and interrogation is especially necessary in the case of North Africa. The cities of the region are too often treated as a single, uniform set, particularly in Anglophone scholarship (Laurence *et al.* 2011; Sears 2011). Thus a site such as Thamugadi along the Algerian frontier is compared easily and directly to sites as distant as Carthage, Lepcis Magna, or Volubilis, regardless of the fact that the distance between Volubilis and Lepcis is considerably greater than that of Rome to Istanbul (Figure 3). There are far fewer works conflating the urbanism of Asia Minor, Greece, the Balkans, or Italy into a single shared history. The recent work of Lassère breaks down some of this regional simplification, identifying both a number of sub-regions that have their own backgrounds and urban trajectories, and a set of functional urban classes that also share common developmental characteristics (Lassère 2015, 367–400). My own regional analysis avoids defining strict regional boundaries or functional typologies as much as possible in the belief that these will always be—to some extent—arbitrary distinctions. I do, however, build on Lassère's work by situating regional trends in foundations, growth, monumentalization, or renewal within the context of different regional histories.

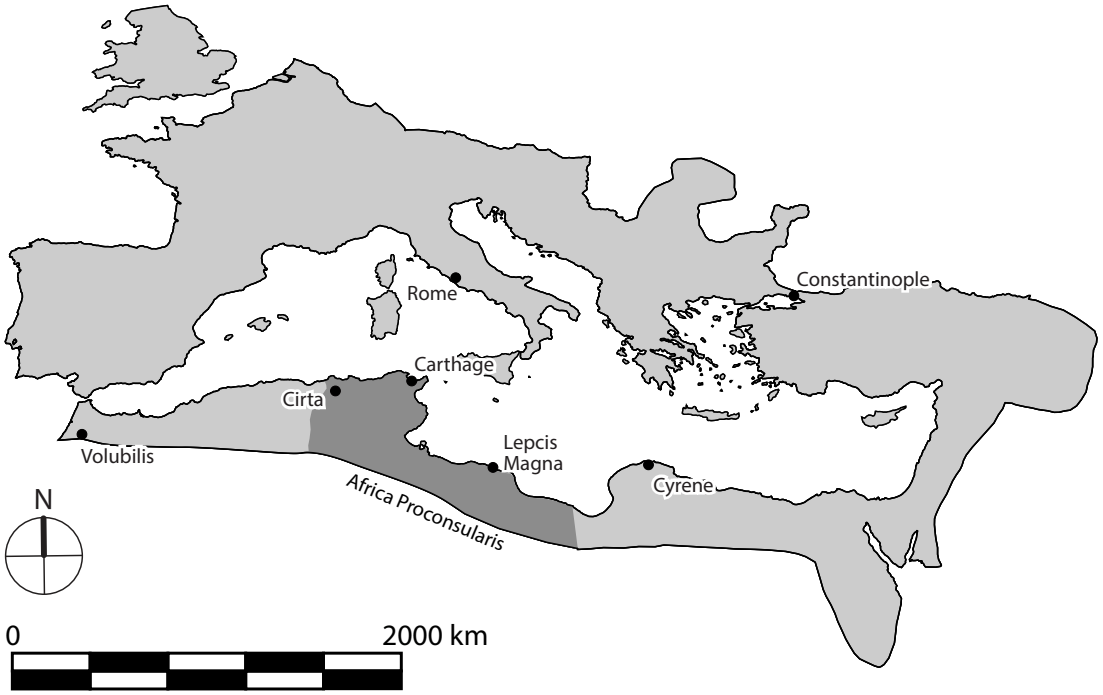


Figure 3. Map of the Roman empire, illustrating the vastness of North African territories.

After looking at the commonalities and differences across regions along a particular urban axis, I offer a short urban biography of an individual site that in some way intersects with these wider trends. This method of urban biography is directly drawn from the use of biography in modern urban anthropology and urban cultural history. Dawdy points to the importance of the study of microhistories to show both local ruptures, disasters, or shifts but also "the stubborn continuity of unconscious structures and the slow but significant actions of nonhuman things" (Dawdy 2016, 37; see also Ginzburg 1980). I use biography as a form of microhistory, as a single story told from multiple local perspectives. Each biography is meant not as a proxy describing a given process across North Africa, but rather as a look at how regional fluctuations may have

played out at a smaller spatial scale. Whereas regional analysis identifies larger patterns across the centuries, individual biography can tease out smaller-scale narratives of how the city and its inhabitants react to and shape these wider changes.

The cities selected for this biographical treatment are somewhat removed from the usual suspects of North African urbanism (Cuicul, Thamugadi, Carthage, Lepcis Magna, Cirta) in favour of sites that are less frequently featured in scholarly syntheses: Madauros, Utica, Tiddis, Thuburbo Maius and, to a lesser degree, Thugga. This attempt necessitates in some cases, like the city of Madauros, a use of considerably less evidence than is available at better known, better excavated sites and, as a result, some conclusions remain speculative. Yet I feel the consideration of new places is necessary if we are to move beyond the well-trodden interpretations of a few key 'type sites' to a more complete understanding of the diversity of urban process.

Using techniques of both regional analysis and local biography, therefore, helps my research to move between global trends—connected both to the earlier colonial histories of North Africa and the expression of Roman power—and local traditions. If the global and local cannot be separated from each other, as posited by Laurence and Trifilò (2015, 116), my approach is an attempt at reconciling this 200% even as simultaneously global and local factors may diverge. The result is a simultaneous understanding of both the expression of imperial power at various scales and the different reactions to this power by local communities.

Discussion

A look at the perceptions of the Roman city, both ancient and modern, has resulted in a few important conclusions. On a practical level, ancient thinking considered the ways in which cities and their constituent buildings, streets, and neighbourhoods should be constructed, as well as discussing the different types of civic administration responsible for governance. Modern scholars have followed these pragmatic themes, and thus we see a number of publications describing architectural and urban forms, or listing the changes to the administrative or civic status of cities across a region.

Yet in the Roman world the city was also seen as an important symbolic force, offering connections to a foundational past, reinforcing political and economic control, or bringing civilized behaviours to the uncivilized masses; this last idea has perhaps had the greatest influence on how we study the Roman city today. There is a tendency for modern scholars to discuss the idea of the city according to a series of functional dichotomies. The framework for debate centres around whether cities are sites of continuity or change, of Romanization or resistance, of consumption or production, and so on.

The study of the Roman city in North Africa can be seen as a microcosm of all these wider scholarly impulses, characterized as it is by works on the nature of Roman power (Bénabou 1976; Février 1989; Février 1990), detailed descriptions of civic history (Aounallah 2001; 2010; Desanges *et al.* 2010; Lepelley 1979; 1981), and questions of urban continuity and change (Février 1982; Fenwick 2013; Leone 2007).

As I have outlined above, there are a number of problems with the continued persistence of these types of scholarly binaries. In too many cases, the result of looking for either one side of the binary or the other results in a conclusion that both things are happening in the city at any given time. The Roman city, like cities more generally, is a dynamic place that functions on any number of different spatial scales and is negotiated by a diverse set of communities. To understand these interactions I argue we must look not only for the contemporary expression of both global and local influences but multiple globals and locals, at some points and some scales acting together, and other times at odds.

I do this in the chapters that follow by looking specifically at the physical changes of the North African cityscape, what I refer to as urban processes, from the earliest Roman presence in 146 BCE to the beginning of the Severan dynasty in 193 CE. In the chapters that follow I tackle four different processes in turn, relying on a combination of modern scholarship, reusing legacy datasets, and employing concurrent regional and local scales of analysis. As we will see, the result of this shift in approach is a narrative of the North African city centred firmly on the lives of its many inhabitants, on the choices and improvisations they make that shape both their immediate urban environment and shared ideas of urbanism across the province.

Chapter 3. City foundations and creole generations

Founded in 1718, New Orleans has been described as an inevitable, and yet also an impossible, city (Lewis 2003, 20). As so often is the case, the site was used before the arrival of the French by indigenous populations, a use which highlighted some of the benefits of the location to the earliest colonists looking at an otherwise daunting and inhospitable swampy landscape (Dawdy 2008, 79). The settlement's site at the mouth of the Mississippi River was also a predictable choice for a colonial outpost and later capital of the Louisiana colony, due to the strategic importance of the location to both trade and travel networks. Yet the delta provided a number of environmental and physical challenges that made the lives of early inhabitants particularly difficult: a lack of arable land suited to the Provençal crops early settlers assumed would flourish in the New World; a propensity for disease caused by the swampy, stagnant waters surrounding the site; and the dangers of seasonal flooding plaguing the city from its very foundation into the present. Added to these environmental concerns, the early city also presented colonising elites with the unenviable task of managing social relationships between the diverse communities with a stake in its foundation. Indigenous populations, French colonists (both elite landowners and poor exiles), slaves from the African continent, and unlicensed Canadian fur traders known as *coureurs de bois* all contributed to the development of a creole society that still characterizes both popular and academic conceptions of the city (Dawdy 2008, 11; Dessens 2015; Guenin-Lelle 2016; L. N. Powell 2012, 197–221).

The plan of the city was central to the parallel colonial goals of controlling nature and shaping New Orleans society—so central, in fact, that early settlement was forced to wait until the arrival of an engineer capable of the task. The Jesuit traveller Charlevoix described the early days of the settlement as "two hundred people sent to build a town…camped on the banks of a great river, where they have only dared to put themselves in shelter from the weather, while waiting to have a plan drawn for them so they might have some houses built." (Letter of January 22, 1722, as quoted in Dawdy 2008, 64). The military engineer responsible for drawing the plan, Adrien de Pauger, arrived with ideals drawn directly from the intellectualism of emerging Enlightenment thought, not only from the rediscovery of Vitruvius a century and a half prior and the application of Vitruvian ideals from single buildings to larger urban spaces across Europe, but also from the successes and failures of the earliest spatial planning of Spanish colonization (Guenin-Lelle 2016, 52). The resulting plan followed a rigid orthogonal grid of square blocks, all meeting in a central cruciform plaza dominated by a cathedral and overlooking the banks of the river (Figure 4). New Orleans was designed, therefore, as an improved version of the ideal French city—free from the restraints of the existing towns and cities of western Europe—presenting its aspirations toward a recognizable urbanity to the world (Dawdy 2008, 69; Guenin-Lelle 2016, 43; L. N. Powell 2012, 60).

Tracing de Pauger's oversight of the early construction of New Orleans brings to the fore some of the tensions between an idealized urban plan and the competing visions and needs of the disparate communities involved from the moment of foundation.

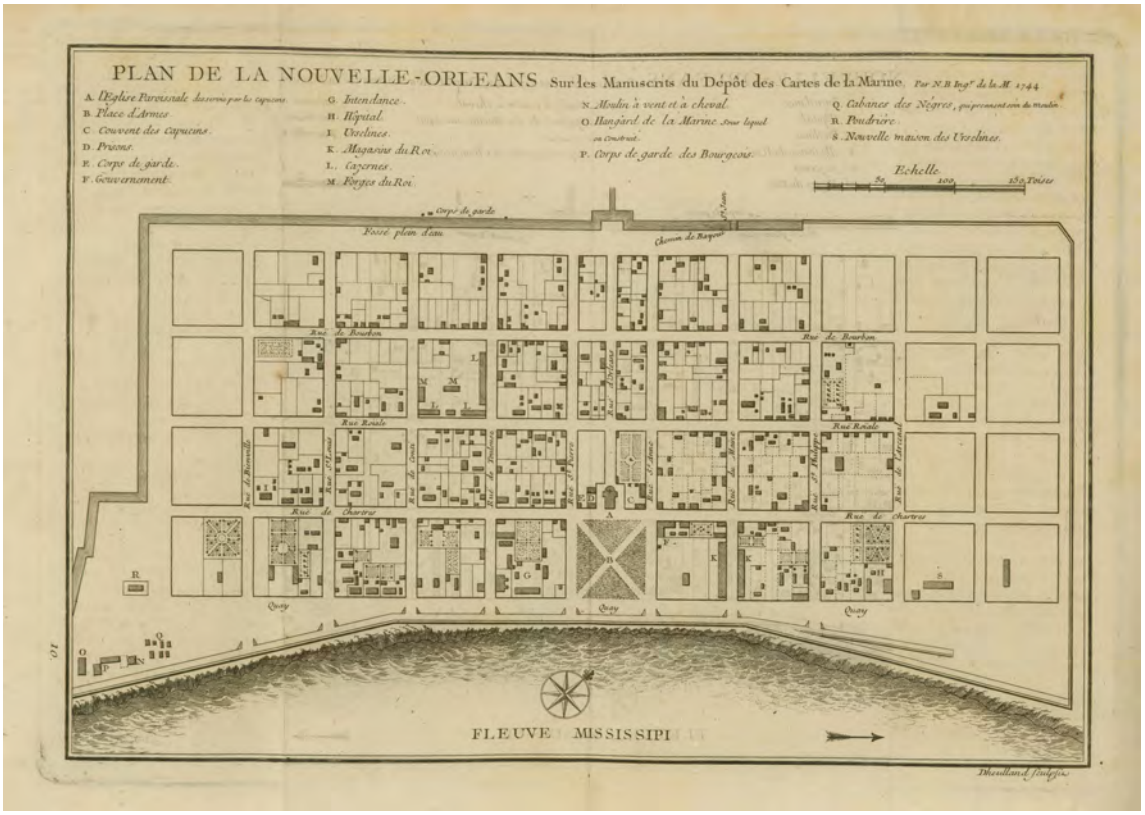


Figure 4. An early plan of New Orleans (1744) as designed by Charlevoix (courtesy of the John Carter Brown Library, Brown University).

Inhabitants of the city did not all share the desire for a rigid grid; others protested the implementation of a new street plan that reduced the size or cut across their existing plots; still others were justifiably upset when their existing houses were pulled down because they did not follow the alignment of de Pauger's new design (Dawdy 2008, 64–65). These tensions would probably have been even more prevalent if not for a hurricane in September of 1722, a 'fortunate' event from the perspective of de Pauger's urban vision, that effectively destroyed almost all earlier structures and provided the blank slate needed to implement the ideal plan for New Orleans without further conflict with landowners (Campanella 2008, 22; Dawdy 2008, 81; Guenin-Lelle 2016, 52).

These tensions between the lofty ideals of the early foundation and the reality of life in the colony also played out over time, and numerous shifts in attitudes can be seen between the first generation colonists and the subsequent populations that Dawdy calls "creole generations" (Dawdy 2008, 7). Zooarchaeological evidence, for example, traces shifts in consumption practices from a traditionally European, French diet of cuts of beef and sheep to a greater reliance on local flora and fauna such as duck, turkey, or fish (Dawdy 2008, 84). Shifts in farming are also noted in historical accounts, from the crops many colonists expected to bring fortune in the new world—such as sugar or tobacco—through a series of adaptations to plants that could actually grow or thrive in the bayou—such as indigo and rice (Dawdy 2008, 83).

These adaptations also impacted the physical shape of the city itself. While de Pauger's plan set out large plots of land for houses and private gardens, it did not take account of the need for slave accommodation for each plot; gardens were quickly reduced in size or removed altogether to make way for slaves' quarters (Dawdy 2008, 98; L. N. Powell 2012, 97). The city walls included in most early representations of the city were also never constructed, reflecting not only a lack of resources and labour needed for their construction but also a lack of social will on the part of later generations to enclose the city and thus control the movement of its various populations (Dawdy 2008, 95). In the case of New Orleans, then, the trajectory of the city was a negotiated process, a series of improvisations by subsequent generations, as much as it was ever a single event planned by its earliest colonial leadership (Guenin-Lelle 2016, 47; L. N. Powell 2012, 92).

As this quick look at the development of New Orleans shows, the foundation of a new city offers a number of opportunities and presents a number of challenges. It is a chance for the creation or solidification of a political legacy; an expansive event requiring raw materials, temporary accommodation, supplies, and labour; an avenue for urban planners to imbed meanings and social ideals into urban spaces; a striking example of immigration or forced displacement of entire populations. In the case of Roman urban foundations, the traditional scholarly focus is on the political agenda behind the creation of a new settlement or the moment of foundation itself, relying primarily on imperial epigraphic materials or mythological foundation narratives, respectively, for evidence. This emphasis has led to a questionable, top-down myth of foundation of the cities of Roman North Africa. Yet such treatment has also detached the foundation of a settlement both from the landscape that existed beforehand, and the ways in which the city and its inhabitants may evolve after it has been initiated. Or, to put forward a question, if Roman foundations in North Africa are already largely understood either in terms of their wider political implications or top-down spatial structuring, what does an alternative discussion of foundation as a longer process bring to the table?

This chapter considers the location and design of foundations in Roman North Africa, interrogating the traditional military motives assigned to most new settlements and challenging the assumptions of widespread *ex nihilo* foundation implicit in many broader discourses of the region's Roman colonization. I begin by outlining some of the scholarship on city foundations, including the foundation itself as a historical event

driven by political and symbolic factors, and the urban plan and the abstract ideals it represents. In each case the subsequent inhabitation of the urban landscape is neglected. It is with a focus on these creole generations who live in a city, and their processes of adding their own significance to the urban landscape, that the chapter turns to the foundations of the Roman world.

On a regional scale, I map the location of both new foundations—defined for my purposes as the construction of a new, planned urban settlement inhabited at least in part by Roman citizens migrating from elsewhere in the empire—and also of Roman refoundations of previously occupied, indigenous sites. This regional analysis both confirms some observations regarding the political motives for settlement expressed in previous scholarship and provides a different perspective on the ways foundational events are situated within longer-term, diachronic landscapes. Finally, I consider the urban biography of a single city—the Numidian settlement and Roman refoundation at Madauros, home to the author Apuleius. To return to the question above of foundation as process, I demonstrate how Roman foundations are not a moment of rupture within an longer urban history, but are instead embedded into the wider ebbs and flows of urban life in the region.

Understanding the impacts of city foundation

A broad, and yet brief, examination of the act of foundation in both the modern and ancient world is helpful before moving to a discussion of the process of settlement in North Africa during the Roman period. Perhaps unsurprisingly given a lack of

widespread physical colonization, there is no body of literature dedicated specifically to foundation as a modern urban phenomenon. We have also yet to understand the full impacts of one of the more striking contemporary foundational events, the refugee camp. At the time of writing sprawling settlements in Jordan and Lebanon to house the millions displaced in the Syrian refugee crisis have received particular media attention, but there are far too many other examples of the same global phenomenon.

Examples of planning within the colonial contexts of the 18th and 19th century, such as not only the example of New Orleans outlined above but also the remodelling of various capital cities to remake them according to enlightenment ideals (see Chapter 6 on regeneration and renewal), provide more suitable comparisons to the issues specific to foundations in a similarly colonial Roman context. Two themes arising from the study of foundations can be identified that resonate with studies of the Roman period: the act of foundation as a historical political event, and the intellectual ideals behind planned urban landscapes. In each case, an overt focus on the act of foundation—and not on the life of the city that followed—detracts from the new layers of experience and physical changes rendered by those who actually lived in built spaces.

Foundation as historical event

One of the most common ways the act of foundation is discussed is as a historical event, a distinct moment of rupture from the past and the creation of a new world in which the city takes precedence. The idea of rupture in urban history is not associated only with the moment of foundation—one minute a landscape is pristine and rural, the next it is

urban—nor is this discourse restricted to modern or western examples. Questions of rupture are raised in wildly disparate periods, regions, and even disciplines: in the problems of a perceived disjuncture between Iron Age cities and their pre-urban landscapes (Harmanşah 2013); in the continued accommodations for nomadism in the new, sedentary Mongol capital at Karakorum (Rogers *et al.* 2005); in the role of the city in post-apartheid South Africa (Morris 1998). The moment of change is often a focus of study of the city (Roman or otherwise), and foundation marks one of the most substantial changes in a city's history. In both ancient and modern discussions, these foundational events are usually ascribed particular meanings—often to do with an expression of political power or control—and carry multiple implications ranging from large-scale building programmes, the provision of much-needed natural resources, or the restructuring of the surrounding countryside.

In the Roman period in particular, the foundational event itself is often treated as a moment of departure from the past, an *ex nihilo* settlement in an area previously uninhabited. This scholarly approach focuses on the date of initial foundation of a city—usually as referenced in historical texts—and the various processes surrounding its establishment. Roman city foundation, much like most aspects of Roman life, was associated with a number of social and religious practices. The various rituals surrounding the selection of an auspicious site and marking-out the initial territory (Rykwert 1976, 33–34; Stek 2009, 21–22), the interment of foundational deposits (Woodward and Woodward 2004), and surveying the city plan (Rykwert 1976, 45–50) all feature heavily in these discussions.

In this approach, the foundation marks a fracture from the past, and there is a clear Roman preoccupation with foundation and boundaries. Yet across the Roman provinces, and particularly in North Africa, allowing the importance assigned to foundation by Roman elites to percolate unquestioned into modern scholarship is deeply problematic. Roman city creation is part of larger processes of landscape change, and can be considered neither divorced from existing patterns of settlement, nor as single points of rupture from wider landscape trends.

The foundation of Roman cities is also treated as part of a wider political agenda—usually at the expense of discussions of local landscapes or populations. As discussed in Chapter 2, the city has been explicitly connected in scholarship to the idea of Romanization and establishing Roman civilization in conquered lands. All Roman cities thus become, to some extent, colonial foundations designed to disseminate Roman ideals of civilized (urban) life to indigenous populations (Fentress 2000a, 12; Keay 2001, 118; van Dommelen 2005, 144–45). The location of new settlements, therefore, can be tied directly to the underlying goals of the Republican or Imperial administration to consolidate political control and entrench Roman culture in the provinces after conquest (Woolf 2000). These political motives were particularly prevalent in borderlands or other areas of strategic importance, in areas of abundant agricultural production, or near to other natural resources such as metals, dyes, or marbles. City foundation was also an essential factor in the Roman military system as a means of awarding land to veterans after service. This system was designed by political elites for a number of purposes. The awarding of land kept military veterans happy and, as a

result, also kept them occupied and away from potential armed uprising against the imperial leadership. Settled veterans also served as an informal, auxiliary military force readily on hand in conquered territories (Laurence *et al.* 2011, 58–59).

As a result of this need for partitioning and distributing small parcels of arable land, city foundation was also often associated with the centuriation of the surrounding landscape. It is an unfortunate facet of studies of the Roman city that, despite this dependency between a new foundation and its hinterland, discussions of the urban landscape are often detached from changes to the countryside, and surveys of the countryside rarely extend their analyses to concurrent developments in the city centre beyond identifying shared alignments for centuriation. New Roman foundations also include the forced migration of citizens to some degree, usually from one province or area of the Mediterranean to another. These types of long-term impacts on local landscapes and their inhabitants are often overlooked by a focus on the foundation as a single political or social event.

Foundation as inscribed meaning

Discussions of the construction of the western city—beyond the largely historical, political, or practical concerns already introduced—have been particularly interested in the abstract ideals or meanings behind various planning choices and, in particular, the idea of the urban utopia. This focus on the meaning underlying the built environment has, perhaps unsurprisingly, also featured heavily in those classical cities serving as inspiration to later urban planners.

The utopia, of course, has a much longer intellectual history that cannot be fully outlined here. Yet from at least the 17th century onwards, the beginnings of a shift in population from the countryside to the city made the perfect built environment of particular relevance. To the emerging colonial cities of North America, the gridded design of sites such as Philadelphia—surveyed by Thomas Holme in 1682 in the employment of founder William Penn—was both a reference to the cities of the Classical world and an attempt at designing a town on foundations of equality, adaptability, and greenness (Mann 2016). In many places in Europe and North America, 18th and 19th century industrial utopias were connected to the emergence of planned settlements or enclaves housing workers and surrounding large-scale production (Mrozowski 2006, 68–72; Rabinow 1989, 95–102; Timmins 2013). In some places, these industrial foundations in turn directly gave way to Fascist utopias that again borrowed examples from the ancient world. A search for a new ideal of the city expressed in the foundations of Fascist Italy, for example, took inspiration from Roman military colonies including orthogonal layouts with four or five zones dedicated to executives, factory workers, and production; the regular inclusion of piazzas or porticoes in public spaces; and even the use of building materials reminiscent of the Roman past (Scaini 2012, 304).

Modernist cities founded in the 1950s and onward adopted a new, futuristic understanding of utopia somewhat divorced from the industrial past. Brasilia, the new capital constructed for Brazil in the 1950s, is one of the most prominent examples of the modernist ideal. The city was constructed as a means of providing economic benefits to an underdeveloped area of the Brazilian interior, but more importantly as a

demonstration by the architect Le Corbusier—head of the Congrès Internationaux d'Architecture Moderne—of the potential for social transformation afforded by the modernist city (Holston 1989, 17, 31). This expression was an extension, of sorts, of an earlier goal of Le Corbusier to unite the territories of the French empire through a shared, modernist urban vision (Çelik 1997, 76). The general Hubert Lyautey, in particular, relied on this vision to implement a technical modernity in Morocco, dividing a *ville nouvelle* from the existing medina in cities such as Rabat or Fez. The result was a segregated city bringing hygiene and infrastructure to French colonists, at the same time denying Moroccans the tangible benefits of French control (Rabinow 1989, 285). This ideal of the French modernist city lived on in new locales, even after the failure of empire.

Studies of Roman foundations show a similar interest in the meaning of the urban plan, and the spoken and unspoken intentions of the elites who were responsible for it. Much has been written of city plans as static, two-dimensional expressions of an urban ideal as first expressed by the Greek scholar Hippodamus of Miletus in 5th century BCE, or the architectural ideals of the Roman writer Vitruvius (see Chapter 2). The architectural historian William MacDonald, for example, combines the wider context of various monumental forms in his idea of the urban armature—a connection of major thoroughfares, plaza, and public monuments that together articulate a uniquely Roman urban experience (MacDonald 1986, 14).

This focus on idealized urban forms, by both urban planners and by urban historians, has been rightly criticized for too heavy a focus on the intended meaning of flat urban plans, and not enough attention to the ways that meanings were developed by the ultimate users of a city, its inhabitants. One of the most vocal and lasting voices on the importance of bottom-up generation of meaning is Amos Rapoport, in his work *The Meaning of the Built Environment* (first edition published in 1976). Aside from the initial expectations of planners, Rapoport argues for the importance of a city's various inhabitants in ascribing new meanings to places. Speaking of MacDonald's 1976 work on the Pantheon, for example, Rapoport criticizes this approach as being overly positivist and symbolic, detached from what Rapoport himself suggests is the more important question of the role of the end user (Rapoport 1990, 39). The idea of armature persisting in Roman scholarship still suffers from this same conflict between top-down intentions and bottom-up meanings inscribed by the actions of a city's inhabitants (see Morton 2015; 2016 for recent North African examples). Yet it is through the taking possession of built spaces that an urban environment is changed from idea to reality (Rapoport 1990, 21).

Roman foundations in North Africa

The scholarship on Roman foundations in North Africa traditionally clings to the themes outlined above, namely the political or ideational motivations for foundation and, to a lesser extent, the connection between urban plans of various types and their intended meanings.

By far the majority of work focuses on the political or territorial aspects of urban foundational events (Février 1982; 1989; 1990; Gascou 1972; 1982; Sears 2011, 33–34, 68–69). Gascou in particular suggests that patterns in the location of new cities correspond to the shifting municipal policies, and even obliquely to the personalities, of various emperors. After an initial foundation of a series of new cities in areas of great agricultural wealth under Caesar and Augustus, Gascou argues there were very few new settlements or status upgrades until the end of the first century CE and the reign of Vespasian (Gascou 1972, 27). From the second century onwards, municipal status was assigned from the periphery moving toward the core of North African territory as a means of shoring up those areas where non-Roman populations posed the greatest threat to regional stability. At the same time, the cultural aspects of Roman urbanism—the temples, porticoed streets, amphitheatres and baths we most associate with the Roman city—worked in the opposite direction, integrating the more established urban elites at the core of the North African provinces into a Mediterranean-wide *koine* before moving to the new settlements along the periphery (Gascou 1972, 234; see Chapter 5 on monumentalization). The relevance of Gascou's hypothesis to the current discussion is confused slightly by his conflation of all municipal status upgrades as *ex nihilo* Roman creations, even though many sites receiving an elevated status of *municipia* or *colonia* were clearly occupied in some urban form prior to Roman control and not strictly foundations or refoundations as defined by this work. Nonetheless, his proposed pattern of foundations along the periphery bears further examination.

Roman foundations were most frequently established to house the retired soldiers of various legions, both as a form of repayment for military service and as a means of keeping newly conquered regions occupied with a population with some military experience (Laurence *et al.* 2011, 59). The reasons for foundation along the periphery, particularly, are also often directly tied to the perceived threats of a nomadic lifestyle to the civilized, sedentary, 'Roman' way of life. The so-called "nomad menace," aptly named by Brent Shaw in his 1982 work, is a dominant paradigm in both antiquity and, to a lesser extent, modern scholarship (Shaw 1982, 31). This vilification is noted in numerous ways: in Carthaginian attempts to control nomads through shifting alliances and enrolment of nomadic groups into the Carthaginian military (Shaw 1982, 38); by the acrimonious relationship between Roman and semi-nomadic Numidian tribes after the 111 BCE revolt of Jugurtha culminating in the Roman annexation of all Numidian lands (Brett and Fentress 1996, 42); in the historic accounts of the revolt of the Numidian deserter Tacfarinas against Roman occupying forces in the early first century CE (Gascou 1972, 38; Shaw 1982, 41); as an explanation for the collapse of many smaller Roman settlements in the period immediately prior to the Arab Conquest (see Fentress 2013 for a recent example); and as recently as 19th century interactions between occupying French forces and unruly Berber nomadic groups (Mattingly 1996). It follows that city foundation in the early Roman period, then, served a very important political goal of protecting civilized (Roman) lands from mobile populations and encouraging the latter to enter into a sedentary lifestyle (Lassère 1977, 355–57).

On the connections between North African foundations and intended meanings, much has been written on the regular plan of Thamugadi in particular, and its connection to a Roman ideal of orthogonal, regular urbanism (Février 1982, 338; Sears 2011, 68). According to this line of argument, the plan of Thamugadi is directly related to the plan of temporary military outposts, common along the limes of the empire (Figure 5). Madauros and Lambaesis are constructed on similarly orthogonal plans, although both receive considerably less scholarly attention. The Trajanic foundation of Cuicul is also often invoked in discussions of urban plans and their meanings, particularly in the work of MacDonald—the site serves as the archetypal example of urban armature, as discussed both above and in Chapter 2 (MacDonald 1986, 4–31). In this case, however, the initial moment of foundation was not key to any lasting meaning, rather the evolution of the city created the armature that MacDonald argues was both common and recognizable to citizens across the Mediterranean. MacDonald here touches on an idea that I elaborate below, namely that a consideration of city foundation as a long-term process provides more insights into both regional and local impacts of the construction of new settlements than a more limited focus on urban plans as a snapshot of life at the moment of foundation.

Foundations, refoundations, and regional landscapes

A regional approach to Roman foundation as a long-term urban process can effectively position the potential rupture of creating a new settlement within the on-going changes in all North African cities during this period. At the same time, my approach also engages with the evolution of these new cities after their initial construction that

MacDonald rightly identifies as equally important to any initial intentions (MacDonald 1986, 25).

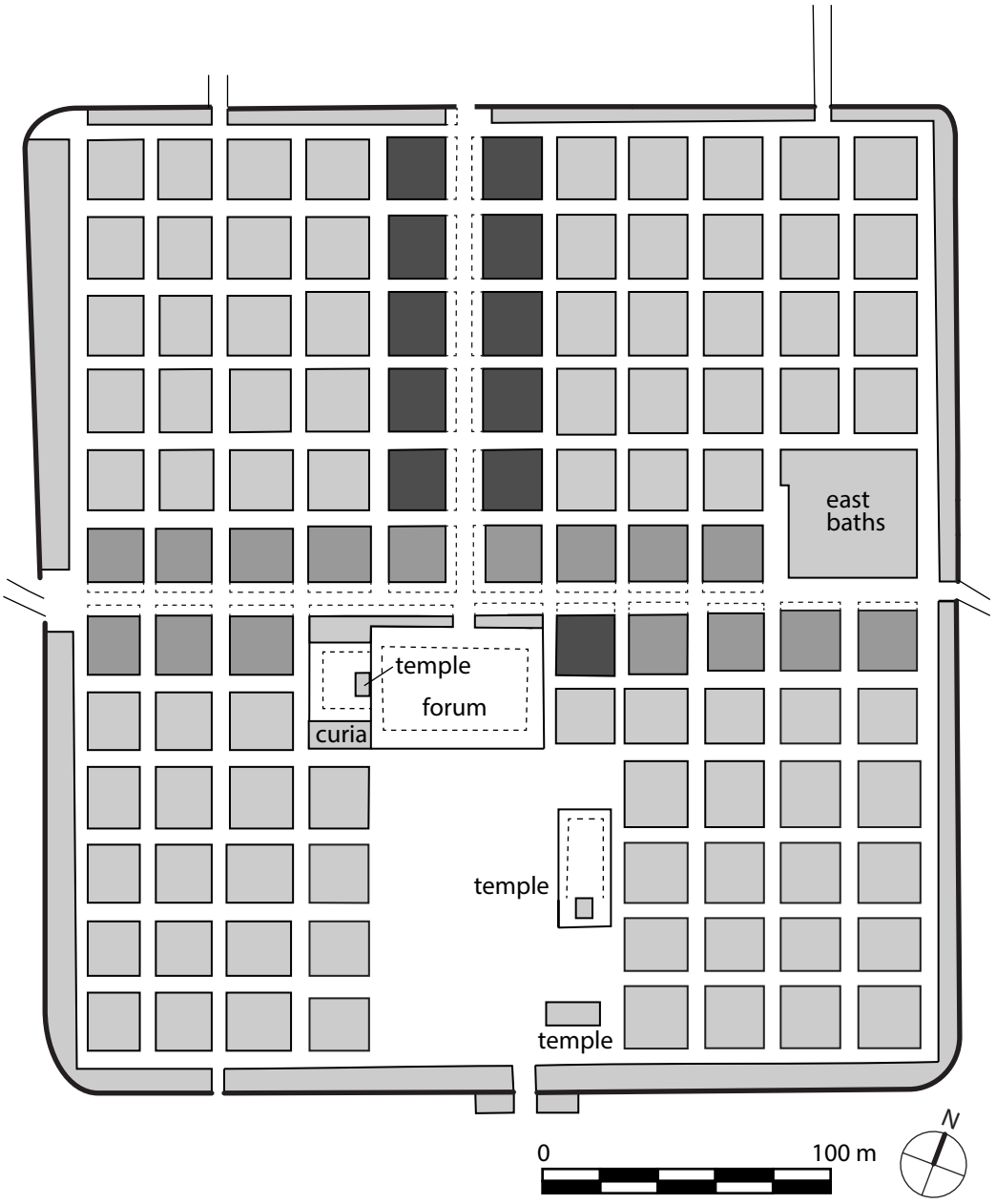


Figure 5. The orthogonal plan of the original forum at Thamugadi (after Fentress 1979).

A few definitions are required before beginning my analysis. It is important to immediately make a distinction between sites promoted to the municipal status of *colonia* (see Chapter 2), often translated as colony or settlement, and urban foundations. The rank of *colonia* was assigned both to new settlements at their moment of creation and also to cities that had already existed for centuries, sometimes accompanied by an influx of Roman citizens and other times as a promotion in civic status without any associated migration. Sites such as the coastal port of Leptiminus or the inland centre of Mactaris, for example, were both promoted to *coloniae* in the second century, despite both cities having origins in earlier periods (Desanges *et al.* 2010, 164, 167). Although this promotion could be accompanied by Roman immigration—namely the military veterans usually behind the political motivation to create *coloniae*—in many *coloniae* the overall population probably remained largely non-Roman (Gascou 1972, 46). It is also worth observing that most colonists were settled not in the city itself, but its surrounding countryside (Kolendo 1976, 76). I will return to both of these ideas, and their implications for populations and city growth more generally, in Chapter 4.

For my purposes, I make a distinction between foundations of new cities and refoundations at the site of earlier settlements. I define foundations as cities that were physically constructed strictly during the period of Roman hegemony at the core of this research, from 146 BCE—193 CE. Foundations are sites where there is not only some historical or epigraphic reference to the provision of the city to colony status, but also architectural or archaeological evidence that the city was in fact built to correspond

with this event. My second category, refoundation, is used to distinguish between *ex nihilo* creations (foundations) and existing sites that were subject to Roman colonists. Under Caesar and Augustus, in particular, refoundations were recorded at all existing sites promoted to *coloniae* as we have detailed records of the apportionment of lands for veterans at this time (see Lassère 1977, 143–233). For subsequent periods, as promotion without settlement became common practice, I noted sites as foundations or refoundations only where some veteran population was confirmed.

I should note here that the evidence of pre-existing activity that helps distinguish between foundations and refoundations is, in many cases, slim. A previous indigenous presence at many sites is often assumed by scholars based on linguistic characteristics of toponyms (e.g. Janon on Lambaesis, 2008, 4340), the shape of an urban plan (e.g. Feuille on Thuburbo Maius, 1950, 83), or proximity to larger centres such as Carthage (e.g. Février on Thuburbo Minus, 1982, 336). At the example of Madauros, included as an urban biography later in this chapter, the loss of a single text by Apuleius outlining the city's pre-Roman origins would drastically shift our understanding of the settlement. If anything the kinds of evidence for earlier activity might lead us to believe even fewer sites are worthy of consideration of *ex nihilo* foundations; I explore the implications of this idea below.

Beyond identifying foundations or refoundations amongst North African cities, I make an additional distinction between settlements founded with a rigid orthogonal plan, such as Thamugadi, and those with a more flexible form of urban structure, such as the

sometimes orthogonal and sometimes irregular plan of early Cuicul. I ultimately agree with MacDonald that the original plan of a city such as Thamugadi is not as important as how the city evolved over time. However, the best way of understanding both the intentions of founding elites and the responses of indigenous and colonist populations to a new urban settlement necessarily involves looking at what existed before foundation, how the foundation itself was structured, and how the city evolved in the centuries that followed. It is with this diachronic eye that I consider the regional distribution of foundations and refoundations of various shapes and types through the lenses of consolidating Roman power, urban planning, and connections to earlier, local traditions.

Consolidating Roman power

As noted, one interpretation of the underlying reasons for foundations in North Africa relates to the role of these new sites in establishing and maintaining Roman power. As a first step to understanding this process, all sites known to receive an elevated status of *colonia* at some point were considered in order to determine whether they classify as foundations or refoundations, according to the criteria outlined above. The results of this classification are presented in Table 1 and represented spatially in Figure 6.

Table 1. Roman foundations and refoundations

Total sites = 340

Foundation type	**Number of sites**
Foundation	15
Refoundation	17
Colonial promotion without settlement	16

An initial observation is the relatively low number of new settlements founded in the region—only fifteen *ex nihilo* settlements in total. The colonization and intensive urbanization of North Africa under the Romans should not be assumed without critical examination of how or where colonists may have settled, or to what extent Romans transformed the urban network. While the impacts of Roman control on the dynamics of city life will be discussed in the chapters to come, it is worth noting now that the overall network of settlement was relatively unchanged from its pre-Roman state all the way through to the end of Roman rule in the 5th century CE. Roman Africa did not see the widespread spatial restructuring observed in some of the other Roman provinces. The number of refoundations corresponds nicely with the observations of scholars who suggest many Roman cities are founded on the sites of earlier settlements (Février 1982, 336).

Mapping these sites provides a further look at some regional patterns. First, the spatial distribution of ex nihilo foundation versus refoundation sites shows the latter located in the core of the original Roman province, in the territory held primarily by Carthage

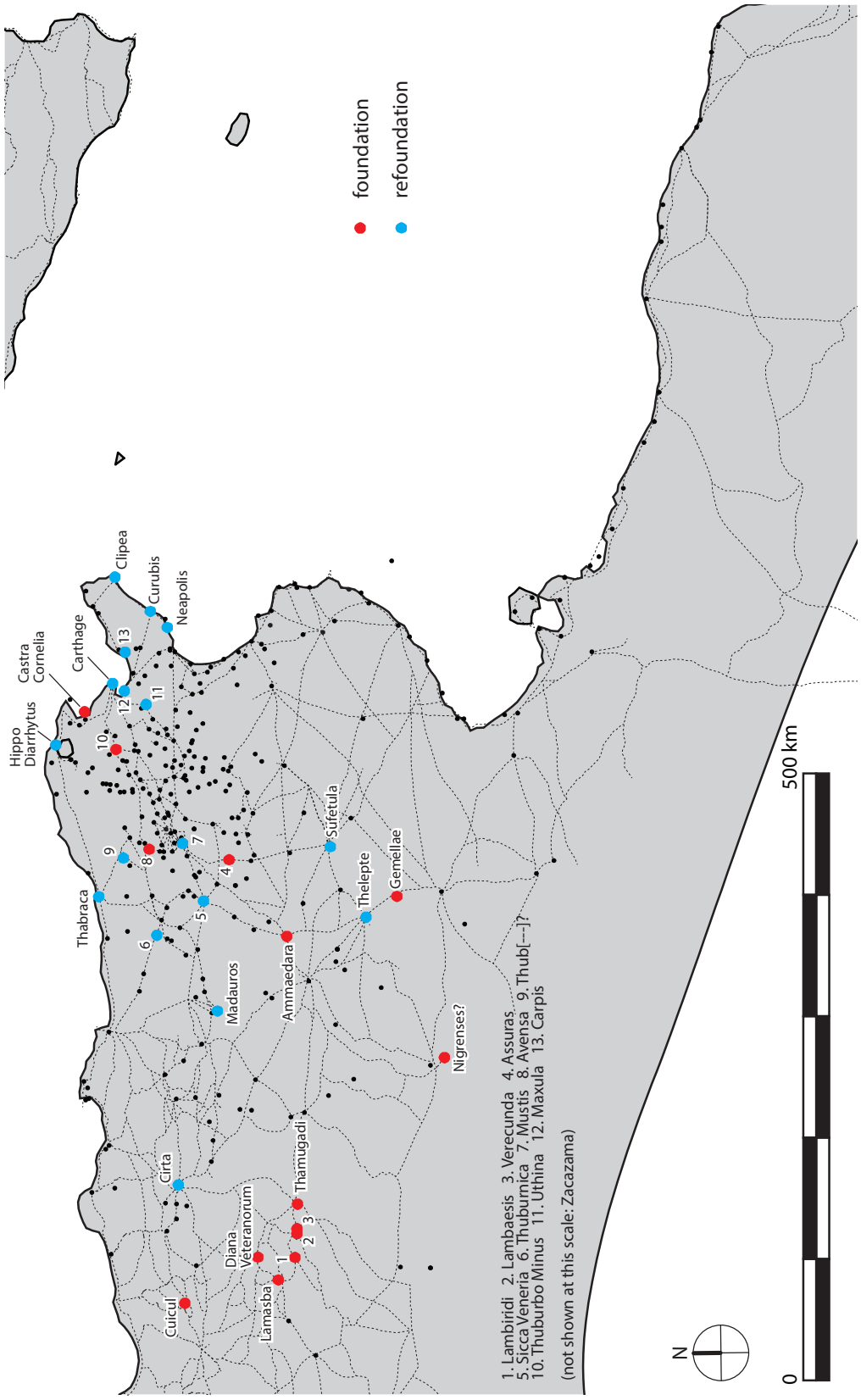


Figure 6. Map of Roman foundations (red) and refoundations (blue).

before the Roman conquest (Figure 6). In contrast, new foundations show a greater spatial distribution, ranging from the Mediterranean coast to the Roman *limes.* The majority, however, are largely clustered along the borderlands of the Roman province of Numidia in the southwest. This area, in the region surrounding the military fort—and then settlement—of Lambaesis, and the nearby late 1st century CE foundation at Thamugadi, is noted for its numerous camp sites of the Third (Augustan) Legion, many of which went on to become settlements housing veterans of the legion after their period of service (Février 1982, 338–339; Lassère 2015, 378–380; Laurence *et al.* 2011, 273; Sears 2011, 68).

Considering the distribution of foundation and refoundation sites according to the timeframe in which they received an upgraded municipal status provides further insight into the consolidation of Roman control through settlement (Figure 7). The earliest Roman colonists are installed during the reigns of Caesar or Augustus, over a century after the fall of Carthage, from the late first century BCE to the early first century CE. These earliest cities are almost exclusively refoundations of earlier occupation. No refoundation occurs after the reign of the Flavians—with the singular exception of the city of Thelepte reconstructed under Trajan. This supports Février's claim that occupation on earlier indigenous sites occurs only until the end of the first century CE (Février 1982, 337).

The few foundations that date to this earlier period are limited—Castra Cornelia, Thuburbo Minus, Avensa, and Assuras. The site of Castra Cornelia, for example, was

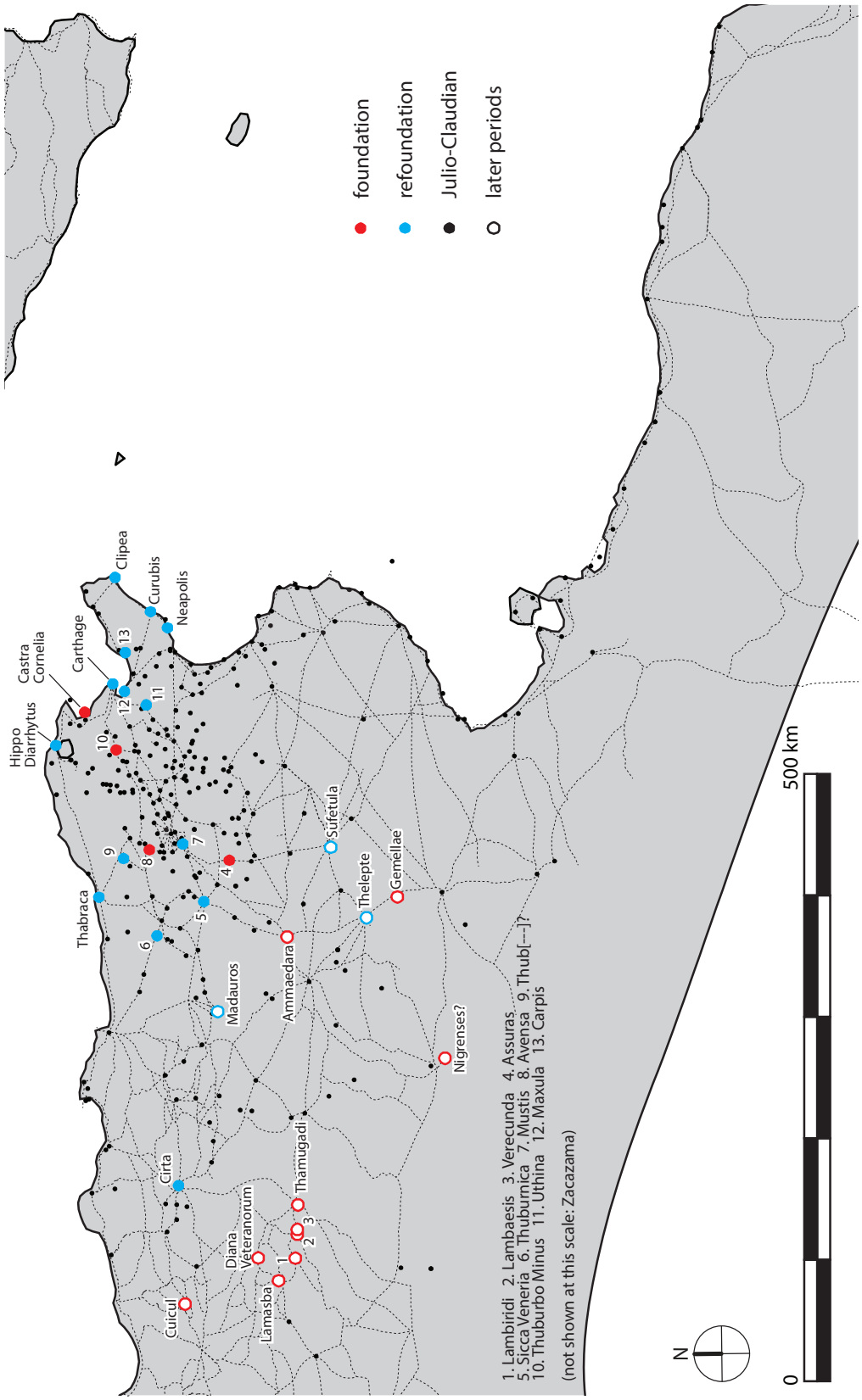


Figure 7. Map of Roman foundations and refoundations by period.

initially established by Scipio Africanus when he landed in North Africa in the late 3rd century BCE to lay siege to Utica during the second Punic War (see Chapter 4). After the Roman conquest, the landing place was established as a fort and given the unusual municipal designation of *oppidum stipendiarum*—or a town of military service—probably at some point in the first century BCE. By the reign of Augustus, the town had developed substantially, although we know very little of its size or stature from this point onward (Desanges *et al.* 2010, 128). The site of Thuburbo Minus, thought to be another *ex nihilo* foundation dating to the reign of Augustus and classified as such for my analysis, could just as likely to have been a refoundation given its close distance to Carthage (approximately 50 km) and the high density of Punic occupation in the area before the period of Roman rule (Février 1982, 336).

The majority of foundations from the reign of Trajan and the 2nd century CE are located in a liminal zone along the borders of the Roman province, namely the cluster of new foundations surrounding Lambaesis identified above. Although Gascou (1972) based his discussion only on civic promotion to *colonia* rather than the foundation of new cities specifically, his trajectory of municipal promotions moving from the periphery into the core also holds true for the spread of foundations in this period.

Foundations and urban planning

A second question relates to the type of urban planning used during the initial construction at foundation and refoundation sites. A look at the distribution of rigid

orthogonal planning and looser, more flexible urban landscapes is revealing, at least where such an identification is possible (Table 2).

Table 2. Urban plan of foundation and refoundation sites.

Total sites = 32 (only foundations and refoundations included here).

Foundation type	**Orthogonal**	**Loose**	**Unknown**	**Total**
Foundation	2	3	10	15
Refoundation	4	6	7	17

The numbers of known orthogonal and flexible plans are comparable for both foundations and refoundations but—with the exception of the often exceptional city of Carthage—refoundations follow a flexible plan in locations closer to the coast, and a orthogonal plan further inland (Figure 8). Thus the plan of the refounded port city of Neapolis, for example, shows some elements of orthogonality (Slim *et al.* 2007). This flexible orthogonality falls far short, however, of the strict structure imposed on the refoundation of the Numidian city of Madauros (Gsell 1922a, see urban biography below). *Ex nihilo* foundations, on the other hand, are harder to read along these lines; many of the relevant cities are still occupied today, and others lack the survey or excavation necessary to make any statements about their full extent or composition. Yet the only confirmed orthogonal plans from this group are the town emerging around the military camp of Lambaesis, and the nearby centre of Thamugadi—a distribution

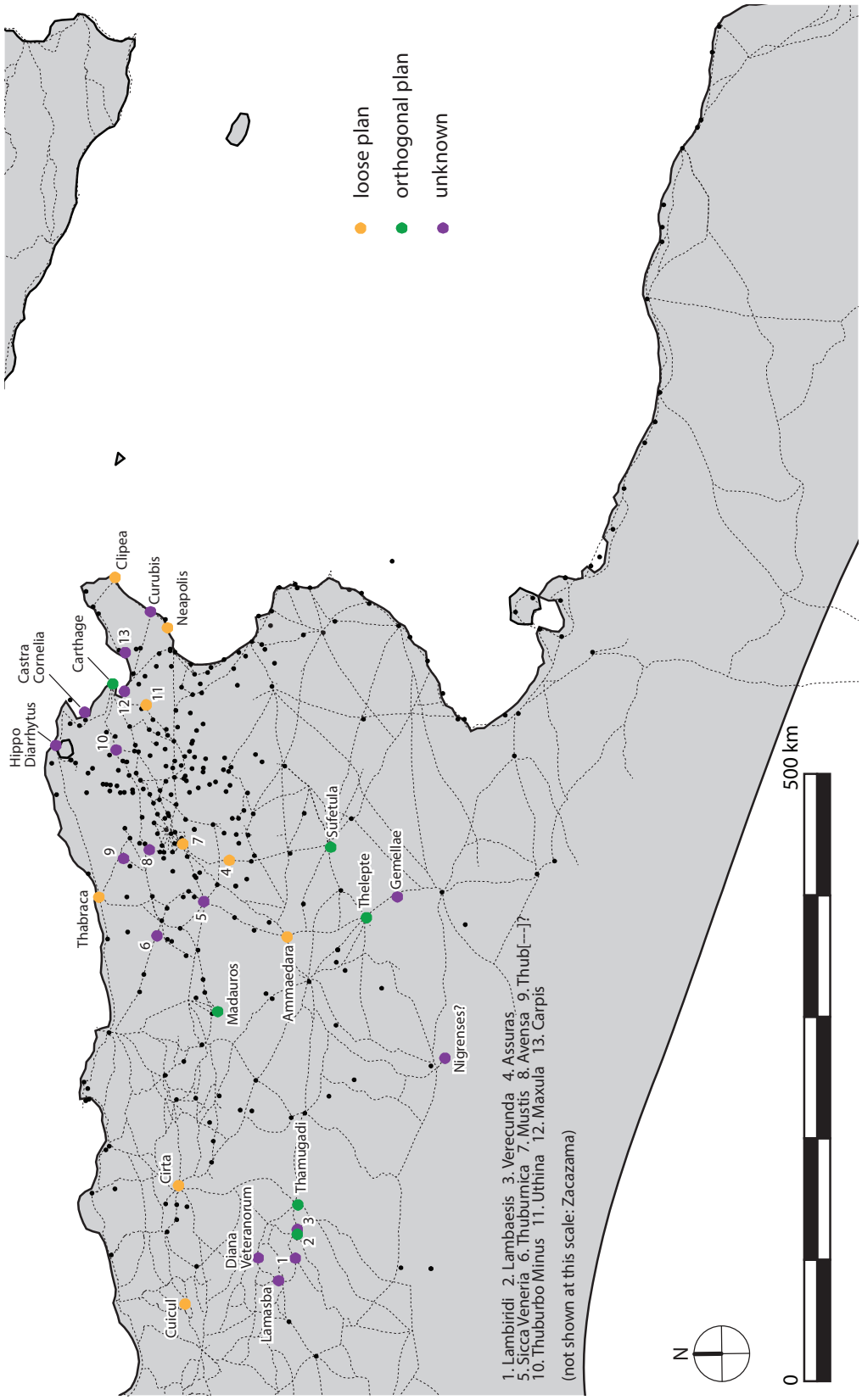


Figure 8. Map of plan types for Roman foundations and refoundations.

that supports MacDonald's claim that this form of orthogonal structure is largely out of use by the 2nd century date of most North African foundations (MacDonald 1986, 25).

These observations respond directly to many long-held assumptions about Roman power and North African city foundations, but do little to consider the effects of these changes on local inhabitants. Reflecting on the North African populations actually living in these cities can shed further light on some possible factors contributing to these regional patterns. In her discussion of New Orleans, Dawdy makes a distinction between earlier French colonial settlements designed as an improved version of the ideal city—such as New Orleans itself—and later attempts at urban design with an implicit aim of controlling indigenous populations (Dawdy 2008, 16). These contrasting goals, the urban ideal versus indigenous control, also played out in the colonies of French North African, most notably in the differences in early colonial development at cities such as Algiers (Çelik 1997) or Annaba (Bône) (Prochaska 1990) and the later changes to the cities of Morocco (Abu-Lughod 1980).

Differences in the desired impact of a new urban foundation on indigenous populations also must have featured in a Roman context, possibly along similar lines. Cities founded along the coast or in the region already densely urbanized under Carthage, at sites such as Uthina or Neapolis, were less concerned with the dangers of the nomadic peoples that occupied much of the North African periphery. As a result, these sites were constructed according to the ideas of armature that MacDonald argues were essential to understanding the idealized Roman urban experience (see Chapter 4). In contrast,

cities founded along the limits of Roman territory were explicitly tied to ideas of population control and, as a result, relied more heavily upon a different idea of planning drawn from the lessons of the military encampment (Figure 9, Figure 10).

The differences between plans observed at roughly contemporary foundations such as Thamugadi and Cuicul is not one of chronologically changing styles, nor even a question of either city's intended population or function—both were constructed to house military veterans. The local topography was certainly a concern, resulting in the elongated shape of the earliest settlement at Cuicul. Yet topographic differences alone should not be used to explain drastically different attempts at urban planning. Differences between sites of strictly orthogonal or more flexible urban design are also a statement on the role of the city in relation to non-Roman populations and the surrounding countryside.

Paradoxically, many of the sites founded with the goal of controlling local populations also relied on the nomadic lifeways of indigenous peoples. At Thamugadi, for example, a productive quarter in the northeast of the city has been associated particularly with wool processing and textile production (Wilson 2001; 2004, 156). Textile production centres included individual vats for fulling—the process of removing grease and fat by trampling fibres in an alkaline solution—as well as facilities for dying the processed fibres. The veteran colony at Diana Veteranorum (see Figure 6) also provides evidence for textile production that required cooperation with nomadic herders for the raw

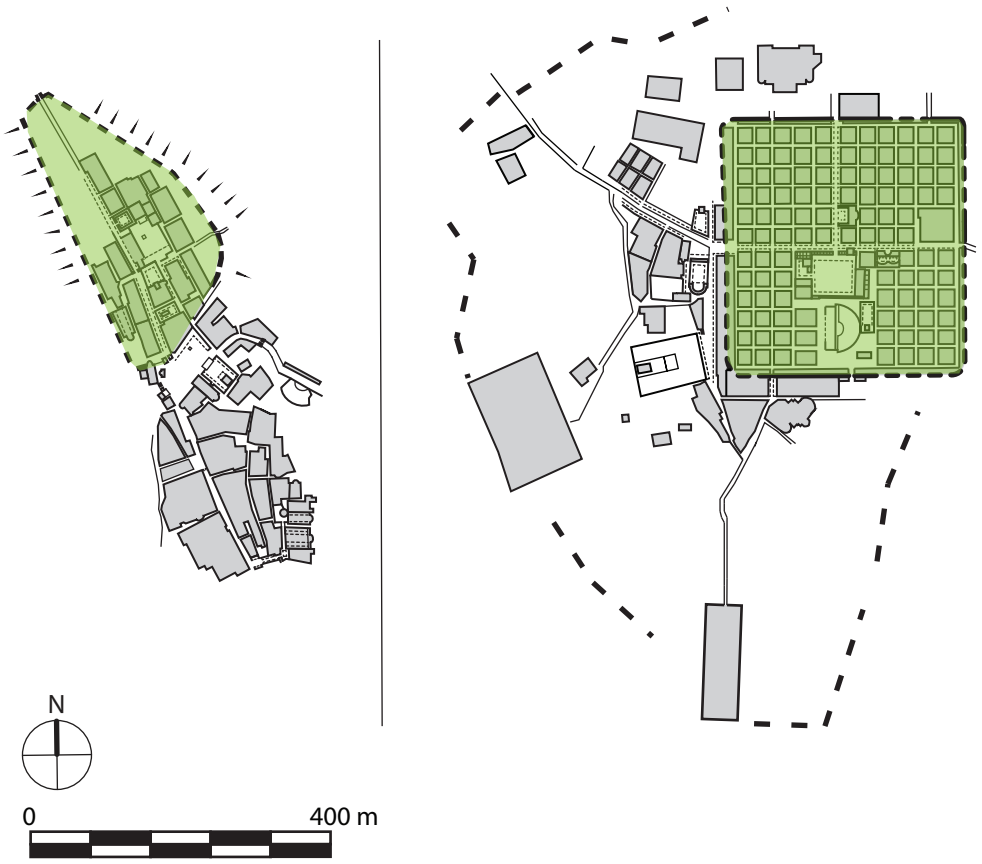


Figure 9. Comparison of the plans of foundations at Cuicul (after MacDonald 1986, right) and Thamugadi (after Ballu 1910, right).



Figure 10. Photos showing the different impressions of the topography and street layout at Cuicul (left) and Thamugadi (right).

materials needed for the continued economic prosperity of the site well into the late antique period (Fentress 2013, 336). Thus foundations along the *limes* were designed with a top-down aim of controlling local peoples, but also with an eye to controlling available resources. The creole generations of Roman colonists relied on these goods and raw materials and, it follows, were encouraged to adopt local landscape practices and facilitate interaction with indigenous communities from the bottom up.

Local tradition, or rupture?

Another question of the impacts of regional foundation patterns on local populations revolves around the degree to which city foundations represented a moment of

rupture—roughly speaking, the binary of continuity or change common to the scholarship that was introduced in Chapter 2. Looking to the presence of prehistoric, megalithic burial structures—the dolmens and *haouanet* that are common across northern Tunisia and Algeria (Camps 1992; Stone 2007a; 2007b)—is one way to understand uses of the landscape beyond settlement in the pre-Roman periods. The presence or absence of earlier burial at each type of new Roman settlement, including those sites with burials nearby, is presented in Table 3 and represented spatially in Figure 11.

Table 3. Earlier burials and foundation sites

Total sites = 32 (only foundations and refoundations included here).

Foundation type	**Burials on site**	**Burials nearby (< 10 km)**	**No burials**	**Total**
Foundation	1	4	10	15
Refoundation	7	0	10	17

Refoundations, by their very definition, are already tied to earlier settlement patterns and show a continuity with the local landscape even after Roman intervention; it is not surprising that almost half of all refoundations feature at least one earlier megalithic burial at the site of the later Roman city. New foundations also show the importance of earlier landscape markers, if in a slightly different way. Only at a single foundation site, Ammaedara, are there known megalithic burials (Camps 1995a, 2490).

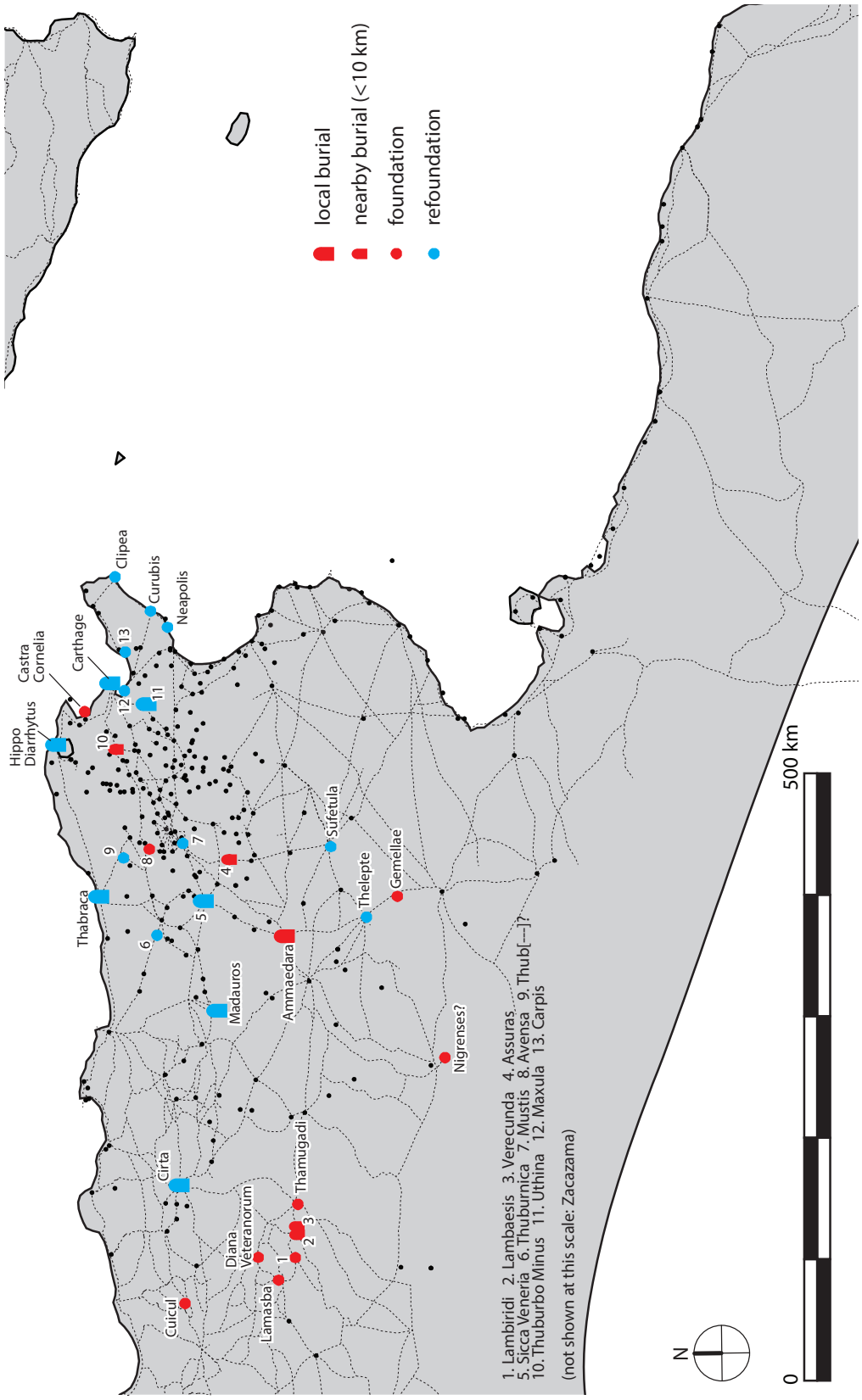


Figure 11. Map of sites with earlier megalithic burials.

More common—appearing in just over a quarter of examples—is the presence of tombs nearby to a later foundation, within a distance of 10 km. In these cases earlier burials were probably not visible from the Roman town, and may have been as far as a 1.5–2 hour walk. Yet the veterans receiving agricultural plots in the countryside surrounding a new colony could be installed directly alongside these burials. Alongside the obvious message of Roman imperial power that accompanied *ex nihilo* foundations, for the founding populations these burials served as an important reminder of earlier indigenous traditions.

Numidians, Gaetulians, and Romans at the city of Madauros

The preceding regional-level discussion raises some questions surrounding the Roman foundation or refoundation of urban sites. In most cases new cities maintain existing settlement networks and are tied to local landscapes, but what is the relationship between Roman colonists, indigenous populations, and the urban form? And how do any of the tensions between the ideals set out at the moment of foundation and subsequent creole generations appear in the archaeological record?

It is these relationships between indigenous populations and urban planning choices, connections to the pre-Roman landscape, and changes in the life of a city in the generations after foundation that will be explored in the following urban biography of the Numidian city of Madauros. A military colony following an orthogonal plan, established in the late 1st century CE on the site of an earlier settlement, the trajectory

of Madauros addresses some of the ways these components were negotiated at the local level.

Geographic overview and past fieldwork

The city of Madauros is placed in a gently undulating landscape at an elevation of approximately 900 m above sea level. The site is 5 km southwest from the west-east road from Cirta (Constantine) to Sicca Veneria (El Kef), and 12 km to the east of the north-south road from Hippo Regius (modern Annaba) through Theveste (Tébessa)(Gsell 1922b, 16) (Figure 12). The city is surrounded by hills to the south and west; further in the distance to the west the view is dominated by a range of mountains, covered in pine, oak, and juniper, that also served as the source of the limestone used for Roman construction of the city itself (Gsell 1922b, 6).

The city was not located directly on the main travel routes of the region, and is not mentioned in either the Antonine Itinerary or the Tabula Peutingeriana. 19th and 20th century travellers to the site—such as an emotive account of the city from a visit taken before the onset of the First World War by the author, historian, and musicologist Martial Douël—also comment on its remote location (Douël 1917, 189). Madauros occupies a position at the interface of two ecological zones, with pastoral steppe to the south and agricultural lands to the north. This diversity also corresponds to Apuleius' oft-quoted description of the position of the city as between the sedentary Numidians and nomadic Gaetulians, and also of the inhabitants of Madauros as half Numidian, half-Gaetulian (Apul. *Apol.* 24). The overall impression, from the perspective of both

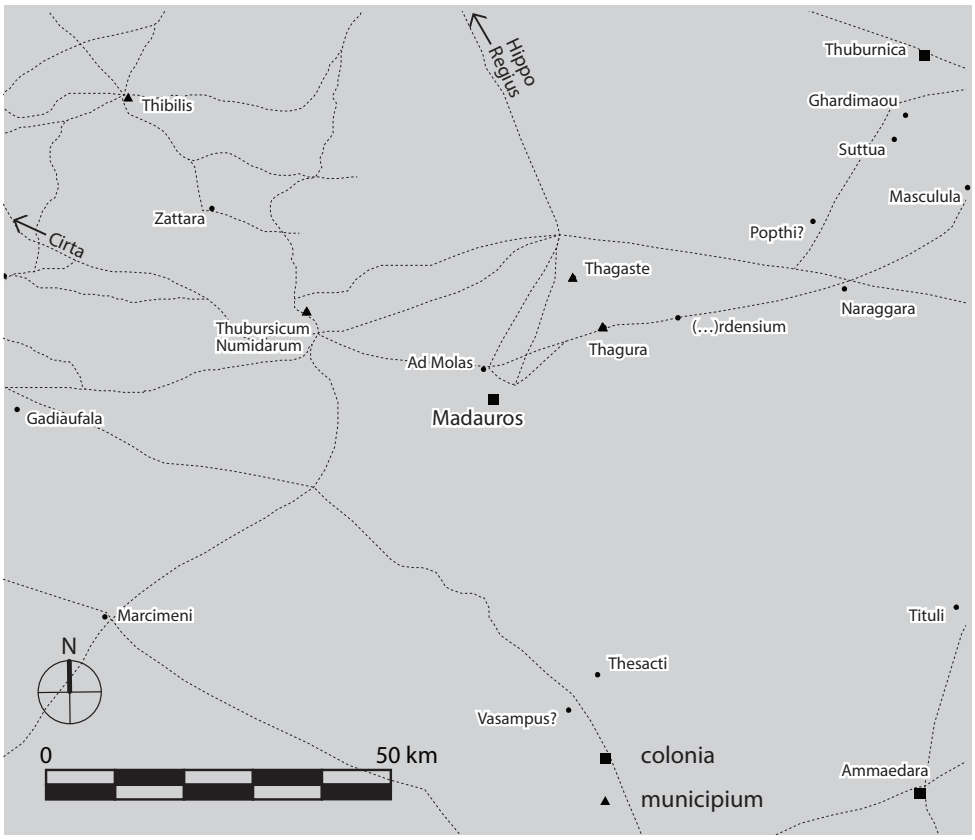


Figure 12. Map showing Madauros in its wider regional location.

historical accounts and environmental characteristics, is of a city occupying a position at the periphery of two distinct zones in the Roman period.

As is so often the case, the earliest academic interest in Madauros focused on monumental standing remains and epigraphic materials, the latter often reused during the construction of the city's Byzantine fortification. The earliest 19th plans of the city, created under the supervision of the French captain A. Karth in 1850 and later by the scholar J. Chabassière in 1866, featured preliminary surveys of the fort, baths, and a single surviving Roman tower tomb at the southern extent of the city (Gsell 1922b, 7). By far the majority of early mentions of Madauros, however, were centred on its numerous inscriptions, including a group of 21 texts recorded first by L. Rénier in the

1850s and later reinterpreted by Rossignol, and with additional texts added to the corpus by Wilmanns in 1875, Masqueray in 1877, Gsell in 1891, and Toussaint in 1896 (Rénier 1855, nos. 2923-41, 4236-7; 1857; Rossignol 1857; 1858; Gsell 1922a, 6; see Gsell 1922b, 181 for a full list of references to early publications on the epigraphy at the site).

Archaeological excavations began at the city in 1905 under the direction of M. Joly, and continued largely without interruption for 15 years. These works exposed the full extent of two bath complexes at the north of the city; two long streets, one passing alongside the baths and the other orthogonal to the first; a number of houses fronting on to these streets; the forum and theatre; the Byzantine fortress; and a church on the northwest outskirts of the city (Gsell 1922b, 7) (Figure 13). A number of regular updates of progress were published in the *Bulletin archéologique du Comité des travaux historiques* (e.g. Ballu 1907; 1916; 1919), and the full results for the forum, theatre, baths, churches, and fortress were included in the second volume of Gsell and Joly's thee-volume *Khemissa, Mdaouraouch, Announa* (1914-1922).

The site has not been subject to a programme of systematic, published excavations following these early works and, as a result, there is little written on the archaeology or the urban development of Madauros after Gsell's 1922 monograph. Scholarship referencing the site in the Roman period—aside from passing mentions of the city as the hometown of its most famous export, Apuleius—has focused almost exclusively on questions of local identities and administration raised by the epigraphic materials (e.g. Alföldy 1989;



Figure 13. Photo of the forum and later Byzantine fortification at Madauros (S. Hay).

Monceaux 1915; 1919; 1920; Sempere 1959; Schmidt 2008) and on the remarkably well-preserved olive presses present in a number of the city's houses (first described in Christofle 1930).

Municipal history

Little is known of the municipal history of Madauros, particularly regarding the pre-Roman settlement. Apuleius references the settlement in his *Apology* as being under the control of the Numidian king Syphax in the third century BCE, subsequently falling under the rule of Massinissa (Apul. *Apol.* 24). Gsell questioned whether the earlier settlement occupied the same specific location as the later Roman foundation, given the preference of many Numidian settlements for naturally fortified hilltop sites (Gsell

1922b, 8). Yet with the certainty of some sort of pre-Roman settlement in the area, and an absence of any evidence elsewhere for this earliest activity, a pre-Roman date seems likely for the earliest occupation at the site of the Roman foundation. There is also little evidence for the organization of the pre-Roman settlement, with no references to any form of municipal status or leadership until the establishment of the Roman *colonia*.

The foundation of a Roman colony can be placed in the latter half of the 1st century CE, under the Flavian dynasty, as attested by an inscription at the site from the reign of Nerva (Gsell 1922b, 9; Gsell 1922a, no. 2070) (Figure 14). There are, unsurprisingly, no accounts of the exact date of foundation nor any indication whether the colony was established under Vespasian or one of his successors. The foundation at Madauros falls at the beginning of a wider regional strategy by Rome, largely implemented under Trajan in the early 2nd century CE, to reorganize the territory south of Theveste (Tébessa), to create a reservation for the tribal lands of the Musulamii, and to consolidate Roman control—all as an eventual result of the revolt of the Numidian deserter Tacfarinas designed to prevent future uprisings (Fentress 2006, 29). The location of the city between the territories of the Musulamii, a loose confederation of Gaetulian tribes, and the lands of Numidians made the site well-suited to surveillance of both groups (Bénabou 1976, 418).

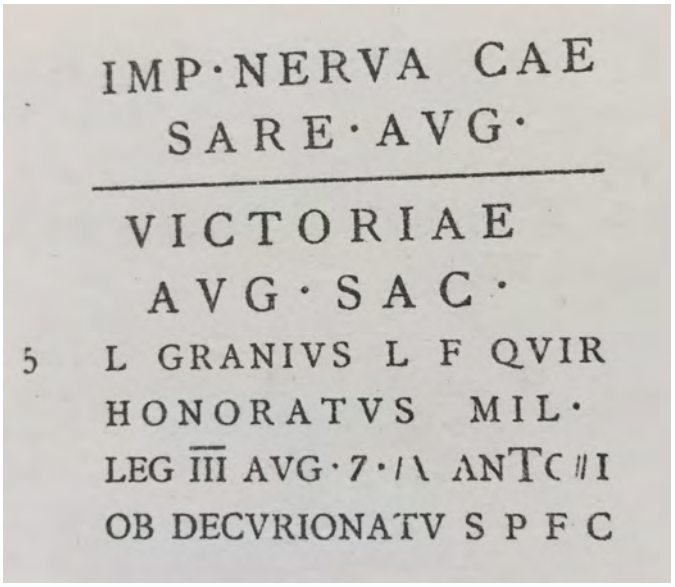


Figure 14. Inscription mentioning a soldier of the Third Augustan Legion possibly dating the foundation of Madauros to the reign of Nerva (Gsell 1922a, no. 2070).

After the Roman foundation, it is unclear what became of the earlier indigenous population of the settlement. Gsell suggests either the continuation of a *civitas* of non-Romans alongside the veteran colonists, or the loss of autonomy for the indigenous peoples (Gsell 1922b, 12). The former possibility is noted at many existing settlements where Roman colonies were established within existing towns, such as at the Numidian city of Cirta under the reign of Augustus (Lepelley 1981, 383). At Cirta, however, the existing physical settlement was also maintained and not subject to a complete refoundation, as was the case at Madauros. In the latter option, local peoples would have lost their autonomy but still lived in the new city of Madauros as *incolae* (foreigners). In addition to the *gentes* of the Iulii and the Claudii common to military veterans, Gsell notes 88 references to the Flavii in the inscriptions recorded at Madauros (Gsell 1922b, 12). One possible cause for the abundance of this name at the

site is that many of the local population were awarded Roman citizenship under the Flavians, if not at the moment of foundation then in the decades that followed.

Urban development

The fragmentary municipal history of Madauros gives few clues as to the actual interactions between Roman veteran colonists and local populations, but a consideration of the physical development at the site can shed further light on the nature of Roman-indigenous contact.

We know relatively little of the pre-Roman settlement at Madauros; there are no structural or stratified archaeological remains recorded from this period, nor does the urban plan show any obvious vestiges of a previous town. To the southeast of the later Roman town a dolmen remains well-preserved, with a single top slab roughly 2 m in length, and surrounded by a circular wall of large stones. Gsell expects similar dolmen likely existed in the area surrounding the spring providing fresh water to the town, immediately to the south, where two crude slabs could still be observed during early 20th century excavations (Gsell 1922b, 8). A single, poorly-preserved fragment of Libyan epigraphy was also found near the later Byzantine fortress (Gsell 1922b, 9), although as the language continued in use into the Roman period there is no indication whether this fragment need be pre-Roman in date. Thus while the refoundation of Madauros was connected to earlier landscape practices—as evidenced both by the historical accounts of Apuleius and known pre-Roman dolmen burials—the construction of a new town at

the site still marks an attempt by Rome to institute a new type of control on indigenous populations.

The act of foundation at Madauros was likely overseen by the imperial legate responsible for the Third Augustan Legion, as was the case at other city construction projects in the region such as Thamugadi or Ammaedara (Gsell 1922b, 10; Sears 2011, 69). Only a fraction of the city has been exposed, and much of the plan is obscured by the later Byzantine fortification of the central urban area (Figure 15). Nonetheless some basic observations about the earliest urban landscape are possible, particularly as the street network of the city remained relatively unchanged after the moment of foundation (Gsell 1922b, 19). The settlement is oriented 27° west of north and based around a central rectangular forum, slightly off-centre at the meeting of the north-south *cardo maximus* and the east-west *decumanus maximus*. The open area of the forum measures 32.4 m by 28.5 m (Gsell 1922b, 58), a similar shape but significantly smaller than the 50 m by 42 m recorded at Thamugadi (Laurence *et al.* 2011, 190). A theatre—abutting the northern limit of the forum and seating approximately 1200 people—and two bath complexes further enhanced the monuments of the city in the late second and early third centuries CE, respectively (Lachaux 1979, 90; Thébert 2003, 214–18). Burials mark the boundaries of the city to the west and south (Gsell 1922b, 22).

A roughly orthogonal alignment for Madauros is confirmed by the presence of two other substantial thoroughfares parallel to the *cardo* and the *decumanus*. One street runs from northeast to southwest approximately 70 m to the south of the forum.

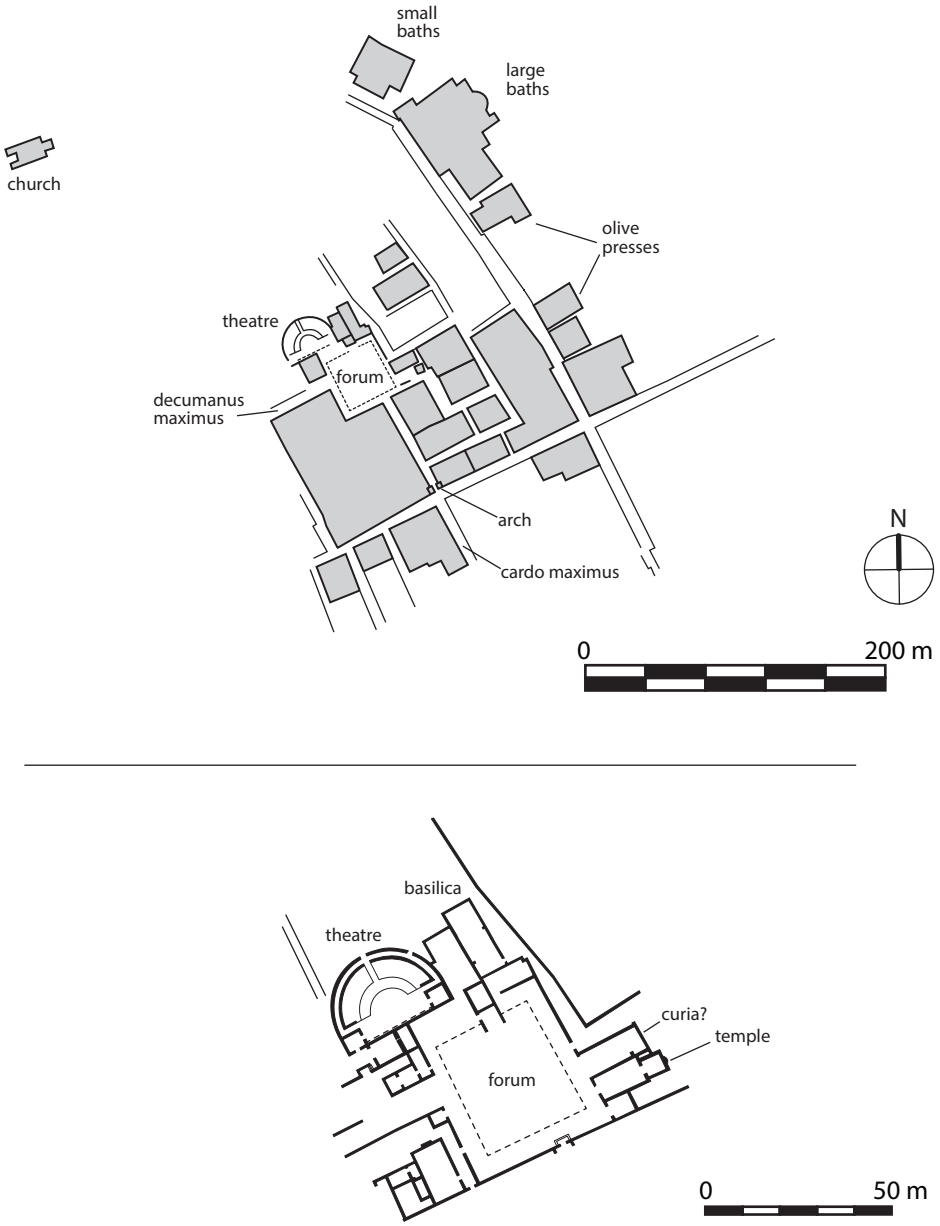


Figure 15. Plan (top) and forum detail (bottom) of the city of Madaure in the Roman period (after Gsell 1922b).

Another paved street passes alongside the baths in the northeastern site area and passing to the southeast, approximately 90 m to the east of the forum. All of these streets are paved, and measure anywhere from 5.5 m to 8.5 m in width (Gsell 1922b, 19). The intersection of the *cardo* and the major east-west thoroughfare to the south is marked by an arch measuring 4.5 m in width that indicates the entrance to the forum, the foundations of which survive; although no foundations survive for a similar arch marking the eastern entrance to the forum, architectural fragments recorded in this area indicate such an arch likely existed at one stage (Gsell 1922b, 55). The path of the *decumanus* can be seen emerging from below the foundations of the later Byzantine fortress, both to the east and the west of the forum, if only in fragmentary segments.

The creole generations of Madauros

Understanding the urban development of Madauros, as recounted above, requires a return to the words of its most famous citizen, the author Apuleius. Apuleius describes a population that is half-Numidian, half-Gaetulian, positioned at the boundary between the territories of the two peoples. This quote, from a work written in the middle of the 2nd century CE, refers directly to the creole generations of the city founded by the Romans a century prior. Yet the population also certainly included Romans, a group completely omitted in Apuleius' description. Tensions between these three groups must have played out in the development of Madauros in the years following its foundation, and could explain some of the particularities of the city plan as it has been preserved to the present day.

We might expect—given the relative proximity of the city to Thamugadi, the roughly contemporary (c. 30 years) dates of foundation for the two cities and, unlike Cuicul, the construction of both on a relatively flat part of the landscape—that the two cities would share some architectural characteristics. Gsell suspects the square blocks immediately surrounding the forum at Madauros delineate the full extent of the earliest Flavian settlement (Gsell 1922b, 19). The combination of these streets creates a roughly square block arrangement, measuring approximately 95 m by 92 m and bisected by traces of other lesser streets, to create an urban plan of slightly different dimensions but reminiscent of the 22.58 m (or 75 Roman Feet) blocks recorded at Thamugadi (Figure 16). Despite the similar overall dimensions of the orthogonal plan at the two cities, however, the construction at Madauros departs from this template considerably. If, as Gsell states, the street alignment was not significantly altered in later periods, then the slight shifts in street alignments and widths, as well as inconsistent internal block sizes, that we can observe today suggest a tension between the initial designs of Roman military surveyors and the implementation of these designs by the Roman and indigenous populations of the city itself.

There is also no evidence for walls surrounding the city at any point during Roman rule, in contrast to those recorded at other comparable foundations such as Thamugadi—although these were partially dismantled to accommodate later growth—or Cuicul (Laurence *et al.* 2011, 158–9). As with the inconsistent application of regular block sizes, a lack of walls may further point to a disconnect between the initial plans for the settlement at Madauros and the realities of their construction.

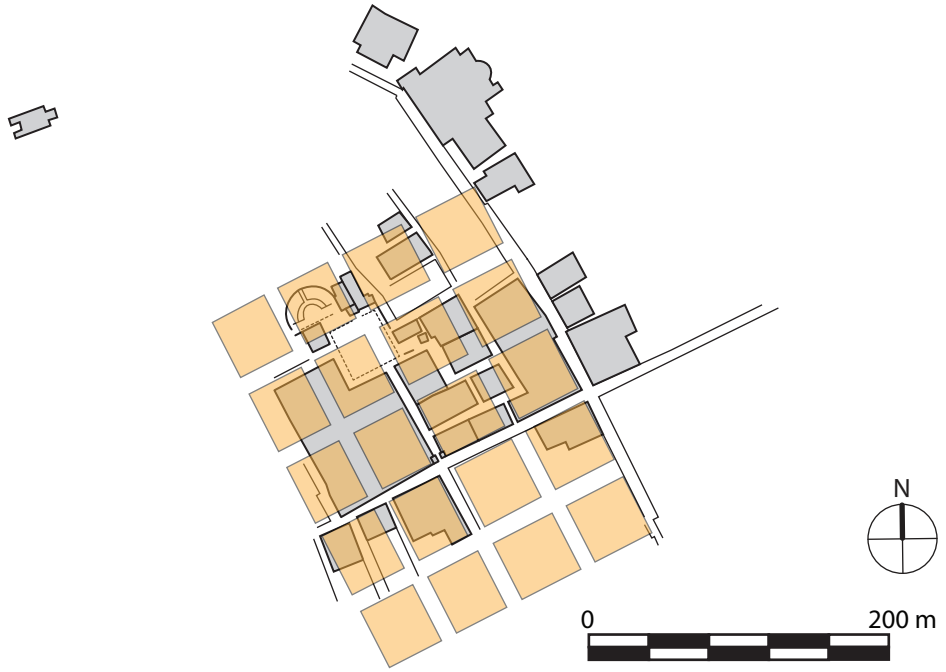


Figure 16. Plan of Madauros with overlay of blocks from Thamugadi (orange) at the same scale.

I suggest these differences arose through the actions of the creole generations of the Roman settlement and were not solely to do with the negligence of the builders, as Gsell suggests in cases of misalignments of other unexpected architectural forms at the site (Gsell 1922b, 64). The role of indigenous populations in North African colonies is a matter of some debate (e.g. Bénabou 1976, 394–97; Cherry 1998, 101–3; Fentress 1983; Shaw 1983). Sear's assertion that the presence of non-Romans in the founding population of North African colonies is too-often assumed "despite a lack of archaeological evidence" is misguided (Sears 2011, 68). Many traces of non-Roman materials were likely discarded during the early-20th century excavations at Roman sites across North Africa, and our understanding of non-Roman ceramic forms and fabrics is

still flawed in many ways. At Madauros a group of inscriptions bearing the *cognomen* Marius suggests—according to Gascou—a number of Gaetulians, recruited to the army under Marius and made citizens under Caesar, were amongst the earliest colonists (Gascou 1969, 568; Lassère 1977, 254). Furthermore, 'Roman' colonists were drawn from across the empire—Lassère notes in the epigraphic materials at Madauros colonists with possible origins in Baetica, Gaul, and Italy (Lassère 1977, 253–54). The question should thus not be framed only around whether non-Romans were present in Roman colonial cities, but rather around how much of the founding population may have been non-Roman and around how indigenous populations influenced urban development.

The smaller, less significant, and less wealthy settlement at Madauros may have featured a more pronounced discrepancy between numbers of Romans and locals, with far greater numbers of the latter than at larger regional centres. There is little evidence to suggest strangers ever moved to the city, likely due to its remote location and limited potential resources. The Quirina tribe is mentioned almost exclusively in epigraphic materials at Madauros and the Papiria tribe, that appears in many neighbouring sites such as Thagaste or Theveste, is missing epigraphic record (Gsell 1922b, 17). The interaction between Romans, Numidians, and Gaetulians was therefore an artefact of the founding population, rather than due to a significant immigration of new populations in the years that followed. From the end of the 2nd century onward there was likely an active intellectual community—Augustine of Hippo studied in the town in the 4th century CE, amongst other less famous scholars—even if evidence of

this community is largely lacking in the archaeological materials (Gsell 1922b, 32). Students to the various schools are a notable exception to this general lack of mobility into the city.

The lack of migration into Madauros does not suggest a lack of mobility of the town's citizens to the far reaches of the empire, a degree of mobility that I will return to in a discussion of Tiddis in Chapter 4. The most obvious example, Apuleius himself, was born in 125 CE to reasonably prosperous parents, before leaving Numidia to be educated at Carthage, Athens, and Rome. At the time of the *Apologia*, Apuleius had married the wealthy landowner Aemilia Pudentilla and was living with his new wife in Oea (Harrison 2003, 131). Despite being the town's most famous native son, Apuleius spent little time at Madauros after his initial departure.

The mobility of Apuleius is not an exceptional case, however. A funerary inscription reused in the construction of the Byzantine fortress details the life of a local citizen, Saturninus Quirina, who entered into a career of military service. This service brought him to Britain, where he moved up the military ranks before eventually returning to his family in Madauros. Once back at the town of his birth, he used the earnings from his distinguished service to erect the funerary monument from which this inscription detailing the achievements of his life was found (Alföldy 1989). The example of Saturninus is well-documented due entirely to the survival of a single funerary inscription. Yet it is evocative, nonetheless, of citizens of Madauros apart from Apuleius leaving the city to engage in the wider dealings of empire—part of a larger and well-

documented trend of mobility for North African populations under Roman rule (Lassère 1977, 643).

Changes to the landscape surrounding the city also provide some details on life at Madauros after the moment of foundation. Although there has not been a comprehensive, modern survey of the city's hinterland, a look at satellite imagery surrounding the city shows no clear indications of a shared alignment among modern field boundaries or other obvious indicators of Roman centuriation (Figure 17). The lands surrounding the site were probably proportioned in small packages in a more ad hoc fashion, as has been observed at the comparable Numidian military foundation at Diana Veteranorum (Fentress 2013, 318). Gsell further identified a number of ruined structures in the area surrounding the city that mark the location of Roman farms, each in use by the city's inhabitants (Gsell 1922b, 17).

The overall agricultural territory of the city, however, was relatively meagre, and perhaps this lack of arable land was in some part responsible for the relatively minor regional importance of the settlement throughout the Roman period (Gsell 1922b, 18). The numerous olive presses recorded *in situ* during excavations of the city (Christofle 1930) and the lack of concrete evidence for any other types of production suggest that—as was the case in most towns in North Africa—agricultural production was the primary output of the citizens of Madauros. The precise date for these presses is unknown.



Figure 17. Landscape surrounding Madauros showing little evidence for centuriation (Google Earth).

A recent study of a series of presses at the House of Bacchus and Ariadne at Thuburbo Maius convincingly demonstrates that their production exceeded the needs of a single family unit, thus augmenting household income and maybe even contributing to intraregional agricultural trade (Bermejo Tirado 2010). Given the limited productivity of the surrounding territory of Madauros, particularly in contrast to the fecundity of the lands of Thuburbo Maius, it seems more probable that agricultural production at the former city was largely for supplying the local population (Ferrone 2013). A similarly self-contained economy is noted during the Roman period at the comparable inland settlement of Sitifis, modern Sétif (Fentress 1990). In the overall absence of modern

survey, however, any understanding of agricultural systems or changes to the rural countryside as a result of Roman foundation remains largely speculative.

Regardless of the exact breakdown of the population of the city, or the productive nature of surrounding agricultural settlement, subsequent generations appear to have quickly abandoned aspects of the Roman colonial planning ideal—such as walls or regular property sizes—in favour of more immediately local priorities. The examples used here allude that the interplay between the populations impacted by a colonial foundation such as Madauros do not occur only at the moment the city was created, but are played and replayed by the creole generations of the city in the centuries to follow.

Discussion

The act of establishing a city serves as a political and symbolic event or an opportunity to create a new built ideal—but it is also tied to earlier landscapes and shaped by longer-term urban processes. The study of Roman colonies, particularly those in North Africa, has remained heavily focused on the moment of foundation. This chapter equally embraces the lives of the creole generations inhabiting these new towns and cities as an equally important part of the foundational process.

First, a look at the regional scale demonstrates a tension between the cultural or political significance of new settlement—the importance most often recounted in the historical or epigraphic record—and the actual impact of these new foundations. Although the first cities given the rank of *colonia* likely involved at least some influx of

Roman colonists, the actual numbers involved in this migration are up for debate. Not all sites assigned the rank of *colonia* were new foundations, and from the 2nd century we see a number of promotions without colonial activity (the growth at these sites is discussed in Chapter 4). Of the 32 cities that were subject to Roman foundations, over half (17 sites) were constructed on the site of an earlier settlement. In a list of over 350 settlements considered as part of this research, then, there were only 15 cities (4%) that can truly be considered *ex nihilo* Roman foundations. Although the act of foundation features heavily in both ancient and modern discussions of Roman power, in the North African context Roman urbanism relied largely on pre-existing urban networks built upon local landscapes and did not involve widespread spatial restructuring or movement of existing populations.

Despite this evidence for continuity, the interactions of locals and Romans in the process of foundation are scarcely discussed in archaeological descriptions of newly founded cities, nor is it clear the extent to which new colonies represented a significant rupture in local practices. Considering the city plans for colonial settlements at the regional scale gives some idea of the dealings between locals and Romans, and the underlying goals of each foundation. At sites founded in the already densely urbanized Medjerda Valley, such as Uthina or Thuburbo Minus, new Roman cities tend to use a more flexible urban plan. These sites were constructed primarily according to one possible ideal of the Roman city—the full experience of moving through its buildings and public spaces, as outlined in MacDonald's idea of urban armature. The stability of the pre-Roman urban landscape in the bulk of North African territory allowed new

Roman foundations to aspire to the monuments befitting their status, and to rival neighbouring towns with construction projects, as will be discussed in Chapter 5.

In the periphery of Roman territory, specifically with the foundations along the Numidian *limes*, most foundations relied upon a strict orthogonal plan tied to the spatial structure of Roman military encampments. This explicit connection to the military speaks to the primary goal of these cities—not to express an ideal of the Roman town, but rather to control the indigenous, often nomadic peoples who lost a degree of autonomy to the new Roman settlement (Bénabou 1976, 395–96). Yet these foundations on the borderlands also relied on indigenous inhabitants and regular contact with nomadic populations for continued prosperity, and creole generations adopted both Roman and local practices. The textile production central to the economy of the sites of Thamugadi or Diana Veteranorum, for example, likely relied upon raw materials from nomadic herders of the surrounding steppe (Fentress 2013; Wilson 2001; 2004). Colonists were awarded land not according to the centuriation observed through much of the Medjerda Valley and at coastal sites such as Leptiminus (Stone *et al*. 2011, 124–27), but in distinct parcels surrounded by open territory (Fentress 2013). Agricultural production around new foundations on the periphery likely followed a similar hybridized, local/Roman approach as has been observed surrounding other pre-Roman cities, such as the area between Cillium and Thelepte where we have the benefit of more extensive survey data (Hitchner 1989, 402).

A microbiography of the city of Madauros demonstrates how some of the tensions between the top-down goals of a Roman colonial settlement and the local experiences of a new foundation were expressed in the physical fabric of the city and its hinterland. Madauros was constructed at the site of earlier settlement and burial activity; the Roman foundation must thus be understood within this longer, local trajectory. While there are indications that the initial aims for the city involved a plan of square city blocks comparable to that enacted at Thamugadi, the actual implementation of the city over its first generations was more casual. The haphazard implementation of a more rigid plan, and a probable lack of construction of city walls, could be due to a lack of economic means in a city with limited agricultural potential, or to a lack of will from an only partially Roman populace to enact Roman urban planning ideals. Regardless, the resulting built landscape of Madauros highlights the importance of adaptability and improvisation over time in the process of colonial foundation. The lives of the creole foundations, as recounted in historical documents and the epigraphic record, further show the give and take between Roman and indigenous identities in the decades following the establishment of the colony.

Overall, this regional and local consideration reiterates the importance of understanding city foundation not only through time, but also in relation to the surrounding landscape. While foundation is a time when the intended meaning of a city may be directly ascribed in physical form, the subsequent inhabitation of these spaces creates new tensions and interactions far beyond any original intentions. As with the example of New Orleans opening this chapter, the focus of a discussion on Roman

foundations should remain squarely on the lives of those who live in a city, and their choices in adding their own significance or making their own physical changes to the urban landscape.

Chapter 4. Urban sprawl and the impacts of expansion

Phoenix, Arizona is a city defined by growth, with an appetite for unrestrained expansion arguably greater than any of its American counterparts and relying on a disproportionate share of available global resources (Ross 2011, 15). Sprawling new suburban neighbourhoods extend in all directions into the desert—unimpeded by nearby settlement and unconstrained by the physical landscape—and connected to an ailing downtown core by car-filled freeways. The dogma that 'growth is good' is shared by many institutions of the modern capitalist city—developers, local government, big retailers, small business owners, utility companies, newspapers, universities, arts organizations, and sports franchises can all benefit from increased urban populations and, as a result, increased markets (Molotch 1976). Phoenix, in particular, adopted development as a *raison d'être* and primary economic driver for the city's administration (Ross 2011, 54). The combination of available land, an increasing populace, and a willing civic administration in the post-war period resulted in wave after wave of suburban expansion. The city's population increased by 1100% from 1940 to 1980, making it the 9th largest metropolis in the United States by population size, yet also the metropolis with the lowest population density (VanderMeer 2002, 64; Ross 2011, 71). The resulting landscape is one of extreme urban sprawl: single-family homes extending along major transport arteries; cookie-cutter outlet malls as the primary sources of commerce; travel by car, through heavy traffic on over-used highways, is a necessity; residential-only neighbourhoods lacking a sense of cohesive community provided by denser, mixed-use development (Figure 18).



Figure 18. The urban sprawl of Phoenix, Arizona (Google Earth).

Phoenix presents but a single example of the paradox of modern suburbia. On the one hand, popular culture and public imagination (particularly in America) presents a suburban ideal of the single-family house, with a two-car garage and a large yard. On the other, many city dwellers deplore the urban sprawl and unregulated progress that allow such an ideal to exist (Hayden 2003, 4–9). As a result, two conflicting visions of the city of Phoenix emerge. Boosters of city development and the construction industry manipulate the ideals of a suburban paradise, downplaying the environmental impacts of unrestrained sprawl. Meanwhile, advocates for a compact urban core point to an increased sustainability and quality of life of targeted, denser neighbourhoods (see particularly Jacobs 1961; 1969; 2016). In Phoenix, growth is so essential to the urban

identity of the city that discussions of restricting the city's spreading boundaries are next to impossible—in the words of one developer, metropolitan Phoenix will "always be a growth-driven economy" (Ross, 2011: 59). Only after widespread financial collapse and a nationwide recession starting in late 2007 did the enlargement of the city slow, resulting in abandoned cul-de-sacs and deserted neighbourhoods overtaken by desert flora. The rate of construction Phoenix maintained for over 60 years was, ultimately, unsustainable.

The trajectory of Phoenix obviously cannot be projected back onto the cities of Roman North Africa, some two millennia prior. This vignette does, however, bring into sharp relief some of the ways in which growth impacts the lives of a city's inhabitants. Expansion provides economic stimulus for still further development (Molotch 1976). It acts as an impetus for continued migration into an urban area, a migration that is both cause and effect of increased infrastructure to manage and support increasing populations (Dierwechter 2008; Fletcher 1995). More inhabitants also introduce new pragmatic and social pressures, creating in modern situations a stand-off between boosters for development and those resisting continued expansion (Ross 2011), and in ancient contexts a need for additional political or religious systems to maintain civic order (Attarian 2003; Trigger 1972). With ever larger populations there is also more often than not a tendency toward unequal access to space or resources, and the tensions between haves and have-nots within a city may be brought to the forefront of urban life (Jargowsky 2002; J. Powell 2002; Squires 2002).

This chapter applies some of the lessons learned from conversations on suburban development in modern, largely western contexts to the cities of Roman North Africa. A brief look at the vast literature on the topic demonstrates that—amongst geographers, urban historians, anthropologists, and archaeologists—there is little agreement on the economic benefits or social problems of a growth agenda, nor on definitions of different types of expansion. A solid typology for increases in the size of North African cities is also impossible. Yet in examining Roman sites on a regional scale, two distinct trajectories can yet be observed: dispersed expansion respecting a form of strict spatial planning (sprawl), and more incremental, denser, and usually informal accretions of new buildings onto the edges of existing townscapes (organic growth). The distribution of these different developments is intertwined with questions of geographic location, city origin, civic administration, and economic function.

Short urban biographies of two cities displaying each category—the coastal city of Utica for sprawl, and the inland town of Tiddis for organic accretion—demonstrate how different growth patterns may have impacted local inhabitants. Increasing populations at coastal sites present a clear case of migration from across the Mediterranean, drawn to the increasing economic potential and demographic vitality of the growing city. Despite these changing populations, modifications to the city of Utica, particularly residential architecture, show a degree of continuity from earlier Punic traditions. Smaller inland towns such as Tiddis, in contrast, show a high degree of stability in indigenous populations. Tiddis' moderate growth is still connected to a larger role for elite families in regional and Mediterranean-wide networks. Positioning the dialogues

surrounding modern growth in relation to a much earlier context helps to highlight some of the structural and social dynamics of population increases in the North African city, and the sustainability of these trends in the longer term.

Studying the process of urban growth

Discourses on growth, its benefits and its discontents, cover a vast swath of literature across disciplines such as Geography, American Studies, Urban Anthropology, and Urban History. Yet the phenomenon remains a poorly defined concept, likely because it is discussed across such a range of disparate academic traditions. When it comes to the augmentation of Roman cities, the subject has received notably less detailed study. This is unsurprising considering the lack of agreement within the wider literature on terms for various types of expansion, and the difficulties inherent in using modern concepts applied to ancient contexts. In the following, I summarize some of the basic questions surrounding growth that emerge across disciplines. I focus particularly on the themes that are featured in specifically archaeological discourses—the impact of expansion on the urban economy, city planning, and differing categories of suburban development—and on the ideas that are the most helpful for my subsequent coverage of the North African city.

Growing populations, growing economies

A first focus in growth studies considers the economic importance of urban expansion. Scholars often acknowledge the economic and political impacts of increasing urban populations—a need for new transportation infrastructure, provision for public health

and other public services, a larger tax base—even as they offer little agreement on the factors behind population increases (Kelley and Burley 1984, 4). However, because the economic effects of development make new neighbourhoods or suburbs as important as the centres of cities to their overall economic function (Hayden 2003, 17), methods of managing these inflows of financial capital have occupied much of the traditional, policy-driven literature on city growth in modern contexts.

These acknowledged economic benefits are not without detractors. Notions of the "urban growth machine", to borrow the term first coined by Harvey Molotch's seminal 1976 work, are also tied to a coalition of elite landowners, developers, mortgage bankers, construction companies—in other words those that stand to benefit the most from ongoing construction—often at the expense of local, non-elite communities (Molotch 1976, 16; Jonas and Wilson 1999, 5). With rising populations and, often, higher population densities, there is more regular interaction between residents and the formal and informal systems regulating cities are subjected to additional stresses (Fletcher 1995, 95). The negative impacts of largely suburban additions on (usually poorer) inner-city populations have been well-documented (Avila 2004; Duany *et al.* 2000, 4; Gilbert 1999; Squires 2002). Even in cities such as Phoenix, with a strong growth agenda, boosters for ongoing development are matched by anti-growth activists—local artists, urban sociologists, and community organizers—hoping to slow or stop expansion and redirect funds into regeneration projects (Ross 2011, 105).

As I touch upon in Chapter 2, the connection between urbanization and the economy is also frequently targeted in discussions of the Roman world. Increases in urban population, usually traced archaeologically through changes to the physical area covered by a settlement, are sometimes used as an archaeological proxy for increased economic production (see Scheidel 2009; Wilson 2009). Such a comparison is problematic, given the lack of obvious relationship between urban area and GDP, and the potential for vast differences in both size and population in towns with comparable civic status across the Roman Mediterranean (Scheidel 2009, 53). Whether a city's size can be directly equated to its economic production is not important to my themes here. The larger social questions underlying these economic works are more relevant: whether an increase in overall production in the cities of the Roman world results in increased productivity for individual inhabitants (Jongman 1988, 151–52); if the period of urban economic expansion in the first centuries of Roman provincial rule was sustainable (Scheidel 2009, 46); and does economic growth lead to higher standard of living, or greater inequality (Wilson 2009, 81–82). I return to these ideas in my discussion below.

Planning for expansion

A second type of scholarship on growth considers the choices made by urban planners and civic administrators for structuring and controlling expanding cities. Much has been said of the different techniques for managing increasing urban areas to be sure new city residents are provided with adequate services and quality of life (see Dierwechter 2008).

Good urban planning can help new neighbourhoods thrive, and increase the vitality and economic well-being of a city (see Jacobs 1961; Jacobs 2016); bad urban planning can result in unchecked gentrification and unintended racial or economic segmentation (Atkinson 2002; Freeman and Braconi 2004; Mullins 2006), environmental unsustainability (Needham and Dieterich-Ward 2010; Ross 2011), the degradation of public health, and increasing social inequality (Jargowsky 2002; J. Powell 2002). The choices of different civic or regional governments on when and how to grow, and the successes and failures of various approaches, compose a field of study with obvious practical benefits.

Beyond the administrative efforts to control or shape city growth, this discussion ties into larger, abstract ideas already introduced about the meanings behind built environments (Rapoport 1990). Expansion into new territory, much like city foundation, offers a unique opportunity to shape the experiences of inhabitants—it is easier to create a clear, coherent message when working *ex nihilo* and not restricted by existing streets or structures. Studying patterns in recently built districts on the urban periphery offers a direct insight into the ways Rapoport's "users"—the inhabitants of a city—take possession of a built environment and change its physical form through personalization of spaces and deviation from any original, designed uses (Rapoport 1990, 21).

MacDonald presents a classic study of Roman growth along these lines in his discussion of changes to the North African city of Cuicul (MacDonald 1986, 5–14). In this work, MacDonald introduces the idea of urban armature—a network of monuments, public

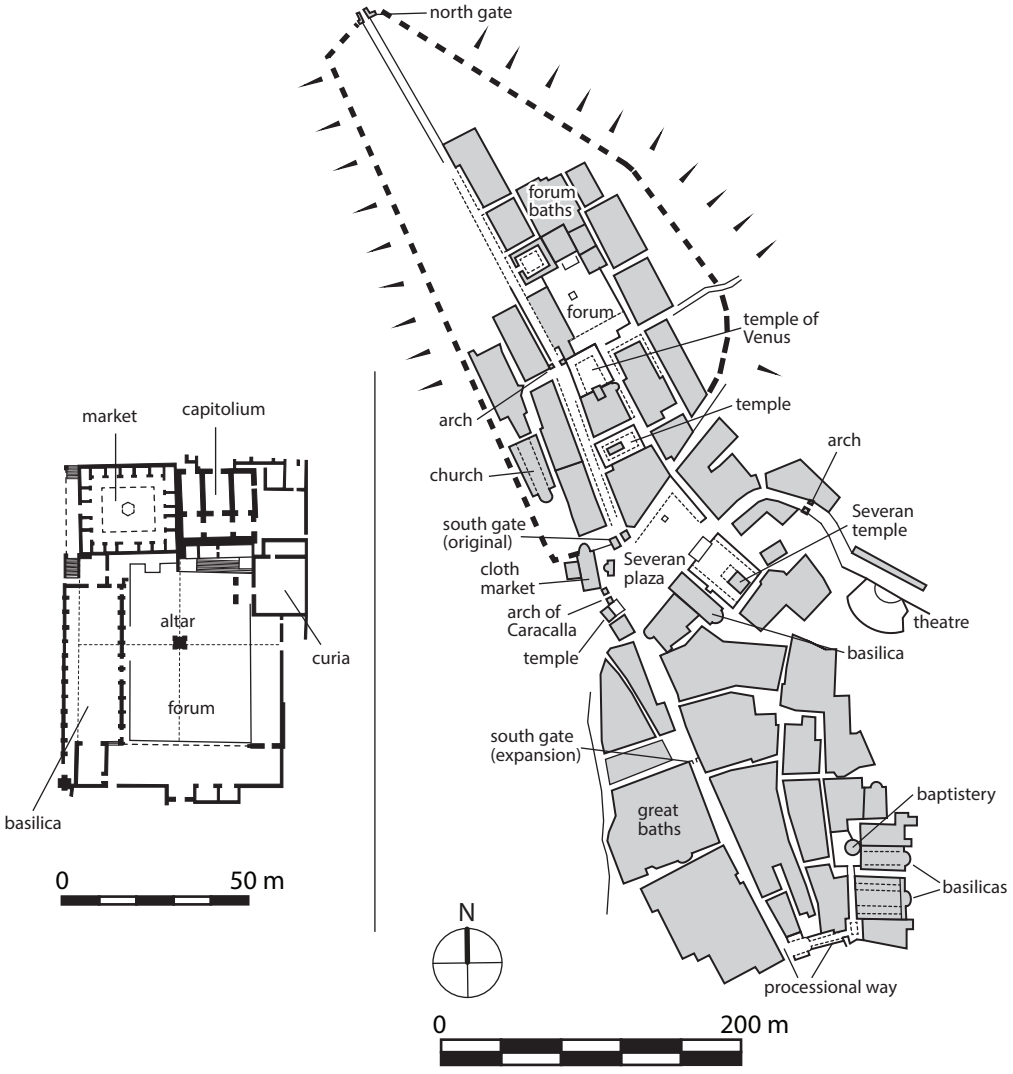


Figure 19. The city of Cuicul, Algeria with forum detail (left) (after MacDonald 1986).

spaces, and streets connecting one end of the city to the other. In the case of Cuicul, these nodal points are used to explain the relationship between the existing city and new constructions of the 3rd century CE (Figure 19). MacDonald's armature provides some sense of organization to the growth of Cuicul, and indeed many other Roman cities, by laying the idea of movement between key landmarks over two-dimensional urban plans. This approach also is noteworthy in its emphasis on the expansion of the Roman city—another case used by MacDonald's features a focus on changes to the Algerian town of Thamugadi (MacDonald 1986, 25–29)—rather than solely on an initial urbanism (see also Chapter 3). Little is said in such treatments, however, of the spaces between this network of points and lines, the houses and non-major thoroughfares, where so much of life in the city actually occurs.

Categorizing the suburbs

A final focus of growth studies, perhaps most resonant with archaeologists for its more direct applicability to the material record, considers different categories of expansion and their varied impacts on city life. In modern contexts, this is seen in the fixation with delimiting different types of suburban development. Hayden, for example, attempts to identify the various patterns of sprawl using city plans or aerial photos; the result is a series of over twenty more specific neighbourhood shapes with a precise, yet frankly largely unhelpful, vocabulary of terms like "boomburb", "alligator", or "leapfrog" (Hayden 2004) (Figure 20).

A second frequently invoked term, urban sprawl, also receives a number of sometimes contradictory identifications. Discussions of sprawl are varied and often emotive—from the bleakness of "a vast horizontal world of places and things that are accessible only through relentless driving" (Gillham 2002, 3), to the violence of deadly confrontations between soccer moms stuck in rush hour traffic (Squires 2002, 1), to the slightly confusing "temptations" of "a hot fudge sundae" in "a calorie conscious world" (Flint 2006, 1). These descriptions and metaphors provide an idea of the contentious, weighted debates surrounding the concept of sprawl, but are light on specifics of how sprawl may be identified; more concrete details are also needed. Breugmann considers



Figure 20. An example of the "alligator" type of urban sprawl—a planned neighbourhood never fully developed and producing negative cash flow for investors (Hayden 2004).

sprawl as any "low-density, scattered urban development without systematic large-scale or regional land-use planning," a phenomenon he suggests is common to cities across continents and periods and not solely a modern American problem (Bruegmann 2005, 18). A similar related definition refers to low-density land development, of mostly residential units, spread out over a large area, far from the commercial centre of a city, and requiring widespread use of the automobile (Dreier *et al.* 2001, 63). Duany and colleagues (2000) go further, naming five homogenous components of sprawl—subdivisions, retail centres, business parks, civic institutions, and roadways—that occur adjacent to each other yet remain largely independent and segregated (Duany *et al.* 2000, 5–7).

In an archaeological context, attempts to create a fixed typology of different growth patterns rely heavily on city plans (M. E. Smith 2010; M. E. Smith *et al.* 2014; Stanley *et al.* 2012). This type of systematic, empirical approach is also not without difficulties. One attempt distinguishes between planned and unplanned expansion, contrasting semi-orthogonal or irregular blocks as the action of individual builders, to an integrated plan including monuments and larger features, to the modular orthogonal block layout often considered characteristic of Roman planning (M. E. Smith 2007). I believe such categorizations are both too static and overly simplistic. As Smith explains, all growth is planned to some degree (M. E. Smith 2007, 5). Yet introducing further sub-divisions of city planning in archaeological contexts, as he does here, is often impossible given the synchronic nature of most excavated city plans. Moreover, issues with typology are rarely resolved solely through the creation of a greater number of increasingly specific

types. I suggest, instead, that the important point lies not in the categorization of growth but in the degree to which expansion is tied to broader economic and social cycles and can cause a ripple effect on other aspects of city life (Bruegmann 2005, 24).

An attempt at a synthetic analysis of growth in Roman North Africa by Laurence *et al.* (2011), as part of a much broader study of the Roman West, falls prey similar issues. This work provides a typology of four types of expansion at North African sites, all identified with reference to the network of streets: pre-Roman centres without a regular street grid; re-founded cities with grids maintained throughout the Roman period; Roman sites with grids that are gradually abandoned as the city expands; and pre-Roman sites that had regular grids both before and after the period of Roman control (Laurence *et al.* 2011, 160). The differences between these categories are not easily spotted at any but the best preserved and excavated sites and, as a result, this attempt does not go beyond a handful of anecdotal examples—Carthage, Thamugadi, Lepcis Magna, Cuicul, etc.—to provide any real indication of the regional distribution of these development types.

Beyond this issue, however, such an approach also relies too heavily on the street as the sole indicator of the speed or type of growth. This places a supposedly Roman ideal (orthogonal blocks) over local urban practices and even topographic limitations. In cases where a street grid was created, such as at the expansion of Utica, it is understood as having to do with admiration for Roman cultural practices. When a different system was used, such as the meandering streets respecting the local

topography inimical to a grid at Tiddis, it "was obviously not a priority for the inhabitants of the towns, even if they otherwise professed their allegiance to Roman culture through the provision of baths, the construction of temples, and the erection of Latin inscriptions" (Laurence *et al.* 2011, 160).

This statement marks a dangerous return to debates of Romanization and resistance that were outlined in Chapter 2, and have far too long dominated the study of Roman cities. Why must all urban change under Roman rule be related to the acceptance or rejection of perceived 'Roman-ness', or a desire to express loyalty to an architectural programme that was by no means uniformly established across the Empire including, most notably, at Rome itself? To ask questions of social change or local adaptation through urban processes, such as growth, requires a starting point that does not assume the primacy of Roman ideals and the superiority of Roman culture. I explore the possibilities for such a flexible framework below.

A flexible appreciation for increasing city sizes

Urban growth has received much attention in disciplines focused on the modern world and yet there is little agreement on defining strict categories of expansion, or even on whether the phenomenon is, ultimately, good or bad for the life of a city. Urban expansion in an archaeological context, on the other hand, relies heavily on the use of increasingly complex typologies revolving around ideas of planning or centralized control. The question emerges, then, how we might consider growth in the ancient

world in systematic yet still flexible ways, across a broader geographic region, without falling into these same issues of unhelpful categorization.

There are a number of vectors that appear in most attempts at creating the classifications I introduced above. First, a distinction between planned and unplanned enlargement is often made, with an underlying assumption that orderly, orthogonal growth is not possible without some degree of centralized organizing force (Février 1990, 22). Population size or population density, another possible vector, is difficult to compute in Roman contexts and even more difficult to map chronologically with any confidence (see Wilson 2011). Calculating the overall physical area of cities does no better, as so few have been excavated to the extent needed to accurately chart a total footprint in different periods.

For my purposes, despite all its flaws, I rely on this third metric and interpret growth as the increasing of the physical footprint of an urban settlement as this method is most directly visible in the archaeological record. Pre-Roman urban sizes were estimated according to areas where earlier deposits have been noted in excavation, or where the urban plan strongly indicates an earlier origin. Earlier urban boundaries, such as necropoleis or city walls, were also considered. Any remaining areas without clear evidence of previous urban settlement were considered as expansion under Rome: new orthogonal city blocks, peri-urban monuments, Roman fortifications, or other urban accretions.

Reviewing the 340 cities in the gazetteer I created for the study area from existing regional surveys (Appendix 1), it quickly becomes apparent that any attempt to systematically recreate a four-fold typology of growth, as outlined in Laurence *et al.* 2011, is impossible. Over a third of the sites are identified through epigraphic sources alone, or have never been excavated. Those sites that have at some point been subjected to fieldwork rarely have been mapped comprehensively, with the focus often on one or two surviving monuments. As a result, for only about 17% of the total corpus (59 cities) is any type of classification feasible. I argue that, even if it were possible, extrapolating such a detailed categorization to the regional scale obscures a much simpler observation about which cities are growing, by how much, and at what pace. Instead I use a more basic grouping between those cities showing a large, usually planned expansion (sprawl) and those increasing in piecemeal stages with less obvious involvement of a centralized authority (organic growth).

The use of a term such as sprawl, with its modern connotations of regional planning authorities and the car as transportation, is initially difficult to reconcile with a Mediterranean past. Yet broader thematic descriptions of sprawling development prove useful to understanding the impacts of such a substantial increase in overall city size. For example, Kolb (2008, 70–74) discusses sprawl by referring to differences in the complexity of social roles tied to a place—the thick city core versus the thin sprawling suburbs—or the density (or lack thereof) of historical time or social meanings imbedded in urban spaces. According to Kolb's dichotomy thicker, historically denser places allow for more satisfying, deeper social engagements with the urban fabric. Conversely, new

neighbourhoods lack the longevity needed for inhabitants to make the same strong connections to the cityscape. Lang (2003) includes a similar idea of complexity in his six primary vectors of sprawl: density, concentration, compactness, centrality, nuclearity, and proximity (Lang 2003, 102–103).

I define sprawl as any example of a city at least doubling in known physical footprint during the study period, and reaching an overall area of at least 15 ha—a point at which the city can be reasonably expected to have a population of over 5000 inhabitants, corresponding to sites that have been classified as "major cities" elsewhere (Wilson 2011, 184). In most cases, but not exclusively, this growth occurs in an orthogonal grid built adjacent to an earlier core of settlement. While at many sites expansion continued into the Severan period (193 CE–235 CE) and beyond, for my purposes only when the pre-Roman extent of the city was clearly defined, and the new construction decisively dated to before the 3rd century CE, was a city classified as sprawling.

In contrast to sprawl, I discuss a second type of organic growth, characterized by smaller additions to the periphery of existing sites usually (but not exclusively) without any strict orthogonal planning and not resulting in a total increase in size greater than 100% of the city area before the Roman period. These cities certainly increased in overall size under Roman rule, but it is more difficult to identify a single planning event or cohesive system for this expansion. New construction often follows along either side of the main roads into and out of the city, creating long ribbons of development rather

than extensive new blocks or neighbourhoods. Any strict adherence to MacDonald's concept of urban armature (outlined above) is not immediately evident.

The foundations and refoundations discussed in Chapter 3 do not fit easily into any grouping—the construction of a new city is a different phenomenon altogether—but these settlements do show another facet of the shifting urban demographics of the region. In the case of both foundations and refoundations of earlier indigenous settlements, there is an obvious period of construction at the moment of settlement—the migration of colonist veterans into the territory and the city itself, the construction of new residences and infrastructure for the Roman colony, and a rapid increase in the urban footprint. Yet after the initial act of colonization, the growth at these cities fits most closely with the incremental increases of other inland centres. Such was the case at Madauros (Chapter 3), as well as at foundations like Thamugadi or Cuicul, before a second wave of expansion in the early 3rd century CE. I integrate the categories of foundation and refoundation separately in the following discussion.

This approach must be accompanied by a significant caveat. Despite attempts to systematically distinguish between the two growth categories, the problems outlined above necessitate that these distinctions are, to some extent, arbitrary. As in a modern context, we have to accept that we may not always be able to describe sprawl, but we know it when we see it (Hayden 2004, 10). The nature of urban growth, furthermore, is more complex than a series of basic dichotomies—sprawling blocks/organic neighbourhoods, rapid expansions/slow accretions, planned grids/unplanned hubs—or

easy classifications. While this remains a somewhat crude distinction, mapping known examples of sprawl and organic growth—connecting these different trajectories to the earlier urban history of cities, and looking in detail at the urban biographies of one example of each growth type—remains nonetheless a productive exercise for understanding the life of North African cities over time.

Tracing shifts in city sizes

The problems with creating such a classification as I outline above mean that we are unable to make concrete statements about the growth of many sites during Roman period based on physical characteristics alone—but this does not preclude the identification of some regional trends showing where cities, and thus populations, were increasing in size. The following discussion, while representative of only the 17% of all sites with the information necessary to assess their expansion in the first centuries of Roman rule, demonstrates nonetheless the connections between urban growth and site location, city origins, civic status, and economic function.

The results from a categorization of increases in size at North African cities—also including the foundations and refoundations discussed in Chapter 3—is presented in Table 4, and these results are mapped spatially in Figure 21.

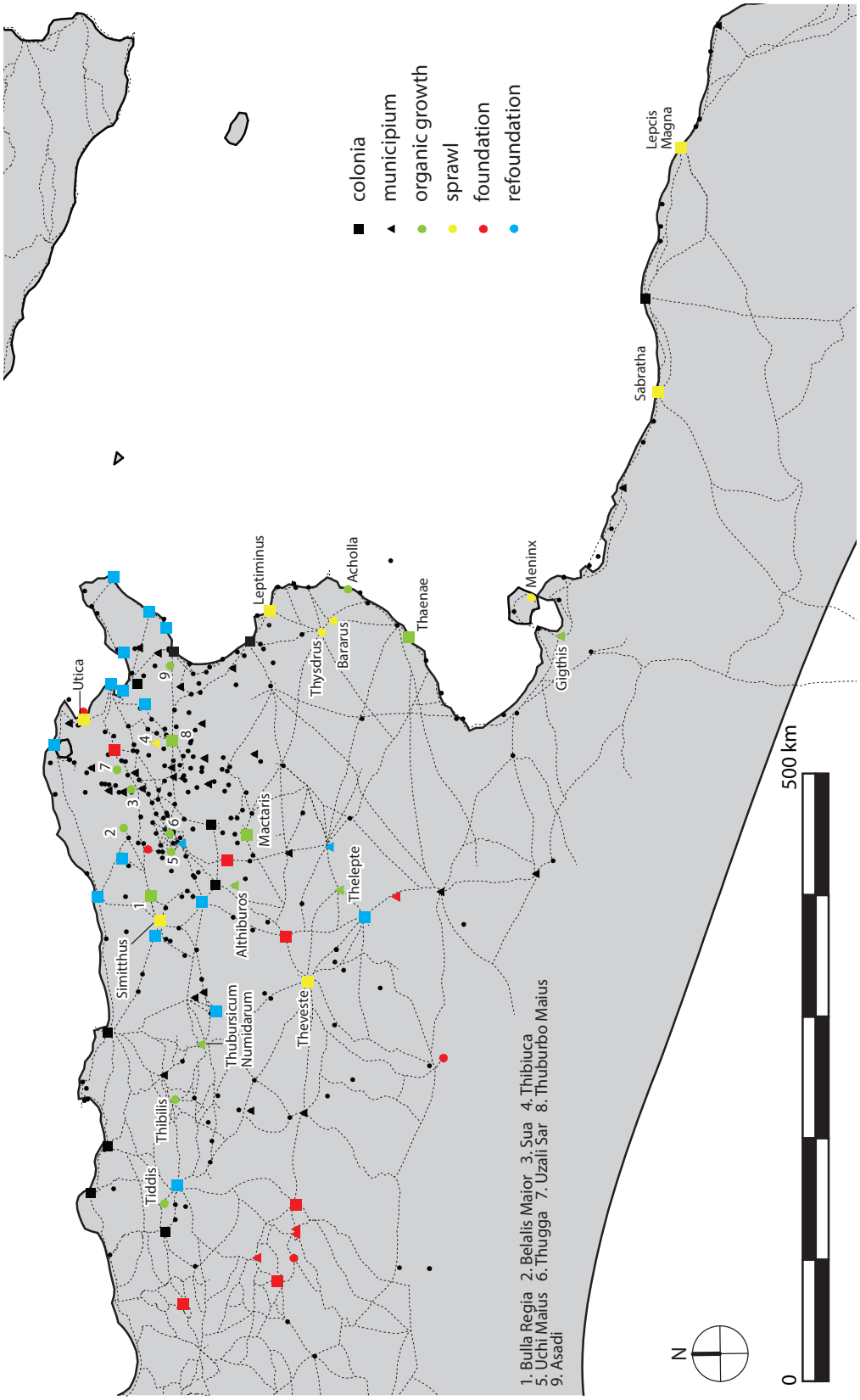


Figure 21. Map showing sites of sprawl (yellow) and organic growth (green). Foundations (red) and refoundations (blue) from Chapter 3 are also included.

Table 4. Growth of cities in the Roman period, by type.

Total sites = 340.

Growth type	Number of sites
Organic	17
Sprawl	10
Foundations	15
Refoundations	17
Unknown	281

Location

A first, basic observation can be made regarding the areas where urban populations are increasing most rapidly, that is the cities showing either sprawling growth or those that were subject to formal colonizing populations. Sprawl occurs almost exclusively along the coast, as we see in the construction of a new quarter of the city on a single alignment at Sabratha (Kenrick and Bailey 1986, 314) or the drastic expansion of the area of Meninx on the island of Jerba (Fentress 2009, 135), as well as at the city of Utica I cover below. Far fewer inland settlements that existed prior to Roman rule—and were not subject to refoundation with Roman colonists, as at the cities of Uthina or Madauros (Chapter 3)—show the same degree of change; I address some possible explanations for these exceptions below.

In contrast, urban expansion at most inland centres is more moderate, often falling under my category of organic growth. This enlargement respects to some extent the

physical footprint of the earlier city, often filling in empty plots within earlier city walls and respecting existing structures and urban plans (see Chapter 6). This is the case at Mactaris, to give one example, where the continuance of the earlier Numidian forum, megalithic burials marking the southwestern extent of the urban area, and Punic materials recorded under the House of Venus give us a good idea of the extent of the early city, which seems to have covered much of the same area as it did under Roman control (Charles-Picard 1977, 114; Dufton and Fentress, forthcoming). Changes during the Roman period include the addition of an amphitheatre to the north (Lachaux 1979, 87), new baths to the south and west (Thébert 2003, 144–46), and a temple to the west sometimes problematically identified as a *capitolium* (Crawley Quinn and Wilson 2013, 40). Based on these findings, the earlier city covered an area of at least 10 ha; although Mactaris surely expanded in the Roman period, this expansion was not as dramatic as at the coastal examples mentioned above.

The hilltop sites often referred to as *oppida* (see Chapter 2) show a similar trend toward incremental expansion. In these types of settlements the topography dictates that growth must occur downslope from the earlier, fortified heights, as at the town of Uzali Sar (Peyras 1991, 118; Fentress 2006, 15). Aside from this directional, topographically dependent construction, hilltop sites show similar characteristics to the developments at sites such as Mactaris: an apparent lack of rigid, centralized planning or shared alignment, and a relatively small physical footprint for new Roman developments in comparison with the area occupied prior to Roman control. The *oppidum* of Tiddis, discussed below, follows a comparable trajectory.

Origins

A city's tendency to increase in size is thus tied to some extent to its geographic location—a greater expansion at coastal sites, following a more rigid ideal of orthogonal city planning, and more gradual changes inland. As I outline in Chapter 2, it is dangerous to rely too heavily on strict ethnic classifications of 'Punic' or 'Numidian'. Centuries of interaction between various North African groups make it difficult to move beyond a broad understanding of many sites as, simply, 'Pre-Roman'. Yet these differences in growth also correlate to a degree to the pre-Roman origins of these settlements. Half of all cities demonstrating sprawl are confirmed Punic foundations, and many pre-Roman cities may have similarly Punic roots (Table 5).

Table 5. Growth of cities according to urban origins. Pre-Roman refers to cities of uncertain Punic, Numidian, or Libyan origin.

Total sites = 308 (32 sites were founded or refounded in the Roman period and are not included here).

Growth type	**Pre-Roman**	**Punic**	**Numidian**	**Total**
Sprawl	4	5	1	10
Organic	9	3	5	17

The earliest Punic settlements tended toward coastal locations suited to their primary role as trading posts (Niemeyer 1990), and coastal ports such as Lepcis Magna or Utica (discussed below) show some of the greatest changes in overall urban area during the Roman period. In contrast, originally Numidian inland centres such as Thugga show only a gradual addition of new urban furniture or residences around the periphery—in

this case a temple to Caelestis in the west (Saint-Amans 2004, 275–81), a new theatre in the north (Lachaux 1979, 133–35), a baths in the southwest (Thébert 2003, 175–76; see Chapter 6).

Civic promotion

Civic promotion is another factor possibly contributing to increases in population size or urban footprint. Knowing which cities expanded the most, can we see a corresponding change in administrative status (Table 6)?

Table 6. Growth of cities and confirmed municipal promotions before the 3rd century CE.

Only the highest recorded promotion (colonia) is noted for cities with more than one status upgrade. Total sites = 340.

Growth type	***colonia***	***municipium***	**None**	**Total**
Organic	4	4	9	17
Sprawl	6	1	3	10
Foundations	6	4	5	15
Refoundations	15	2	0	17

More than half of the sites promoted to the rank of *colonia,* where any categorization of growth was possible, exhibited characteristics of sprawl. Moreover, in more than half of the identifiable instances of this type of expansion, the city would be promoted to *colonia* before the Severan dynasty. Two of the three sprawling cities where no promotion was noted—Bararus and Meninx—have presented us with no known information of civic status to date but, based on the presence of entertainment

monuments, we might expect that both were indeed promoted to *colonia* at some point even if we have lack the epigraphic evidence needed to confirm such an assertion (see Chapter 5). The third, Thysdrus, was promoted to *municipium* under the Severans with a number of similar upgrades effectively breaking up the former territorial holdings of Carthage in the valley of the Medjerda (Gascou 1982, 217–18). The status of *municipium* offers more equivocal evidence. Only in one case, Thibiuca, is there a suggestion of large-scale expansion (Maurin and Peyras 1993), but only in five cities promoted to this rank was any sort of classification of growth possible. Cities without a recorded promotion before the Severan emperors show a strong tendency (75%) toward organic growth.

As I touched on in Chapter 2, the distinction afforded by civic promotion—particularly the rank of *colonia,* the highest awarded to cities in the Roman provinces—was associated with a number of perks for inhabitants: changes to citizenship, greater municipal self-governance, and lesser rates of taxation (Février 1989, 170–72). While it is difficult to determine which came first, civic promotion or a burst of sprawling development, it seems most likely that these factors were intertwined. As cities expanded inhabitants in turn had the resources needed to campaign for a promotion of civic status and, once a city had achieve a preferential status, even more would flock to take advantage of the associated (largely economic) benefits. Cities that remained relatively unchanged in size did not have the economic or population clout necessary to warrant promotion in the first stages of Roman rule.

Economic function

A model of growth based on the above factors—location, origins, and administrative status—accounts for many of the patterns observed in Figure 21. Yet there are a number of outliers that still deserve interrogation, such as the sprawl noted at the inland *coloniae* of Simitthus or Theveste, or the expansion of Thysdrus well before any associated civic promotion.

Lassère introduces a functional typology of cities as but a single part of his much larger synthesis on Roman Africa, dividing cities into agricultural, military, port, or industrial types (Lassère 2015, 370). I generally avoid relying too heavily on such exclusive categories, given the likelihood that a single settlement could both serve multiple functions simultaneously and change in primary activity over time. A settlement such as Ammaedara, for example, initially served a military purposes as the home of the Third Augustan Legion. With the shifting of provincial boundaries and the transfer of the army to Theveste, the city likely took on a more traditionally agricultural role. Veteran colonies, in a similar vein, were largely agricultural in daily or seasonal routine but still served an important role in establishing Roman military control along the *limes*. In the case of growth, however, looking at Lassère's primarily economic functional categorization answers some outstanding questions about the exceptions to the other trends outlined here (Table 7).

Table 7. Growth of cities according to economic function.

Total sites = 308 (32 foundations and refoundations not included here).

Growth type	Agricultural	Port	Military	Industrial	Total
Organic	14	3	0	0	17
Sprawl	3	5	1	1	10
Unknown	231	48	2	0	281

A basic preference for sprawling expansion at port cities is consistent with the observations for coastal cities, above, and merits no further mention. More interesting are the differing roles of inland examples of sprawl. Theveste, as I suggest above, underwent a period of rapid growth with the repositioning of the Third Augustan Legion in the mid-first century (Christol 2010), making the pre-existing city an important military hub for the region; the city was promoted to *colonia* under Trajan, alongside the departure of the legion to the new foundation of Lambaesis (Gascou 1982, 173–74). In the few cases where an agricultural town was substantially augmented, the city's location as an important regional hub is again noted. Such was the case at the site of Thysdrus, positioned at the centre of a number of important transport routes that likely contributed to the rapid changes at the city that are, generally speaking, not seen at neighbouring agricultural towns (H. Slim 1985).

Another inland example of both expansion and civic promotion, the city of Simitthus, is an exemplar of Lassère's industrial city. The results of the latest geophysical survey show growth at the town in a series of regular *insulae* in the northern area, following

the same alignment of the Imperial temple and a later basilica (von Rummel *et al.* 2013). Without excavation in this quarter we can say little of a definitive chronology, but a date in the 2nd century is reasonable (Dufton and Fentress, forthcoming), perhaps to accommodate an increase in population at the height of extraction of Numidian marble in this period (Russell 2013, 92). Without any other similarly well-documented examples it is difficult to say more on any tendency toward sprawl at similar industrial or productive towns.

The majority of organic growth sites, by contrast, fall under Lassère's broad 'agricultural' category. These settlements might better be described as agritowns or agrivillages: small centres discussed here as cities that adopt many of the monuments often associated with Roman urbanism (see Chapter 5), but do not feature the sizeable populations or regional importance of larger cities. Accretions at sites such as Thugga (Chapter 6) or Tiddis (discussed below) are relatively modest in scale. In the former example, a boom in rural settlement in the first centuries of Roman rule suggests the surrounding countryside changed more drastically than Thugga itself (see de Vos and Attoui 2013; de Vos 2000; 2013). The city served as a central place for surrounding rural communities, providing some of the features associated with an urban life but not necessarily housing an increased population. The almost exact mirroring of percentage functional distributions between cities showing unknown (82% agricultural, 17% port) and organic growth (82% agricultural, 18% port) is coincidental, and not evidence that in cases where insufficient physical remains were present incremental expansion must have occurred. Nonetheless, we can assume that many of these uncategorized sites

likely fell into a similar pattern of small-scale, incremental changes to support an agricultural population.

From regional patterns to local impacts

Overall, then, a number of factors are tied to patterns of urban expansion on a regional scale: location (coastal or inland); origins (Roman foundation, Punic port, or Numidian *oppidum*); civic status (promotion to the rank of *colonia*); and economic function (military, industrial, or agricultural hub). These observations match a movement of populations noted in onomastic evidence. Foreign populations show a preference for ports and, to a lesser extent, for inland administrative centres (Lassère 1977, 401). Yet the relative paucity of foreign names in the epigraphic record also implies much of the increase in North African urban populations was indigenous, particularly inland (Lassère 1977, 406).

These regional patterns lead us to a number of local questions. If the substantial growth of coastal sites supported a growing population, drawn to the increasing importance of North African ports as centres of Mediterranean-wide commerce, what were the practical impacts for both new and existing city inhabitants? And did inland centres showing only incremental, organic additions feel the effects of urban expansion?

I now shift my attentions to the local scale, and how these changes may have shaped the development of two individual sites: Utica and Tiddis. Utica occupied a prominent coastal position, had Punic origins, and experienced the type of large-scale, orthogonal construction characteristic of the majority of sprawling cities. The fortified *castellum* of

Tiddis, by contrast, experienced the incremental, downslope expansion shared by many other sites identified as organic growth in my regional analysis. A biography of the development of each site provides some insight into the questions posed above.

Utica: A city of unsustainable sprawl

The first type of growth, defined as sprawl for the purposes of this discussion, is common primarily in coastal settings or at re-foundations of earlier settlements. The city of Utica, increasing its physical area at least 500% from the late 2nd century BCE to the late 2nd century CE, serves as an appropriate example of this form of sprawling expansion. This process leaves very clear traces archaeologically, most obviously new city blocks on a uniform, rectilinear plan visible in aerial photography and geophysical survey, and large monuments—the city has two theatres, two amphitheatres, and a circus—constructed to accommodate a growing population. The ramifications of this rapid increase in size for local communities, and the correlated but often overlooked increase in population, are less obvious. A single discussion integrating the city's geographic position, its municipal history, and its urban development—augmented with the results of recent archaeological fieldwork—works to introduce some of the social implications of sprawl into otherwise largely architectural and economic discussions of growth under Rome.

Geographic overview and past excavations

The city of Utica is located approximately 40 km north of Tunis, and 10km from the Mediterranean coast (Figure 22). In the present day, the site occupies a prominent

topographic position across from the peaks of the Djebel Kechabta, dotted with windfarms, and overlooks a flat, expansive plain to the west and to the north. In antiquity, however, this was not the case. The ancient city was situated on the ancient coast at the mouth of the River Medjerda, whose course has long-since shifted with the silting of the river (Delile *et al.* 2015). The earliest Phoenician settlement covered the tip of a narrow, almost triangular promontory, sharing the easily defensible position of many—but not all—early Phoenician settlements (Aubet 1995; Niemeyer 1990; Niemeyer 1995). As the city expanded in later periods, it grew to the south, covering at its peak an area of over 85 ha.

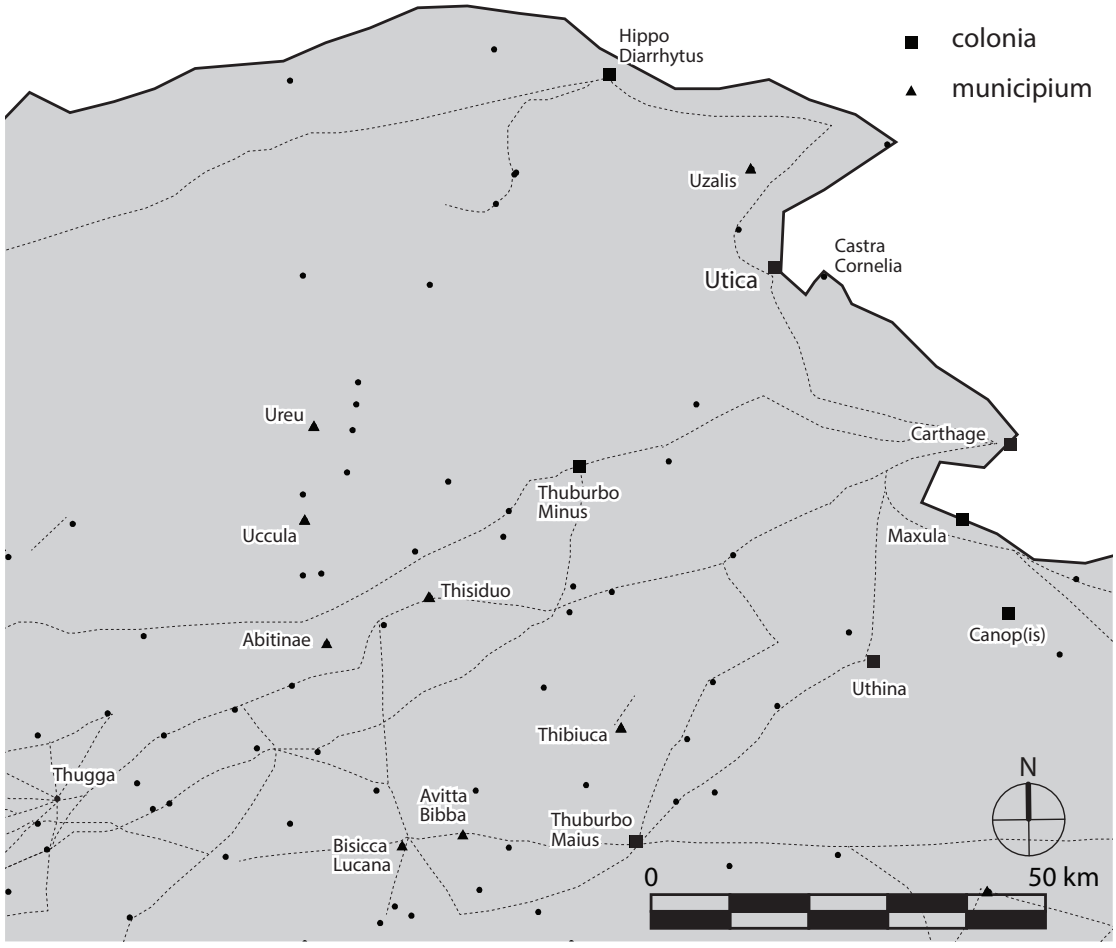
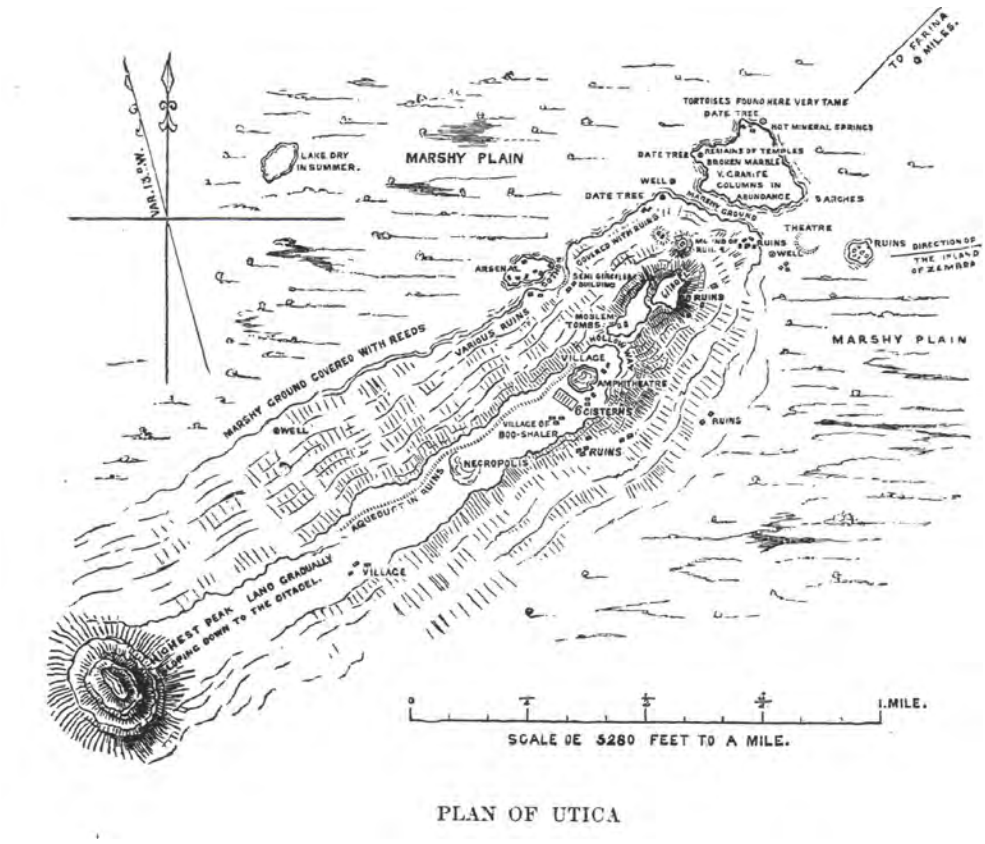


Figure 22. The city of Utica in its regional context.

This promontory was the target of the earliest explorations of the site, beginning (as with most North African sites) with French military expeditions in the mid-late 19th century. A pattern of looting and reuse of the materials at the site, from the early Islamic period to probably as late as the 19th century, has resulted in the preservation of few of the extravagant remains so often recorded at other North African centres. Early documentation of the site focused, unsurprisingly, on its monumental core, and assumed the northern (original) city was located on an island separated from the mainland by a canal. These earliest topographic accounts and excavations recorded the basics of visible architectural remains—the city walls, the forum, the potential harbour (in fact a large bath complex), and scattered residential structures. The 19th century also saw haphazard excavations of those areas most likely to reveal mosaics, sculptural fragments, or other desirable finds. Most of these works, such as the excavations of Borgia (1815), Davis (1856) and Smith (1878), have gone unpublished (Lézine 1970). Those that were published, such as works by Daux (1869) and Hérisson (1880), provide accounts of the site that bear little resemblance to later accounts. Neither the full extent of the city nor the likely location of the ancient coast was accurately defined, although one of the earliest maps of the site created by Edwin Porcher for the excavations of Nathan Davis did include, rather charmingly, the location where he encountered some rather tame tortoises amongst a stand of large date palms (Figure 23).

From the early 20th century, French archaeologists began to excavate and document the remains at Utica in earnest. From 1923–25, the excavations of Moulard focused on



PLAN OF UTICA

Figure 23. An early plan of Utica (Porcher 1858).

Punic tombs and resulting funerary materials (Moulard *et al.* 1924; Moulard 1926). These works paved the way for a decade of excavation and survey, from 1948–58, under the direction of Pierre Cintas, resulting in the further exposure of the Punic necropolis and extensive excavation and reconstruction of the Roman Insula II (Cintas 1951; Cintas 1954; Février 1956). Other colleagues of Cintas from the École Française de Rome worked on site during this period, most notably François Reyniers, attempting, without success, to locate the remains of the early port of the city (Reyniers 1952). At the end of this programme of works the architect Alexandre Lézine completed an extensive survey of the excavated and standing remains of Utica (Lézine 1968; 1970; 1971). These syntheses form the basis of our understanding of the urban trajectory of

the city, augmented by the works of Spanish, French, and British teams over the last half-decade (Ben Jerbania *et al.* 2015; Kallala *et al.* 2010; López Castro *et al.* 2016).

Municipal history

A full history of Utica, from its earliest foundations to its eventual collapse, would offer more detail than is needed to understand changes to the city in the first centuries under Roman rule. A grasp of the foundation and changing political role of the city, however, provides some insights into the physical changes to the urban landscape in the later Roman period. It is with this in mind that the following key historical events in the life of Utica are recounted in brief.

Unlike many examples of western Punic or Hellenistic colonies, there is a surprising agreement amongst historical sources on the date of 1101 BCE for the initial foundation of Utica, usually stated by ancient authors in relation to the later foundation date of nearby Carthage, or the chronologically similar foundation of Gadir on the southern coast of Iberia (Aubet 2001, 156). Such a complete concordance in historical sources is relatively rare; the most likely explanation is that all four of the ancient writers making reference to the foundation of Utica are drawing from a single source, suggested by Lézine (1970) as the Greek historian Timaeus writing in the first half of the 3rd century BCE (Lézine 1970, 22). Unfortunately few of the works of Timaeus have survived from antiquity, so Lézine's account cannot be further verified.

Modern archaeologists, in contrast, show no such agreement on foundational dates, other than to call into question the veracity of historical accounts. Lézine often refers to a local occupation at the site in "prehistoric times" (Lézine 1968, 147; 1970, 21), although the only published evidence to support this claim is a deposit of carbonized vegetation recorded in natural deposits during excavations north of the Roman *decumanus* (Lézine 1968a, 130). The earliest archaeological evidence for Punic settlement has long been dated not to the 11th century foundation mentioned in texts, but to the 8th century BCE. However, recent work on the site by the Tunisian-Spanish mission provides support for claims of an earlier foundation, including a series of radiocarbon dates from the deposits recorded at the bottom of a well that date the activity to the late 10th century BCE (López Castro *et al.* 2016). These dates are comparable to the earliest materials recorded at the site of Althiburos over 100km to the southwest (Sanmartí *et al*. 2012; Kallala *et al.* 2008), suggesting a longer history of urbanism at other North African sites is not out of the question. These dates are, nonetheless, still far from the 1101 BCE proposed in the historical sources.

There is broad agreement, however, that the city was founded by Tyre, as is the case at Carthage, leading some to question why the group responsible for the latter foundation would avoid just joining the nearby, existing settlement at Utica. Topographic concerns, specifically the limited space for expansion afforded by the promontory hosting the core of the original city (Picard and Picard 1958, 25), or conflict between this second wave of settlers and an established ruler (Lézine 1970, 24), have both been suggested as possible reasons for such a choice. Regardless, the cities were founded a mere 40 km

apart, and their fates were intertwined to a degree from the beginning. Accounts of historical events, such as the conquest of Tyre by Alexander in 331 BCE, make reference to the more prominent Carthage as a refuge much more frequently than neighbouring Utica (Cintas 1951, 49). Even though the city is seldom mentioned it is reasonable to assume that, as at Carthage, an influx of population from the Levant settled at Utica and other coastal cities after the conquest of the Levantine Phoenician heartland. Indeed, a part of the necropolis at Utica was replaced with habitation quarters at some point in the 3rd century BCE, expanding the city at least 200 m to the south of earlier city limits (Lézine 1968a, 147).

The strategic importance of Utica can be understood from its prominent inclusion in a number of conflicts in the first millennium BCE. Mention of the city's relative size and defences can be found, for example, in accounts of the attack of Agathocles of Syracuse in the late 4th century BCE. Agathocles' forces approached with siege engines displaying the suspended bodies of local elites, captured from their estates in the surrounding countryside, and easily overpowered the city; it is interesting to note that many of the more prominent local elite held country estates by this time (Diod. Sic. 20.54; Lézine 1970, 26). The city again found itself under attack a century later in 204 BCE when the forces of Scipio Africanus landed at nearby Castra Cornelia (modern Kalaat al Andalous), across the bay, before besieging Utica by both land and sea (Livy 29.35.6; Lézine 1970, 27). Scipio's attack was ultimately successful, but by this point the seaward-facing ramparts—although still wooden—had been greatly improved, and were covered with skins to prevent attacks by flaming arrows (App. *Pun.* 8.3.6). The

account of this attack makes no direct mention of the landward fortifications of the city, and also suggests no artificial port at Utica, contrary to early assumptions about the nature of the city's harbour (Lézine 1970, 28).

After the city's support for Rome—and provision of auxiliary troops—in the Third Punic War and the subsequent fall of Carthage, Utica was granted *civitas libera* (free city) status and became the new capital of the Roman province. The site served both as the seat of government for the new Roman province of Africa, and as home to legionary forces, likely housed in the fortified heights above the city, outside of the earlier Punic rampart and approximately 350 m to the south of the early urban core. The rural territory attached to the city also increased dramatically with this improved status, expanding to the outskirts of Hippo Diarrhytus (Bizerte) in the north, and to the borders of the now-abandoned Carthage in the south.

Utica again found itself at the centre of Roman politics during the conflict between Caesar and Pompey, at which point the Pompeiian loyalist Attius Varus took control of the governance of the province of Africa and the city itself as the seat of government. Varus used his knowledge and connections in Africa, gained from an earlier stint as a promagistrate in the province, to raise a force of two legions with additional cavalry (Caes. *BCiv.* 2.31). These forces were installed in a camp overlooking the city, according to text no more than a mile away from the town (Caes. *BCiv.* 2.24), and most likely 300 m to the south of the city between the Republican-era theatre and the city itself (Lézine 1970, 29). The forces of Pompey maintained this strategic location, under the command

of Varus and later under Cato the Younger, who reinforced the fortifications of the city with a second ditch and palisade, and imprisoned those citizens of the city still expressing a loyalty to Caesar in the area between the older fortifications and this new defensive structure (Caes. *BAfr.* 87). After a series of losses for the Pompeyan forces, and realizing the desire of many of his troops to flee, Cato killed himself, and the city welcomed the approaching forces of Caesar.

Upon the death of Cato in 46 BCE, Caesar rewarded the loyalty of the citizens of Utica, and punished those who had provided Metellus Scipio and Varus with supplies, by forcing the latter to provide 200 million sesterces to the former, payable over three years (Caes. *BAfr.* 90). This sum, if correct, is noteworthy for being over 40 times that of the gifts to other coastal supporters such as Hadrumetum (five million sesterces) or Thapsus (three million sesterces). On account of this windfall, surely distributed primarily to local Roman elites, the city began a period of rapid growth. Inhabitants were given the rights of Latin citizenship with the upgrade of the city to the status of *municipium* by Octavian in 36 BCE, and though the refoundation of a provincial capital at Carthage as early as 38 BCE undermined Utica's administrative status, the city continued to flourish as the second most important seat in the province (Lézine 1971; Lepelley 1981, 242). The city gained the title of *colonia* under Hadrian, after a period of intense petitioning of the emperor recounted by Aulus Gellius, mentioned in Chapter 2. This change was accompanied by, or possibly facilitated, the continued enrichment of the urban fabric of the city until it reached what was probably the apex of its wealth—and certainly its most privileged legal rank of *ius italicum*—under the Severan dynasty of

the early third century (Lepelley 1981, 242). The city underwent a number of further changes after this period, including the eventual silting-up of the harbour, a surprisingly early abandonment of much of the occupied area by the 5th century, and a re-occupation in the early Islamic period, but these events are beyond the remit of this discussion.

Urban development

The city of Utica is an interesting study in urban growth as it shows one of the most abrupt increases in size in North Africa under Roman rule. From a site roughly 10 ha in size in the late 3rd century BCE, the city covered an area of over 85 ha by the end of the 1st century CE (Wilson 2011, 184) (Figure 24). The spatial signature of these changes can reveal further details about the concurrent social changes associated with such a drastic change in urban form.

Dates for the foundation of the city are disputed, as I outline above, but some measure of population was certainly established no later than the early 8th century BCE. The earliest settlement is presumed to include a fortified trading outpost, and a temple to Melqart referred to in later texts (Lézine 1970, 37). There would also most certainly have been an early port, although attempts to locate either the Punic or the Roman port of the city have been, thus far, unsuccessful (Reyniers 1952; Kallala *et al*. 2010). Early attempts at reconstructing the layout of the city observed a linear ditch in the modern topography, running east–west across the promontory, and assumed a canalized pass separating the city from the mainland (Daux 1869). The ditch was later identified,

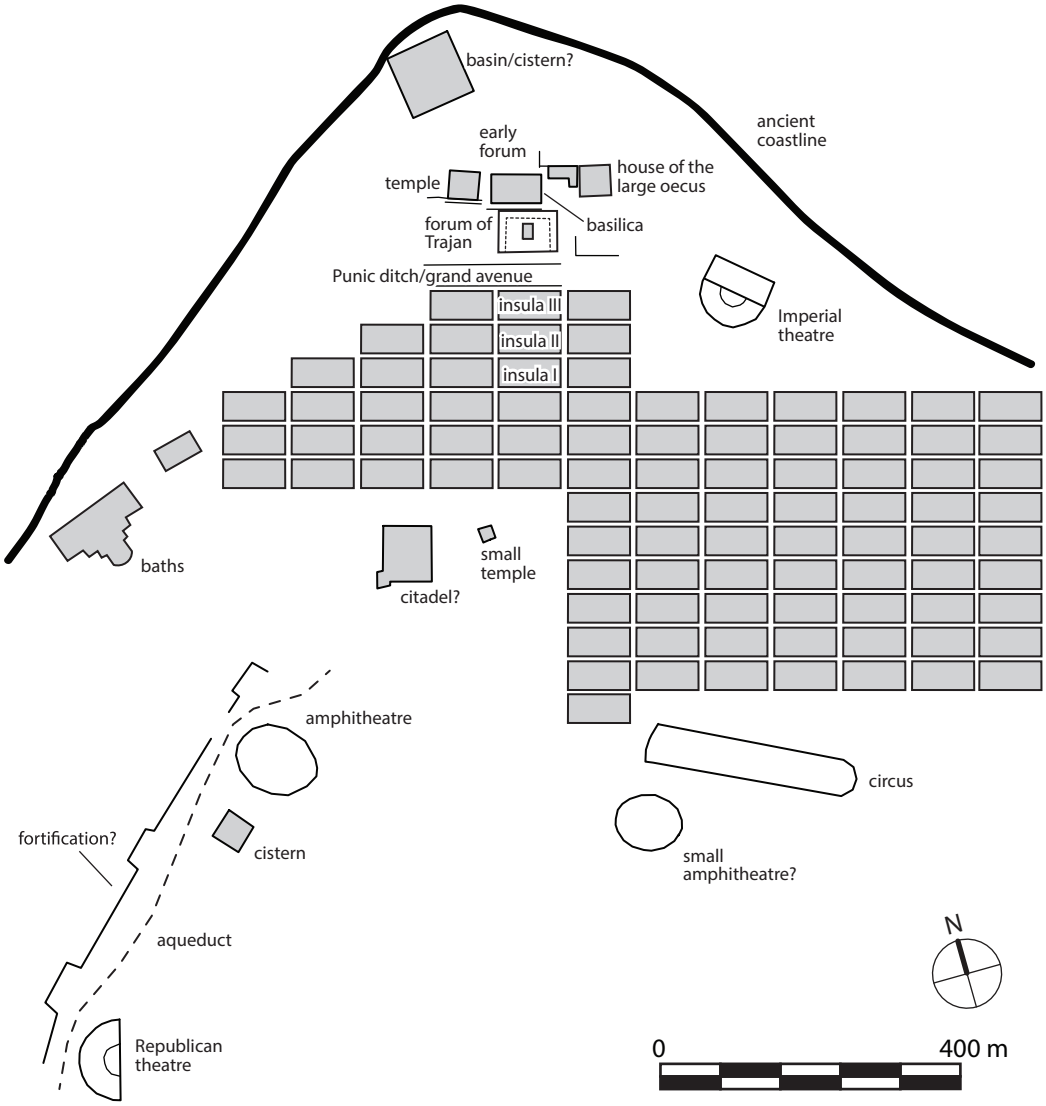


Figure 24. Plan of the city of Utica at its greatest extent (after Lézine 1968).

however, as a colonnaded street, and the movement of earth required to create such a grand avenue considered as a sign both of Roman engineering prowess and the wealth of the Roman city (Lézine 1968a, 83–86).

Recent work has shown that the extent of the Punic settlement was in fact defined by a large fortification wall separating the promontory from the land to the south. The fortification was of ashlar construction with rubble infill (*emplecton*), and flanked to the south by the ditch mentioned above and noted by the earliest archaeologists visiting the site, measuring at least 30 m in width (Ben Jerbania *et al.* 2015). The ditch, originally part of the city's defences, was transformed in the late 1st century CE into a large Roman street, with shopfronts and portico recorded by Lézine and still visible today. A single sherd of Punic amphora recorded from the *emplecton* of the fortification suggests a date in the late 5th or 4th century BCE for its construction (Ben Jerbania *et al.* 2015, 30). The presence of a Punic necropolis south of the fortification wall, excavated by the French team of Moulard in the 1920s and with graves dating from the 8th to the 4thcentury BCE, also implies an early southern limit of the Punic city (Moulard 1924; 1926; Cintas 1951). The original city, comprised of the area to the north of the rampart confined by the ancient coast, was thus limited to at most 10 ha in size. According to these measurements, Punic Utica is of comparable size to the approximately 7.5 ha area of the city of Kerkouane at its height in the 3rd century BCE, before its destruction by Roman forces and subsequent abandonment (Fantar 1984).

Burial in the Punic necropolis ended by the 3rd century BCE, as noted, at which point a new residential quarter was established south of the fortification wall in the area of later *insulae* excavated and restored by Cintas in the 1950s. For example, ashlar blocks were recorded in a sondage to the south of *Insula II*, approximately 1.2 m below the level of later Roman occupation and following the same alignment (Lézine 1971). Similar findings under the House of the Treasury in excavations at Insula 3 (Février 1956) and amongst earlier Punic burials all show an alignment either parallel or perpendicular to the later Roman street plan (Lézine 1970, 59; 1971, 90). Lézine's suggestion that a form of regular plan existed in this new residential quarter, accompanied by a shift in the location of Punic burials to the west, is convincing. His proposed 4th or 3rd century date seems more problematic. Recent fieldwork has debunked Lézine's proposed location of the Punic fortification, some 200 m south of excavated *insulae* he dates to the 4th century BCE, in favour of a position to the north following the alignment of the later Roman avenue (Ben Jerbania *et al.* 2015). It seems unlikely the city would respond to the attack of Agathocles, and the slaughter of those living outside its walls, by immediately constructing a new series of extra-mural residences.

Février, in his account of excavations at the *Insula I*, provides a more convincing chronology. He notes that the earliest remains show a period of rapid growth, building structures on an alignment maintained by the later *insulae* but using a sloppier, less permanent technique—this earliest phase of expansion he dates to the latter half of the 2nd century BCE, in the period immediately following the fall of Carthage (Février 1956,

150). This date corresponds more closely with the construction of the so-called 'Hannibal quarter' excavated at Carthage in the early 2nd century BCE (Lancel 1995, 156–57); I address some other similarities between these developments below.

Regardless of the precise dating of these earlier remains, at some point from the first century BCE—dated by the presence of early 1st century Campanian Ware in the construction trenches and the presence of architectural elements congruent with this date (Dufton and Fentress, forthcoming)—these earlier blocks were reconstructed on the same footprint, and the city underwent a drastic expansion to the south. In an early plan of the city Lézine extrapolated a grid of 10 by 12 blocks, each based on the dimensions of the three *insulae* excavated, to varying degrees, by Cintas and Février (Cintas 1951; 1954; Février 1956) (Figure 25).

The presence of the expanded city grid has recently been verified by a geophysical survey completed at the site, showing a regular plan across the insulae proposed by Lézine, and recording at least another ten new city blocks in the east (Figure 26). Excavations at a complex of kilns on the edges of the city as defined by Lézine have also shown Republican-period housing, although no further dating material for these earliest levels was recorded (Ben Jerbania *et al.* 2015, 27). The strict adherence to a regular city grid over such a large area suggests an initial instance of planning—followed by relatively uniform construction following these parameters—that is in direct contrast to both the organic growth of inland centres such as Tiddis (below) and the incremental expansion following different alignments seen at planned foundations

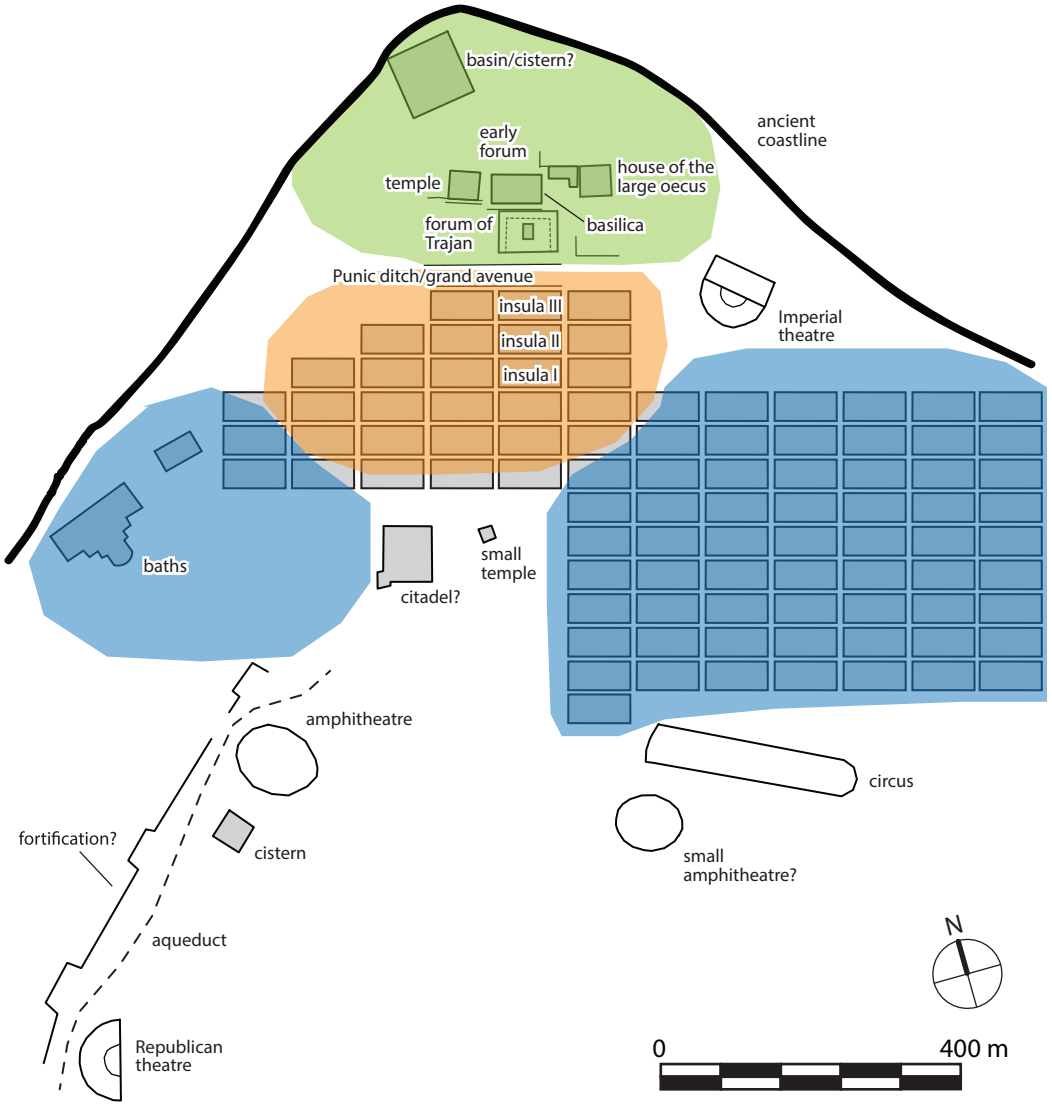


Figure 25. Schematic plan of growth at Utica from the Punic period (green), late Punic/early Republican expansion (orange) and late Republican/imperial sprawl (blue).

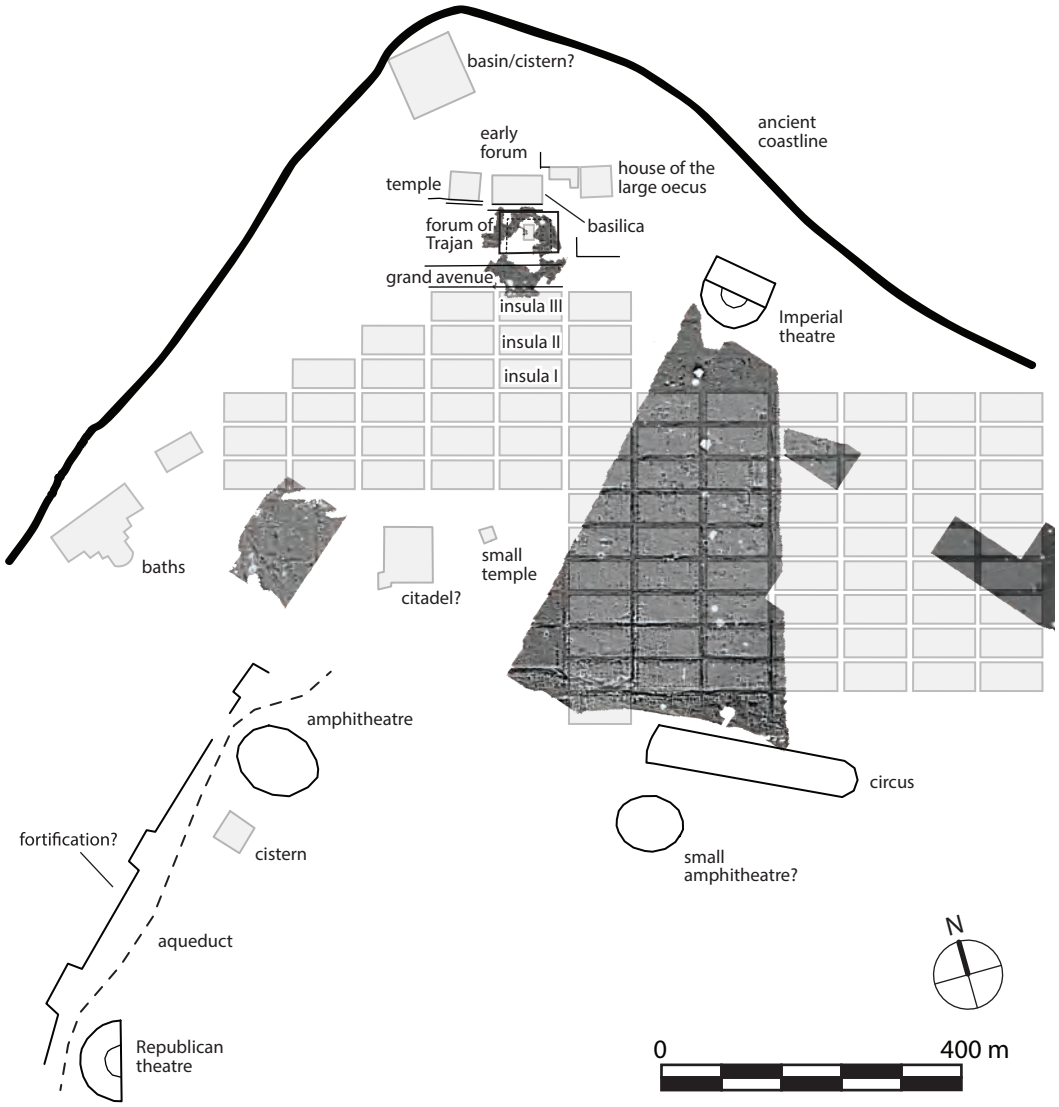


Figure 26. Results of geophysical survey confirming expansion of Utica in regular, rectangular insulae (British School at Rome).

such as Thamugadi or Cuicul (see Chapter 3). From an area of 10 ha in the early 2nd century, this rectilinear plan covers an area of at least 85 ha, and the urbanized area as a whole includes over 100 ha when considering suburban or peripheral elements such as the fortifications on the hill, two theatres, two amphitheatres, and a possible circus. Although the city underwent many changes after the 1st century CE, including continued monumentalization and renovation of the urban core, this growth, and the gridded street layout it follows, is one of the most striking and defining features of Utica's urban topography.

The repercussions of sprawl

The expansion of Utica from a small town, to a short stint as provincial capital, to an important regional hub, left clear traces in the archaeological and architectural record of the city. The impact of these changes upon the social life of the city, however, is less immediately obvious. Combining historical accounts and archaeological materials, an interesting picture emerges of a rapidly changing city from the 2nd century BCE to the end of the 2nd century CE.

First, an unspoken correlate to growth at this scale must be a matching increase, at least to some degree, in the city's population. New city blocks, most including residences, are built to meet an existing or perceived demand in housing—in the case of Utica, an increase of up to 800% in the urbanized area implies a massive influx of population. The original Punic city likely had a population on par or slightly larger than the 2000 people estimated at the comparably sized settlement at Kerkouane (Fantar

1984), making this early population some 2500 people at conservative estimate. With the increase in size, this population may have reached over 15 000, comparable to estimates of population for other coastal cities, such as Sabratha (Wilson, 2011: 174). This growth must have occurred sometime from the early 1st century BCE, and continued at least beyond the early 2nd century CE and promotion of the city under Hadrian to the elevated civic status of *colonia* (Gascou 1982, 183).

Who are the people occupying this new urban sprawl, and increasing the population of the city fivefold in a little under a century? There are a number of possible answers to this question, and the likely response must take into account a combination of various factors. First, the destruction of Carthage in 146 BCE and the elevation of Utica to the status of provincial capital must have resulted in the movement of much of the surviving population of Carthage and its environs to the new regional hub. If we look at the structure of 1st century BCE construction, we can see some clues to the Punic roots of this population. The most complete of the excavated city blocks, the *Insula II*, measures 86.8 m by 39.6 m in total (Lézine 1968a, 109) (Figure 27). If one adds the distance to the midpoint of the street on either side, and an average street width of 5.1m, this block measures 91.9 m by 44.7 m. This measurement is not particularly meaningful when converted to the Roman Foot: 310.5 by 151.0 RF (1 RF = 29.6 cm; Wilson Jones 2000a, 79). Converting instead to the Doric Foot Lézine believed was used for measurements at Utica (1 DF = 32.7 cm; Lézine 1968, 85; Wilson Jones 2000b, 74), this same block measurement is 281.0 by 136.7 DF. Both these figures are not



Figure 27. Photo of excavated and restored Insula II.

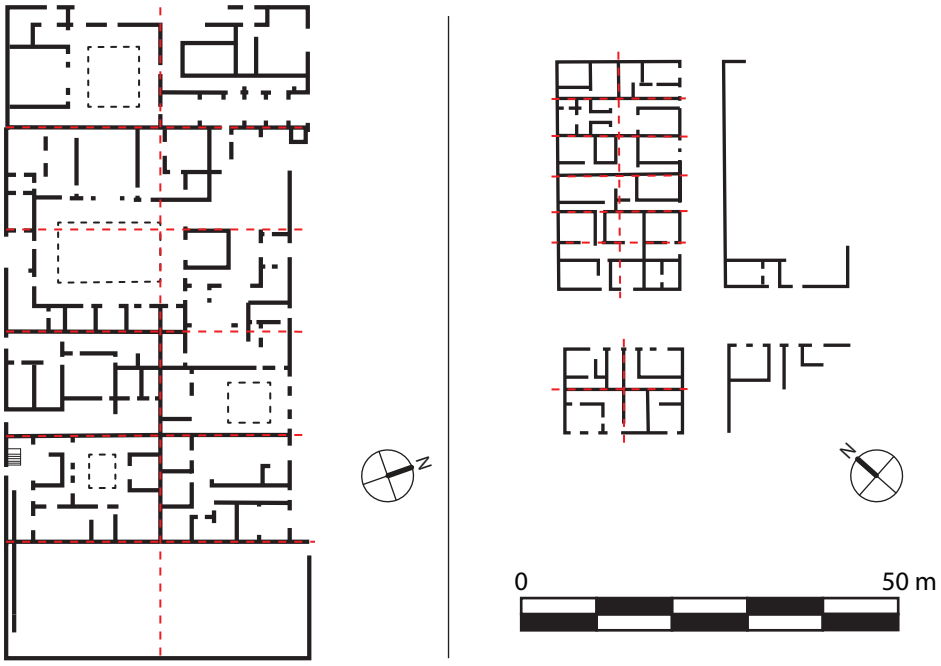


Figure 28. Comparison of insulae at Utica (left; after Lézine 1968) and Carthage's 'Hannibal Quarter' (right; after Lancel 1995).

particularly satisfying, although the approximately 2:1 ratio between the length and width of the block makes an amount of geometric sense. A third option is that the new *insula* at Utica were constructed using the Punic Cubit (1 PC = 51 cm; Younes 2012), at dimensions of 180.2 by 87.7 PC, or roughly 180 by 90. This option also fits perfectly with the average street width proposed by Lézine at 5.1m, or 10 PC. These measurements follow same proportion as those of late Punic housing recorded at Carthage's "Hannibal Quarter", as well as roughly the same width of street, although in the latter example the overall block size (30 x 60 PC) is considerably smaller (Lancel 1995, 162).

The adoption of Punic measurements, rather than Hellenistic or Roman counterparts, corresponds nicely to other elements of Punic design observed within the *insulae*. Each block is divided into 12 rectangular plots, each of identical size. In some cases, such as the House of the Cascade, multiple plots were consolidated at a later date to create a larger, more elite residence (see Chapter 6). The original divisions, however, mirror to a degree those recorded at Carthage, even as differences in the overall size of the *insula* make individual houses at Utica also considerably larger (Lancel 1995, 163–64) (Figure 28). Long, narrow courtyard entrances containing wells are also noted in many of the Utica residential plots—at least those not subject to later alteration—marking another similarity to Punic practices, in this case sharing a similarity again with the houses at Carthage and also those recorded at Punic Kerkouane (Lézine 1970, 48–62; Fantar 1985) (Figure 29).

The lack of a large epigraphic record at Utica, particularly in comparison to many other North African cities, means that we cannot make as strong a case for migration into the city as we might for other sites with greater onomastic evidence. Lassère notes that 40-odd names of possible Italian origin may represent an early influx of population from the Italian peninsula (Lassère 1977, 378). More broadly speaking, the picture from similar port cities, with a larger body of data to work with, shows the importance of Mediterranean-wide trade as a driver for migration, particularly from Egypt and the Levant (Lassère 1977, 406–7); we might reasonably expect a similar trend at Utica, if a greater number of funerary inscriptions were available for study.



Figure 29. Entrance corridor at Utica, Insula II (left) and at Kerkouane (right).

The award of all citizens of Utica with Latin citizenship in 36 BCE, and the accompanying benefits to tax status, would only increase the flow of population into the city at a time when few North African cities enjoyed these same benefits. Unlike other known veterans' colonies—such as Thamugadi or Uthina—there is no historical record of veteran settlement at Utica, although at least some of the new population must certainly have also belonged to this category. Such a shift in population and sprawling growth corresponds to the settlement of other veterans' colonies in the new Roman province, such as the rapid construction at Uthina, 60 km to the south, in the early 1st century CE after the creation of a veterans' colony at an earlier indigenous settlement (Ben Hassen *et al.* 1998, 32–33). The reconstruction of Carthage by Augustus at the end of the 1st century BCE would eventually draw some of this population back to the larger metropolis, but apparently not immediately; historical accounts suggest Lucius Domitius Ahenobarbus, proconsul of Africa, was still based in Utica as late as 12 BCE (Lézine 1970, 31).

We must remember that city growth was not strictly state sanctioned at this time, beyond new foundations for veterans, and thus construction at the pace observed at Utica also required a large amount of private investment and labour. As noted above, the victory of Caesar resulted in the reward to loyal citizens of the city with the large sum of 200 million sesterces. This likely provided the influx of funds necessary to support such a drastic building boom, creating an economy heavily buoyed by construction projects even after the administrative role of the city was downgraded. Building also included a number of secondary industries—stone masons, temporary

lodging for construction staff, provision of raw materials, or other specialist tradesmen (DeLaine 2000; Russell 2013, 239–54; see Chapter 5).

These industries, in turn, provided further impetus for others to move to the city to take advantage of various types of employment and investment opportunities. Services, such as shops or *tabernae*, would have added to the flutter of economic activity. In addition to the boutiques on either side of the grand avenue, many of the blocks visible in geophysical results toward the city's outskirts show likely shopfronts. No formal market is known, although such a space must have existed in the city or on its periphery for the construction industry to access supplies, and for other citizens to purchase produce from the surrounding rural territory (Fentress 2007). Ongoing construction works and ever-growing populations must have created an overall impression of wealth under Rome rule. This impression may be responsible for the willingness of the citizens of Utica to strive toward a full integration within the Roman political system, even to the disbelief of the emperor Hadrian himself (Gell. *NA* 16.13; discussed in Lézine 1970; Février 1989, 170; Revell 2009, 57).

Yet this amount of growth, in such a short time, also introduced a number of additional, and perhaps unexpected, stresses to the lives of inhabitants of the city (Fletcher 1995, 95). Or, put another way, a growing population and economy does not necessarily result in an increase in the quality of life (Jongman 1988, 151–52; Wilson 2009, 81–82). The most obvious of these impacts is the additional burdens of water supply, provisions, and waste management that such an increase in population warrants. A number of

wells and cisterns are known across the tip of the peninsula during the Punic period (Cintas 1951; 1954; Lézine 1968; 1970; Ben Jerbania *et al.* 2015). An aqueduct was constructed, likely during the reign of Hadrian, to bring an additional supply of fresh water to the city from a spring over 10 km to the south (Cintas 1951). Remains of the aqueduct can still be seen at the southern limits of the site (Figure 30). Drainage, for both rainwater or other waste, has been recorded under an area now identified as a forum and temple to Trajan in the monumental city centre (Ben Jerbania *et al.* 2015) and from a number of excavated houses to the south (Cintas 1954; Février 1956). Drainage is also visible under most exposed streets within the original city and was probably installed under the streets of the city's extension, matching that at other contemporary sites.



Figure 30. Surviving remains of aqueduct on Utica's southern periphery.

Aside from practical concerns of resource supply and waste and water management, this arrival of new people will have also had an impact on the social dynamics of Utica's population, perhaps creating a spatial distinction between new inhabitants and established Uticeans. Housing for the established elite presumably remained on the tip of the peninsula that was always the core of the city. Indeed, the few excavated residences we have for the city, such as the House of the Large *Oecus* and House of the Hunt, show the large size, architectural complexity, and expense in decoration that must be seen as hallmarks of considerable wealth (Alexander and Ennaïfer 1973; Dulière 1974). Properties closest to the original city also underwent the consolidation and expansion I explore in Chapter 6.

If existing inhabitants remained to the north, perhaps joined by any surviving Carthaginian elite in the late second century BCE after the sack of Carthage, most migrants to the city must therefore have occupied the new blocks to the south. Without extensive excavation it is difficult to say whether these sprawling blocks featured the opulent fittings of Cintas' exavated *insula*, although it seems unlikely; the House of the Large *Oecus* is clearly exceptional in its size and wealth. An initial analysis of the geophysical results suggests these new *insulae* rely on the same 12-plot division as the excavated examples (Maw pers. comm.). It is difficult to discern from magnetometry alone whether these plots are subject to the same consolidation and expansion as those adjacent to the grand avenue—with individual houses taking up multiple properties. Regardless of specific architectural characteristics, these areas are significantly further



Figure 31. Magnetometry results at Utica highlighting open, potentially unoccupied spaces (green) and alignments of 12-plot insulae divisions.

removed from the ceremonial and administrative activities at the city's monumental centre, and much closer to the (often undesirable) suburban activities of the amphitheatre and theatres, the circus, and suburban productive quarters. It is tempting to suggest a segregation of sorts, between established elites at the city centre and newer, probably poorer populations—veterans, tradesmen, and others—on the outskirts.

The latest evidence also suggests the expansion of Utica may have fallen short of the plans of the city's surveyors. An urban plan of over 75 blocks is clearly visible on geophysical survey results, suggesting the streets at least were completed to this full extent. Yet there are also examples of blocks with few signs of internal divisions or constructions—particularly toward the outskirts of the city (Figure 31). The clarity of the magnetometry in the immediate vicinity of many of these voids suggests they are not a result of processing or survey errors, or local ground conditions. It is possible that remains in these areas were robbed out at a later date, much like the reuse of materials that has destroyed much of the monumental core, but this type of disturbance would probably register as some amount of 'noise' in geophysical survey results.

One possible interpretation is a deliberate inclusion of urban open spaces or large gardens within the city, for entertainment or food production (Ben Jerbania *et al.* 2015: 4). There is convincing evidence that courtyards in North African housing were regularly planted (Jashemski *et al.* 1995), most likely as a means of retaining water and providing shade in the hotter summer months. Yet in most examples the inner courtyard covers a

relatively small area in relation to the built surroundings. Urban gardening on a scale as large as the voids observed in the geophysical results at Utica, if it exists, must be associated not with formal open spaces, but rather with the use of empty lots for gardening activity until the land was otherwise developed—a practice akin to community gardens or allotments present in many cities today. These open spaces far from the city centre, whether used for a form of gardening or not, represent areas that were in fact never occupied in full. It would appear Utica was expanded too rapidly, under the assumption of a continued growth in population, only for these blocks to be only partially inhabited when the factors pulling new residents into Utica shifted to encourage migration elsewhere.

Prescisely when, or why, the growth at Utica came to an end is unclear. The first indications of the eventual silting-up of the River Medjerda, ending all maritime trade at the city from as early as the 4th century CE, could have encouraged an end to development. A growing functional differentiation between the various neighbourhoods of the city (see Chapter 6), or the increasing infrastructural and social pressures of a larger population, may also have also been contributing factors. The most likely culprit, however, seems to be the return to prominence of the nearby, larger settlement of Carthage in the early 1st century CE. As Carthage regained its former place as provincial capital and premier city of North Africa, there was no longer an impetus for investment at Utica. Carthage technically claimed Utica's administrative role as early as 38 BCE, but the monumentalization of the city centre at Carthage began in earnest only in 12 BCE (Fishwick 1994, 64; 1996, 34); elites likely waited until the re-

founded Carthage had all the necessary components for civic life before returning. Urban growth can only continue for so long before other integral shortcomings and building population pressures take their toll; the boom at Utica was—ultimately—unsustainable, and by the 5th century CE the city was almost entirely abandoned to the Tunisian countryside.

Tiddis: Organic growth in the Numidian highlands

Following on from the discussion of sprawl at Utica, a counter-example of organic growth is needed—in this case, at the Numidian site of Tiddis. . Organic expansion, unlike sprawl, occurs in incremental, unplanned stages, marked archaeologically by smaller accretions onto the existing cityscape. Where Utica developed as an important regional capital and Mediterranean trading port—with an influx of population from nearby Carthage, Italy, and the eastern Mediterranean—Tiddis followed a markedly different trajectory. The site, also known as Castellum Tidditanorum, the site went through a number of stages of expansion from its early status as a remote *oppidum* in the territory of nearby Cirta (modern Constantine) to a small and bustling town integrated into the wider networks of the Roman world. Considering the city's location, municipal history, and development over time provides insight into the impacts and opportunities of even gradual increases in size on local populations.

Geographic overview and past excavations

The site of Tiddis is located in the northern Algerian Tell, approximately 15 km to the northwest of Cirta. The city occupies a position of considerable topographic

prominence, one of a series of hills—collectively known as the Kheneg—overlooking the productive agricultural valleys of the Wadi Rhummel and its tributary the Wadi Smendou (Figure 32). The topography of the site itself slopes sharply from an elevation of almost 575 m in the west to approximately 450 m in the east, all over a distance of around a half kilometre; a gradient of roughly 25%. This challenging topography results in a town that is naturally fortified, with buildings on a series of terraces cut directly into the bedrock, surrounded by sharp hills on all sides, and accessible only from the northeast. The landscape of Tiddis, in this way, shares many characteristics with the other, smaller Roman settlements dotting the Kheneg, as well as the larger regional centre of Cirta to the south (Berthier 1951, 12; Berthier 2000, 35).

The city's natural fortifications protected Tiddis in antiquity, but also made the site highly inaccessible before the construction of a road in the early 20th century, and this remoteness gave the impression of a "sauvage solitude" for Tiddis despite the close proximity of the provincial capital of Constantine (Berthier 2000, 20) (Figure 33). Perhaps the best demonstration of the site's remote quality is found in an anecdotal account by Alfred Baraudon (and repeated by André Berthier) of his attempted trip to the site in the late-19th century—travelling with a group of interested scholars, all armed with pickaxes and Latin authors. Baraudon describes a site that is unknown to local populations, difficult to access across a challenging topography, and ultimately "vraiment introuvable" (truly impossible to find) (Baraudon 1893, 136–37; Berthier 2000, 18). Despite their best efforts, and eight days of searching, the early archaeologists were forced to return home, where Baraudon quips they spent another fifteen days

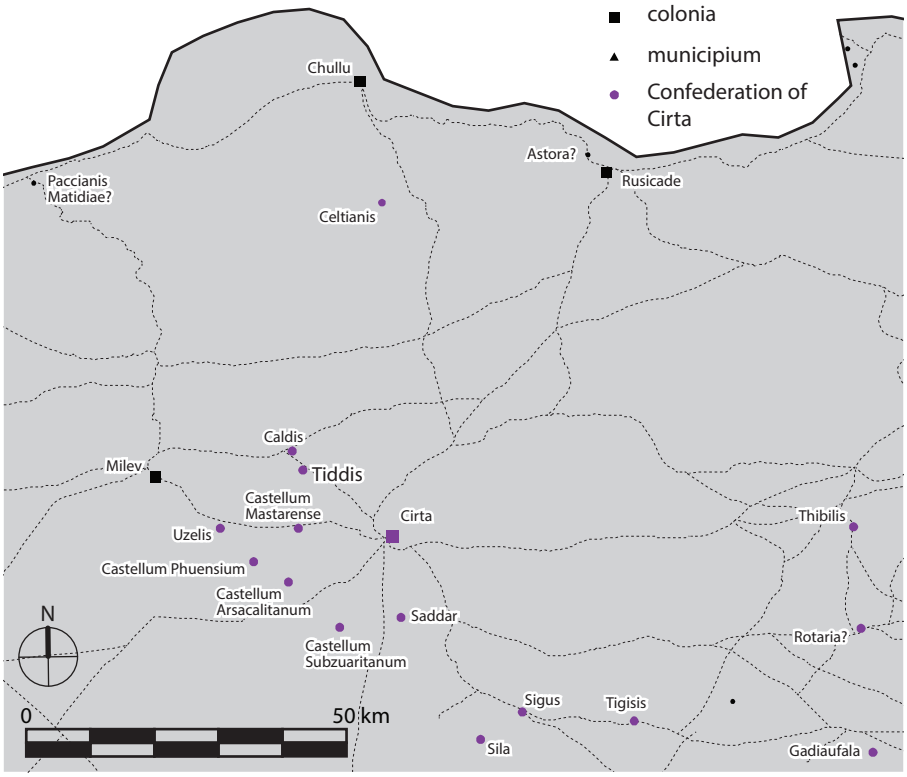


Figure 32. Tiddis in its regional context. Cities of the Confederation of Cirta marked in purple.



Figure 33. Photo showing the topography, terracing of construction (E. Fentress).

describing that which they were unable to reach. In antiquity the site was located on a route from Cirta to the city of Milev to the west, and so we should not project this modern sense of isolation onto past inhabitants. The city was, nonetheless, in a less densely occupied landscape than the sites of the Medjerda valley at the heart of the Roman province of Africa.

This account of an unsuccessful expedition notwithstanding, the 19th century did see a number of explorations of the site and its archaeological remains. The first superficial excavations at Tiddis were undertaken by the Société Archéologique de Constantine, resulting in the discovery of a number of funerary stele and a substantial corpus of Latin inscriptions—including one outlining the accomplishments of Q. Lollius Urbicus, discussed below (Creully 1853; Marchand 1855; Cherbonneau 1863). New inscriptions (Gsell 1897, 365–66; Vars 1898, 357–59), funerary stele (Doublet and Gauckler 1893, 25), and other small objects such as figurines (Besnier and Blanchet 1900, 2; Gsell 1898, 340–41) remained the primary focus of many of the publications of the late 19th century, occasionally interspersed with discussions of the megalithic dolmen burials recorded on the site's highest, western slopes (Féraud 1864, 112–13; Brunon 1876, 324–32). The fortifications of the city—also a favourite topic of 19th century scholars—were also recorded in detail by the French colonel Génie Brunon, resulting in the first delineation of the city's total area, and one of the earliest surviving plans of the site (Brunon 1876; Berthier 1978).

Tiddis was largely ignored in the early 20th century, despite the dreams of the archaeologist André Berthier to one day excavate at the site (Berthier 2000, 24). Excavations began in earnest only in 1940, as part of a wider programme of physical labour (including archaeological works) undertaken in resistance to the occupation of North Africa by the Axis-controlled Vichy France (Dessaigne 1991, 137–43). The excavations were directed by Berthier and Marcel Troussel, during periods of Berthier's absence for military service (Berthier 2000, 27). These works introduced greater spatial coverage and more systematic fieldwork techniques, and yielded quick results—the uncovering of the monumental north gate and the discovery of a paved major thoroughfare, leading to and including the forum itself (Berthier 2000, 26). The 'rediscovery' of a substantial Roman town was considered a major success for the Société Archéologique de Constantine (Carcopino 1942, 307–9), and excavation and restoration continued well after the conclusion of the Second World War, persisting even throughout the Algerian War of Independence (1954–62). In addition to the ongoing discovery and reconstruction of the town's eastern domestic quarter, this fieldwork also focused on the megalithic burials first observed in the 19th century (Berthier 1956; Camps 1956; Février 1970; Février and Berthier 1980); on the sanctuaries of the hill overlooking the city (Berthier and Leglay 1958); on the continued discoveries of new inscriptions at the site (Berthier 1945); and on the large collection of coins recorded during excavations (Troussel 1948). As a result of these 30-odd years of work, the site of Tiddis occupies an important role in the history of modern Algerian

archaeology, and provides a wealth of information on the organic development of the site in the early Roman period.

Municipal history

On the other hand, the town of Tiddis does not provide the detailed municipal history of many larger cities; Colin Wells goes so far as to describe the site, somewhat harshly, as "a place of no importance or fame then or now" (1992, 224). Throughout its history Tiddis is overshadowed by the fortunes of Cirta, and the story of the site must be told to some extent through the lens of its more illustrious neighbour. Yet it is this lack of municipal importance that makes the town an interesting study in organic growth. Tiddis shows a continuity of urban development regardless of changes in Roman control of the wider region, and a steady rate of expansion in tandem with greater integration in North African and Mediterranean-wide urban networks.

The exact date for the foundation of Tiddis is unknown, beyond the basic acceptance that there was a form of proto-historic Berber agglomeration at the site. This early settlement, relying on a naturally fortified location, mirrors many sites in the region (Berthier 2000, 43), and is probably comparable in chronology to the 9th or 8th century BCE dates of similar inland sites (e.g. Althiburos, see Kallala *et al*. 2008; Sanmartí *et al.* 2012). By the 3rd century BCE, the town formed part of a ring of defensive sites surrounding the territory of the regional capital at Cirta—known as the Confederation of Cirta—and control of Tiddis was administered from this larger centre.

The earliest historical mentions of Cirta note the city was the capital of the kingdom of the Masaesyli Berber ruler Syphax, ally of Carthage, who was later displaced by the Roman ally Massinissa (Brett and Fentress 1996, 26). Under these Numidian kingships Cirta developed a form of Hellenistic (or, better, Mediterranean) cosmopolitanism comparable to similar regional capitals across North Africa (Bertrandy 1994), and it is reasonable to assume Tiddis experienced similar influences during this period, if at a much lesser scale. The system of administration of the region surrounding Cirta, including Tiddis, continued after the end of Numidian rule and well into the period of Roman control (Gascou 1983). The formal Confederation of Cirta continued until the early 4th century CE. While the town of Tiddis enjoyed a moderate degree of independence from at latest the mid-1st century (Wells 1992, 224) the site was not promoted to either *municipium* or *colonia*, and as a result did not have full control of either its urban core or the surrounding countryside, which remained under the administration of Cirta at least into the 3rd century CE (Gascou 1983, 181).

Urban development

The earliest settlement at Tiddis took advantage of the natural topography, which provided a form of fortification on all sides, and clustered toward the higher western area of the plateau (Figure 34). This trope, of a smaller fortified settlement enhancing a position of topographic prominence, corresponds well with Gsell's description of the typical 'Berber village' (Gsell 1927, 243–44). Walls in cyclopean masonry were constructed on

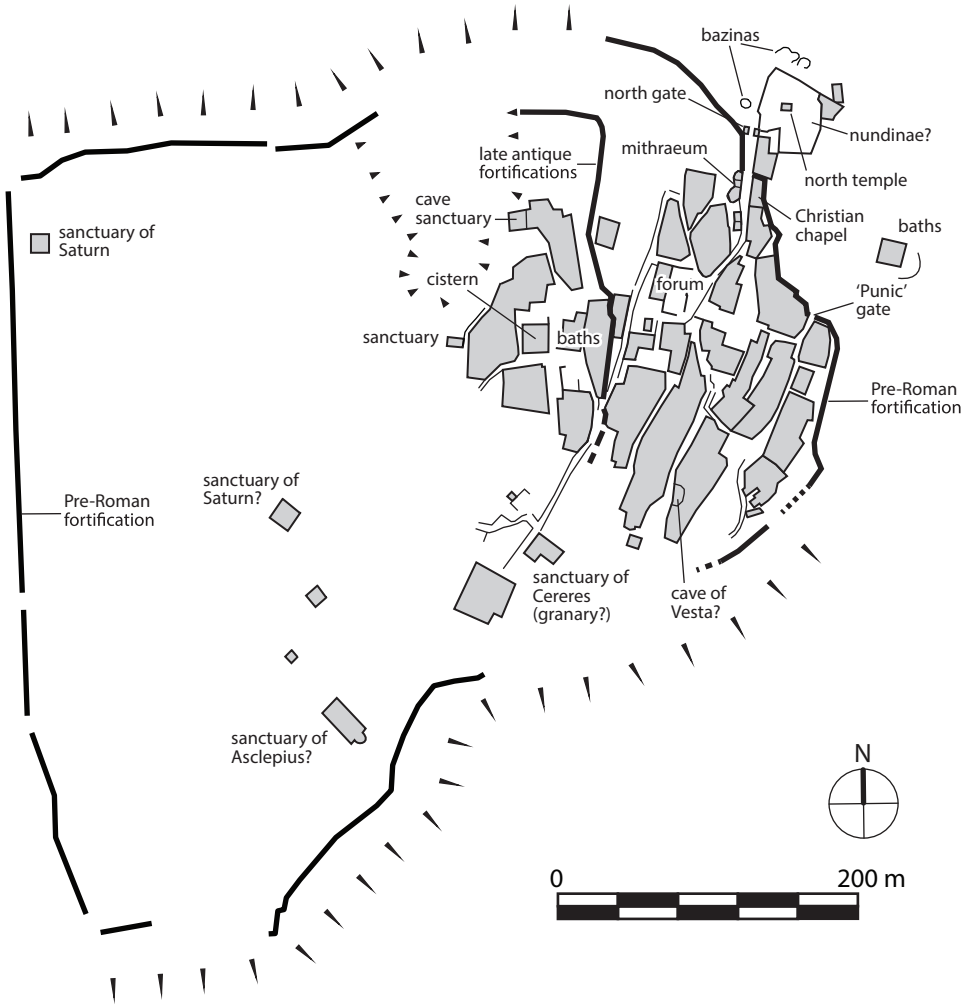


Figure 34. Plan of Tiddis at its greatest extent (after Berthier 2000).

all sides to further reinforce this position of strength, enclosing an area of roughly 12 ha (Berthier 2000, 43). These walls were initially overlooked by investigators (Brunon 1876), before 20th century excavations confirmed the earliest fortification of the plateau, at some pre-Numidian date (Berthier 1978, 146; 2000, 40).

Little is know of any possible residential area of the site in the earliest periods, beyond the unlikely possibility that piles of stones in the western half, not occupied in later periods, are the remains of some form of early shelter (Berthier 1951, 13). Yet late-1st millennium BCE activity is clearly visible: in a series of dolmen burials, each approximately 2 m in length, still present in the westernmost 'cultic area' of the site; and at an early sanctuary to Baal-Saturn at the northwestern summit of the plateau area abutting the earliest fortifications (Berthier 1951, 15; Berthier and Leglay 1958). Similar graves recorded a few hundred metres to the east of the city recorded multiple burials in each, as well as the disarticulation and redeposition of some bones after interment (Bussière 1998, 42).

Most rock-cut or dolmen burials of the Tunisian and Algerian Tell were in use in the latter 1st millennium BCE and were constructed by local Berber or Libyan populations (Stone 2007b, 44). Evidence from larger monumental examples mirroring these forms, however, suggests continued use into the Julio-Claudian period, if not later, in both Berber/Libyan and other cultural contexts (Crawley Quinn 2003, 18)—indeed, one of the dolmens recorded at Tiddis included a Neo-Punic inscription (Berthier 1951, 13; 2000, 45). Similarly, although the objects recorded at the sanctuary show heavy Punic

influences—such as votive figurines thought to be the goddess Tanit/Caelestis—deposits also included ceramic material dating into the late antique and Islamic periods (Berthier and Leglay 1958, 58). Thus while the westernmost part of the site was not settled in later periods, it remained an active part of the cityscape throughout.

A first shift toward urbanization at Tiddis began in the late 3rd century BCE, before the reign of the Numidian kings. Under the influence and administrative control of Cirta, and following a similar urban trajectory, the cyclopean fortification walls at Tiddis were disassembled and a series of terraces constructed in their place, running north to south across the plateau and shoring up the sloping terrain (Berthier 2000, 40). The first terrace (moving west to east, or downslope) shows many marks of 2nd century construction, including ceramics and coins, construction techniques, and surviving architectural fragments (Berthier 2000, 39–45). The first fortification of the eastern site area—identified as Roman by Brunon's 19th century description (Brunon 1876, 324–32)—also dates to this earlier period (Berthier 1978). The so-called 'Punic door', oriented north, opens from the probable 3rd or 2nd century fortifications into terraces below (Berthier 2000, 39). Accounts of the urban development of Tiddis oddly make little mention of changes to the town under the Numidian kings of the 2nd and 1st centuries BCE, although with little change in population it is fair to assume many of the traits described here continued on a similar trajectory.

The eastern, and downslope, expansion of Tiddis continued into the period of Roman rule with the continued infilling of the area delineated by the earlier fortifications

(Figure 35). The challenging topography of the site, and the continued occupation of earlier structures, prohibited the implementation of a strict orthogonal planning. The easternmost developments of the 1st and 2nd century CE may represent an attempt to implement the standard street layout of a north-south *cardo* and east-west *decumanus*; the former passes through the earlier fortification, piercing the wall at the gate of Memmius, constructed in the 2nd century CE (Berthier 2000, 40). Yet both possible *cardo* and *decumanus* meet not at but directly below the forum, itself most likely also constructed in the first half of the 2nd century (Berthier 2000, 452). Each street passes through a monumental arch on the terrace directly below, perhaps giving the impression—from the perspective of a visitor—of a more regular urban form than the sloping plateau allows (Berthier 2000, 48). The forum is modest in scale, measuring 30 m length by only 10 m in width. These measurements are comparable to the fora at the smaller sites such as Thibilis (Gsell and Joly 1918, 61)—another member of the Confederation of Cirta—but pale in comparison to larger centres, such as the roughly 75 m by 50 m forum recorded at Cuicul (Février 1996, 654), or the irregular 45 by 35 m space at Thugga (Khanoussi 2003, 145) (Figure 36).

The town reached its greatest physical extent during this period of Roman expansion, with residential quarters to the north and the south of the forum, and a market attested in the epigraphic record likely also occupying part of the easternmost terrace (Berthier 1951, 31; 2000, 44). A bath complex was also constructed at the foot of the hill, alongside the earlier city walls. The Roman period did not include the construction of a new fortification wall. Instead, the existing fortification was largely maintained, albeit

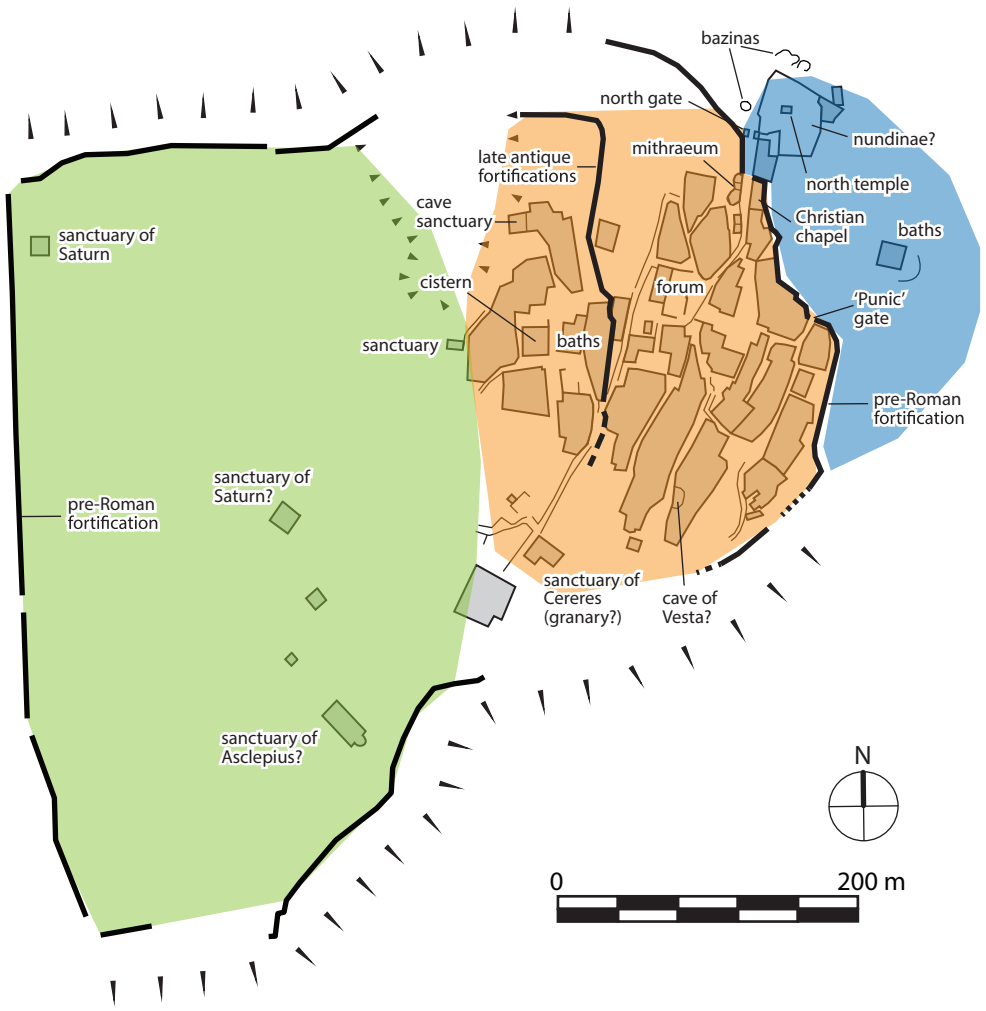


Figure 35. Expansion at Tiddis showing area of original settlement (green), 4th to 2nd century expansion (orange) and Roman accretions (blue).

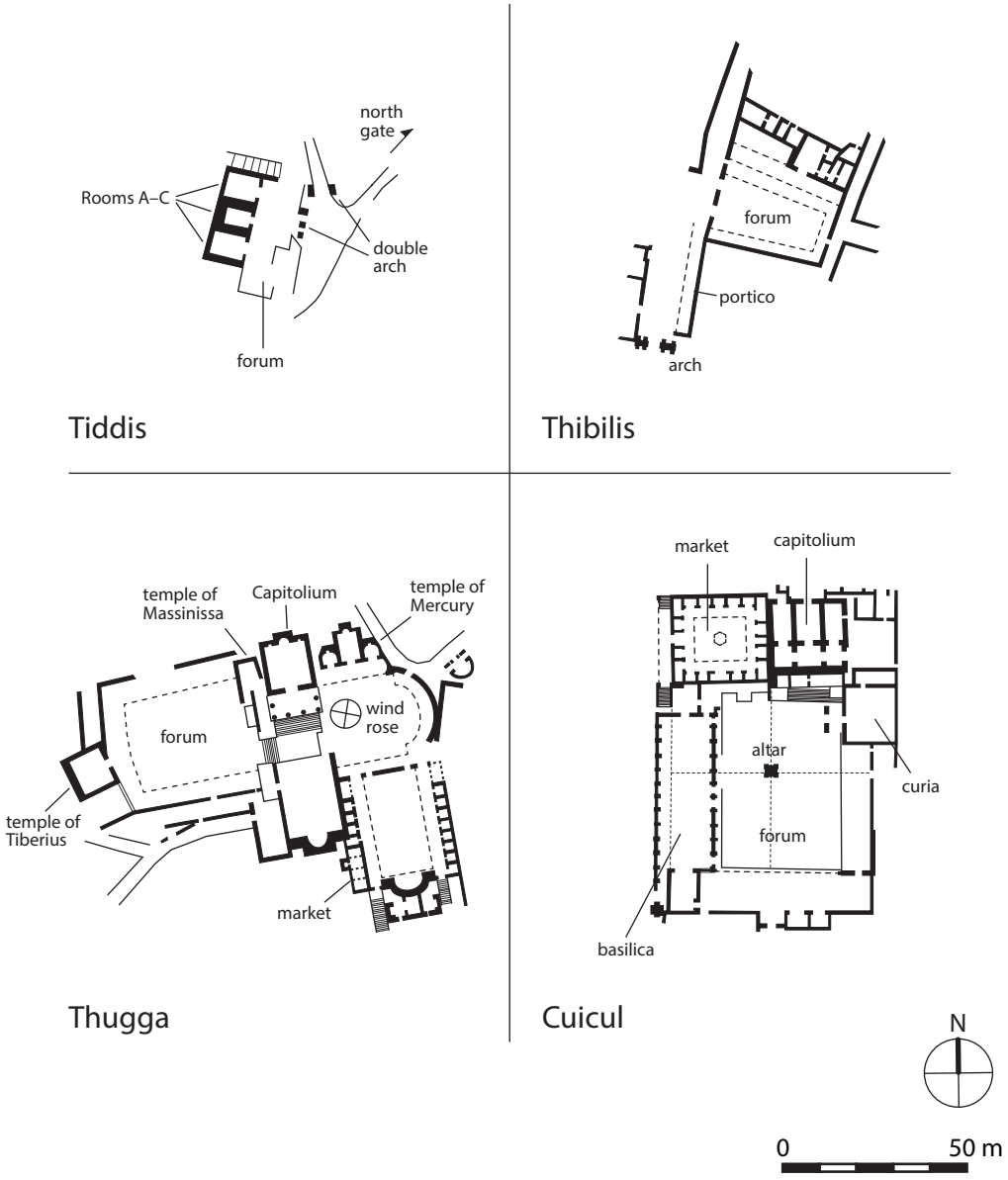


Figure 36. Comparison of the sizes of the forum at Tiddis (top left; after Berthier 2000), Thibilis (top right; after Gsell 1918), Cuicul (bottom left; after MacDonald 1986) and Thugga (bottom right; after Poinssot 1983).

with the addition of several new access points greatly diminishing its defensive function (Berthier 1978, 152). Furthermore, there is no evidence to suggest the Romans expanded the city to the west, except for the construction of a single recorded brick building, instead respecting the earlier 'cultic' area and dolmen necropolis dating to the earliest periods of the site (Berthier 1951, 13). Occupation continued into the Byzantine and Islamic periods, but in a reduced form behind the restored earliest fortification walls of the hill. These activities (not the focus of study here) including the installation of a potters quarters in the earlier forum and market, possible tanning pits and, in the Islamic period, workshops for glass production (Berthier 1951, 53; 2000, 42).

The implications of organic growth

The expansion of Tiddis during the Roman period was modest in scale, relying more heavily on restructuring the existing town and adding at most 2.5 ha to the extent covered by the earlier city walls—an increase of c. 25% in occupied area. This organic growth under Rome does not mark a meaningful departure from the earlier spatial trajectory of the city—if anything, the slow expansion of the city down the eastern slope of the plateau began under Numidian influences, and the Roman city just continued this trend. The topography of the plateau and the construction practice of cutting directly into the bedrock, furthermore, required the building of the town in successive stages, each lower terrace abutting the retaining walls of its higher neighbours (Berthier 1951, 23). This growth pattern is perhaps to be expected. The *castellum* of Tiddis is not a Roman foundation, nor even an important regional centre in

the Roman period. Rather the site shows the continued urbanization of an existing fortified location (Berthier 2000, 46). The construction of new monuments and urban amenities will have had some impact on the lives of the Tidditani—but what are the implications of organic growth, specifically, for local inhabitants?

First, and in contrast to examples of sprawl (such as was described at the city of Utica), organic expansion (such as that at Tiddis) was likely not accompanied by a significant increase in the urban population. There is no evidence of the construction of the large numbers of residential blocks needed for an influx of inhabitants. Limitations to the water supply, given the lack of natural springs and the reliance on rainwater to support the entire city, are a further argument against the growth of the town's population throughout all periods of its history. Tiddis was never served by an aqueduct, instead relying on a number of rock-cut cisterns to capture and store rainwater. Over 50 cisterns have been recorded on the site, most for private use and associated with individual houses (Berthier 1951, 14; 2000, 50). There is also little evidence from epigraphic materials for an influx of foreign populations, in direct contrast to the movement of Thracians and Spanish recorded into the more important regional capital of Cirta (Lassère 1977, 393, 396).

It is fair, therefore, to assume the town experienced a high degree of continuity from earlier periods—the same families responsible for shaping the earlier town continued to participate in civic life, and the control of the city remained in the hands of nearby Cirta regardless of a shift to Roman control of the wider region. The fact that much of the

later Roman construction does not appear to significantly alter earlier developments, either on the outskirts and upon the terraces of the town, further supports a continuity of local populations. With the continuity of occupation we can expect—to at least some degree—a continuity of local practices, such as the ongoing use of dolmen burials surrounding the city, and the maintenance of the open, cultic area on the western side of the plateau. I disagree with the assertions of Berthier that—of all the development at Tiddis—'Rome' left the largest impact (Berthier 2000, 35). To the contrary, and ignoring the difficulty in condensing the complexity of 'Rome' to a single agent, I suggest the nature of settlement at Tiddis was only peripherally impacted by the growth of the city in the first centuries of Roman rule.

This does not imply, however, that ancient Tiddis was as isolated as the earliest modern accounts of visits to the site may suggest. There are important signals in the town for a shifting relationship between the city and its productive surroundings. The earliest occupation of the plateau relied on its inaccessible location, augmented with built fortifications, to protect inhabitants from the dangers of the surrounding landscape. These fortifications were augmented in the 3rd or 2nd century BCE, implying a continued need for some form of safety. Yet in the Roman period the creation of a makeshift *cardo* was more important than maintaining the integrity of the city's defences, and the walls were cut to accommodate Roman growth. Additional suburban construction included both a bath complex—positioned in the urban periphery—and other residential structures outside the walls, all ostensibly—as far as can be told—without

any form of fortification. These changes speak to a greater expectation of security in the Roman period.

Other evidence demonstrates a potentially new role of the town as agricultural hub. Papi and Martorella (2007) interpret a structure on the highest plateau of the town not as a sanctuary of Cereres (Berthier 2000, 149–53) but as a granary. The building, of uncertain date but thought to be before the 2nd century CE, is estimated to hold up to 100,000 litres of grain (Papi and Martorella 2007, 176–78). A market is also noted in an inscription; in the absence of a formal built market space, we can assume this must reference a periodic market (*nundinae*) held outside the gates of the town, as was the case at many cities across Numidia (Dufton and Fentress, forthcoming; Fentress 2007). These signs of interaction with a productive hinterland suggest an increase in rural populations in this period, populations who relied on towns such as Tiddis for civic functions, weekly markets, or other services. A lack of pedestrian survey in the area around the town makes it difficult to confirm these changes to the surrounding landscape. However the results of fieldwork at Thugga (de Vos 2000; de Vos and Attoui 2013) and Kasserine (Hitchner 1988; 1989; 1990) both show an increase in rural settlement under Rome. Wider studies of the rural landscape across North Africa have pointed both to the intensification of agriculture and the decreasing quality of life of rural populations during the so-called Roman 'African boom' (see Hobson 2015), and to a greater parity between rural and urban populations from the late antique period (see Dossey 2010).



Figure 37. The mausoleum of Q. Lollius Urbicus, north of Tiddis (Berthier 2000, 264).

A final point relates to the tension between global and local that runs throughout all of my urban biographies, and relies on the personal history of arguably the town's most famous resident: Q. Lollius Urbicus. The career of Urbicus is known from an inscription bearing his achievements that had been originally intended for the base of a statue—long since lost—positioned in the forum of Tiddis. Under Hadrian, Urbicus served as legate during campaigns in Judaea, the Danube, Germania, and Asia. He was governor of Britain under Antoninus Pius, from 139–145 CE, during which time he conquered the Scottish lowlands and oversaw the construction of the short-lived Antonine Wall (Bertrandy 1994, 1975). The storied career of Urbicus concluded with a stint of uncertain dates—but most likely from 146 until his death in 160 CE—as prefect of the city of

Rome. The successes and wealth of Urbicus and his family are commemorated by a large, circular mausoleum to the north of the city, likely on the lands they had owned at the time of his death (Figure 37).

The biography of Urbicus has been used as a demonstration of both the prosperity of North Africa under Rome, and as a sign of the integration of the local elite into Roman systems of government (C. Wells 1992, 226). Rather than revisit debates about elite Romanization, however, I use this example as a means of showing that even the most local of towns could engage in global networks. Despite Tiddis' modest size, and an arguably minimal increase in the urban population in the Roman period, at least one of the town's elite families still amassed considerable influence across the empire by the 2nd century CE. This economic and political strength relied not on the growth of the city, but on the productivity of its surroundings. Urban expansion, instead of responding to migration or yet further development, responded instead to the different needs of a regional agricultural context. It is within that rural, agricultural context that Urbicus decided to erect his lasting monument, the mausoleum to his family and his achievements that stands to the present day.

Discussion

Modern studies of urban growth point to the role of the city as economic driver, Molotch's 'growth machine'. The resulting sprawling landscapes in turn create failing, detached communities, with a sharp distinction between the urban poor suffering the consequences of unbridled expansion, and the suburban elites reaping many of the

economic benefits of development. While these modern concerns cannot, of course, be retroactively applied to a different time and culture, considering the increase in size amongst the cities of Roman North Africa still provides useful ideas on the impacts of this process on the cityscape and urban inhabitants.

First, the factors contributing to regional growth patterns are both geographic, such as the rapid expansion in sites on the coast, and responsive to other factors, such as the origins of a settlement, its economic function, and its municipal status. Maritime ports were more likely to feature urban sprawl, many more than doubling in size in the first centuries of Roman rule. Port cities demonstrated, to paraphrase Lassère, a more tenuous demographic vitality that was often associated with rapid periods of urban expansion (Lassère 2015, 374). Veteran settlements placed along the shifting southern and western *limes* of Roman territory, the foundations and refoundations I introduced in Chapter 3, saw a rapid influx of population at the time of foundation or refoundation, only to fall into a pattern of steadier development. The small agricultural towns making up the majority of North African settlements expanded incrementally and, largely, organically. Cities showing greater and more structured growth were most likely to receive an upgraded status to the ranking of *colonia*, although whether this promotion was a cause for—or on account of—expansion remains unclear.

Two biographies of sites—Utica for sprawl and Tiddis for organic growth—demonstrate some of the implications of these regional patterns at the local scale. Utica shows the type of substantial expansion that is noted primarily at coastal sites, and shares a

development trajectory with sites such as Sabratha, Lepcis Magna, or Leptiminus. Only in these port cities could Molotch's theory of the 'growth machine' apply in a Roman context. The process of construction, increasing populations, and city enlargement at Utica may be responsible for the site's continued prosperity even when other factors, such as the refoundation of Carthage and Utica's loss of status as provincial capital, suggest the city should hold a more limited role. In terms of urban population densities, the largest shift must be tied to cities such as Utica with the greatest, sprawling expansion. New residential blocks are constructed for immigrants, and the material remains of sprawl can be treated as a proxy for changing demographics.

Despite Utica's ongoing involvement in Mediterranean-wide trade, and the probable influx of foreign populations into the city and other coastal examples noted by Lassère (1977, 401), the city shows a degree of continuity of much earlier urban practices. Housing at the city relies on traditionally Punic architectural techniques—long entrance corridors, blocks built using Punic measurements—even in the areas constructed under Roman control. Shifting populations and external influences do not, unsurprisingly, result in a complete change in the shape of the city. The cities with the greatest urban growth, although heavily influenced by larger regional factors, are still situated in their local contexts.

The hilltop town of Tiddis tells a different story, one that is shared by many inland agricultural settlements. Sites with organic growth still demonstrate considerable development, as noted in the gradual infill of the earlier Punic walls at Tiddis and also

the ongoing process of monumentalization at most towns that I discuss in Chapter 5. Yet this expansion must have been relatively moderate, particularly in contrast to the vitality of coastal ports or regional industrial centres, such as Simitthus. A lack of widespread construction of new houses, the restrictions of the natural topography, a lack of water, and an absence of onomastic evidence for foreign migration all point to a stable indigenous population at Tiddis. Evidence from comparable sites elsewhere suggests any growth in population is more likely to have occurred in the town's rural hinterland. Yet despite this lack of foreign immigration the history of one of the town's residents, Q. Lollius Urbicus, demonstrates the degree to which local, North African families could be involved in much larger, Mediterranean-wide networks.

I do not attempt to quantify precise population numbers; indeed, this work has been attempted elsewhere, with varying degrees of success (Lézine 1969; Wilson 2011). I look, instead, at potential changes within urban populations as a means of understanding the extent to which demographic fluctuations were a factor amongst the dynamic urban processes at work across the region. Bruegmann suggests that, in the early days of a city, there is a pull toward the centre where a greater concentration of population provides both economic and social benefits; this force stabilizes as the urban economy matures, resulting in population dispersal into the suburbs and surrounding countryside (Bruegmann 2005, 24). This theory holds when considering the organic growth of agricultural towns, or the slowing of expansion at military colonies after an initial period of veteran settlement, but does not accurately represent the sprawling growth at most coastal sites. Ports such as Utica were more heavily tied to

Mediterranean, imperial networks—both before the fall of Carthage, and into the rule of Rome—that exposed them to ongoing population pressures and social influences beyond those acting at smaller, inland cities such as Tiddis.

I conclude with a final point regarding the overall impacts of various types of city growth. Although the expansion of Utica was undertaken either as a single planning event, or with some centralized authority maintaining both block sizes and alignments in later periods, the latest survey results suggest the city was not immediately fully constructed to its proposed extent. A similar process of infill of a sprawling city plan over generations of inhabitants is noted at Carthage, where the city was still expanding into the 3rd or 4th century BCE and many blocks remained unfilled even until the time of the city's abandonment (Lancel 1995, 430). A degree of advanced urban planning—blocking out a large area for gradual infill and construction—was also observed at many organic growth sites, such as Tiddis (above), Bulla Regia (Ben Akacha 2016), or Mactaris (M'charek 1985). In the case of Utica the growth machine was not ultimately sustainable, and the silting of the city's port and a return to regional prominence of Carthage resulted in the surprisingly early contraction and eventual abandonment of the city. Lepcis Magna also underwent a period of contraction in the Late Antique period, and I propose a similar fate for most of the other sprawling, coastal sites that grew too quickly. Organic growth, however, continued along a trajectory established for most settlements well before Roman control. Roman expansion most certainly had an impact on the prosperity of cities, and the lives of their inhabitants, but the gradual

shifts of the growing process were not as marked as some of the other processes at the heart of this work.

Chapter 5. Monumentalization and the ever-changing cityscape

The initial impressions of a visitor on her or his first visit to the monumental core of Washington D.C. are usually its visual and architectural cohesion, the striking impact of the long east-west axis of the Mall passing from the Capitol and cutting through the gardens in front of the White House at the obelisk of the Washington Monument. Yet a largely static, present-day understanding of the Mall in Washington bears little resemblance to the same space throughout its relatively short history. A series of sometimes complementary, sometimes contradictory plans have shaped the current structure of the American capital, bringing into sharp relief the tensions between the inevitable changes in public and individual associations with a given monument, and the supposed permanence of a memorial, monumental landscape (Savage 2009, 10).

The earliest plan for Washington, and certainly the one which holds the most admired position in the canon of American urban planning, is that produced in the late 18th century by the renowned French designer and friend to George Washington, Pierre Charles L'Enfant. L'Enfant's plan promoted a vision of America as empire—a city to speak to the new nation's limitless potential. A central, monumental triangle was formed by the Capitol building, the White House, and the Washington Monument, with Pennsylvania Avenue serving as the hypotenuse and the Mall as the next longest leg (Reps 1967, 21). The city radiated out from this core along a series of primary streets using an axial plan designed by L'Enfant to promote speedy growth around a series of



Figure 38. An early plan (1794) of L'Enfant's Washington (courtesy of the John Carter Brown Library, Brown University).

settlement nodes, and to express a symbolic possession of the landscape with the nodal placement of monuments (Reps 1967, 18; Savage 2009, 32)(Figure 38). Yet L'Enfant's design for the monumental core of the city was never fully implemented; L'Enfant himself was removed from any meaningful role after a series of delays in producing a final plan and following a public conflict with a landowner who was evicted from his property to make way for a future thoroughfare (Reps 1967, 22).

As a result, the development of the Mall has shifted with the whims and fashions of urban design over the years—showing us how even the most iconic monuments are produced over long periods of time, subject to episodes of restructuring and phases of

rethinking. In the 1850s, for example, we see the mall as a popular public garden developed and implemented by the landscape architect Andrew Jackson Downing. Downing's designs disavowed monumental space and instead appealed to the mid-19th century belief, born of the movement for access to free education, in the pedagogical value of the public garden as a type of jointly instructional and recreational space (O'Malley 1991, 63). The resulting national garden linked federal buildings and monuments with non-monumental parkland, painting a picture of the importance of individual experiences with American nature over L'Enfant's earlier message of America as a growing empire (O'Malley 1991, 71–74).

A shift in thinking away from 19th century public grounds to 20th century public spaces necessitated yet another restructuring of the Mall, this time as a coherent monumental package worthy of the capital of a growing American world power (Savage 2009, 14–15). A number of different proposals were submitted, each featuring the replacement of the parks with a more structured landscape that was believed to be—both by designers at the time and by many architectural historians since—a return to the goals of the city set out by L'Enfant over a century prior (Reps 1967, 92). It was the McMillan Plan of 1902 that was fully embraced and implemented, a plan produced by the members of the Parks Commission including the prominent architects Charles McKim, Augustus St. Gaudens, and Frederick Law Olmstead Jr. (Gutheim 1967, 17), even if many of its key elements had been discussed for years by various administrators (Lessoff 1994, 258).

The McMillan plan involved the creation of a new monumental avenue between the Capitol and the Washington Monument, and extending to the White House in the north, creating as a result a visually coherent space between these three central monuments. New monuments were planned along the various axes: the equestrian Grant memorial at the eastern terminus overlooking the Capitol Reflecting Pool to its west; the Lincoln memorial at the western end; a new sunken garden with pool and fountain immediately to the west of the existing Washington Monument; and a group of monuments to national heroes at the southern end of the axis extending from the White House; a series of major cultural buildings bordering the Mall on both sides (Reps 1967, 109–10). The overall recommendations together formed a new sort of comprehensive city planning—a useful term I will return to later—and marked the beginning of a City Beautiful movement intent on attacking the shortcomings of the city, rationalizing urban spaces, and ennobling the lives of city inhabitants (Peterson 1991; Savage 2009, 158).

Construction works to implement the plan began almost immediately and continued into the 1930s, an important reminder that monumental schemes of this scale can take years, sometimes decades, to implement. The monuments to Lincoln and Grant, at the western and eastern ends of the Mall respectively, were completed in the 1920s and were still interspersed by the curvilinear paths and parkland of the 19th century, bordered by greenhouses and antebellum row housing (Savage 2009, 7). Yet public opinion shifted rapidly from initial support of the plan to active resistance as the known landscape was slowly stripped away, marking the difference between the meanings of

monuments for the daily experiences of a city's inhabitants from their symbolic importance to the country at large. There was particular outcry over the removal of the celebrated trees of Downing's gardens for the construction of an equestrian monument to Grant, completed in 1924 (Savage 2009, 180–86); the celebrated architectural historian Lewis Mumford went so far as to describe the construction as creating an ugly, imperial façade on the democratic ideals of the American capital (Savage 2009, 11; see also Mumford 1924, chapter 6, 'An Imperial Façade').

These public concerns were largely overcome, however, and by the middle of the 20th century any earlier resistance had been largely forgotten. From that date, the Mall has continued to undergo a series of changes. The addition of Maya Lin's initially controversial but since well-received Vietnam Veterans Memorial—a wall with the names of the dead, cut into the earth—marked a shift from the constructed monument to the memorial powers of space itself, and introduced a new aspect of personal experience and emotional discovery to the monumental landscape (Savage 2009, 21). A later memorial to the veterans of the Second World War, opened in 2004, was met with much greater resistance. One aspect of this resistance centred on the increasing militarization of the nation's monumental heart, particularly in the aftermath of the attacks of September 11, 2001 and the ongoing military action in both Afghanistan and Iraq. An even greater objection, though, was tied to the seeming destruction of the coherent, comprehensive perfection of the McMillan plan with the creation of a new monument along the Mall's primary axis—even though this version of the monumental landscape of Washington was less than 70 years old, and part of a much longer and

more varied history. Put another way, the contradictory responses to these two new memorials shows us how "monuments are subject to dispute and change [both] before and after they are built" (Savage 2009, 22).

There are many ways the development of the Mall at Washington has resonances to the construction of monuments in the Roman world. Beyond the widespread use of Classical architectural forms, the common perception of the Mall as a unified monumental project mirrors to a degree the ways in which we often consider the monuments of the Roman provincial city at the height of the empire as part of a single comprehensive urban vision. Yet as we can see from Washington, over two centuries the monumental centre of the city went through at least three completely distinct evolutions. Each iterative vision of the monuments of the capital was tied to the social conditions and common thinking of its time; each took decades to implement; each was met with varying degrees of resistance, and had different implications for the different populations of the city; and each was never fully realized as planned. The history of the Mall shows us the important differences between the characteristics of individual buildings, the collective spaces that are created by sets of individual monuments, and the programme of works that can lead to the creation of these spaces over time.

In this chapter, I make a deliberate distinction between monuments as individual buildings, and monumentalization as an urban process involving the ongoing construction and renovation of monumental structures and spaces. I begin by exploring

some of the different ways in which monuments are studied in ancient and modern contexts. The study of monuments as an expression of power, a symbol of Rome, and as part of a wider urban experience are all particularly common in studies of the Roman world, and each is covered here. My focus on the changes brought about by monumental construction projects in particular, however, goes beyond the chronological and conceptual challenges of this existing literature.

I then consider the chronological and spatial distribution of monumental construction projects across North Africa from the early first century BCE to the end of the second century CE. This regional analysis shows how new buildings were wielded by local citizens eager to make their cities worthy of promotions in municipal status, or to demonstrate both civic wealth and prominence. It also makes direct connections between preferences for different building types to many cities' pre-Roman origins. A look at the monumentalization of a single city, the Tunisian town of Thuburbo Maius, reinforces these regional trends but also establishes the significance of local developments. This urban biography also shows the degree to which many monumental programmes were built in a piecemeal fashion, with improvised decisions being made as much on the level of the individual monument as with any higher concerns for city or the empire as a whole. Overall, I argue it is the continuous interaction between the construction process itself and the completed monuments that has the greatest impact on North African populations.

Approaches to the study of urban monuments

The treatment of urban monuments in Roman cities falls within wider discussions of monuments more generally, and so asking broader questions of monumentalization is a necessary background for a discussion of the process in the cities of Roman North Africa. This is, of course, an area with a vast body of scholarship, and I make no attempt to provide anything approaching a comprehensive summary here. The following, rather, pulls apart some of the themes most common to the study of Roman urban monuments: the monument as an expression of power, as a symbol of empire, and as an urban experience. Each of these approaches suffers, to varying degrees, from an insistence on assigning singular meanings to individual monuments and from a lack of chronological awareness that I later argue can be addressed by a focus on the ongoing process of monumentalization rather than the monuments themselves.

Monument as competition

A first focus of studies of monumentality is the social and economic power involved in the construction of the monuments themselves. Building a new monument—regardless of the period, geographic locale, or reasons behind the project—requires the mobilization of vast quantities of both labour and materials. Competing construction projects emerge, between individuals in the same community or between groups. The monument itself serves as a direct reminder to all of the power and wealth of the builder, be they an individual or state, a family or a faction.

Studies on the monument as a sign of power often consider the labour costs behind such competition, long a focus in studies of prehistoric monuments or sites in the New World (e.g. Abrams 1989; Erasmus 1965; Renfrew 1973; Trigger 1990). A recent trend toward labour studies has also begun to quantify the materials and manpower required for Roman civic competition, looking at the process of all stages of construction including the provision of raw materials, pre-construction works, specialist labour, supervision, and transport of building supplies (DeLaine 1997; 2000; Bernard 2012; Barker and Russell 2012). Hypothetical quantifications—such as DeLaine's total figure of, in peak periods, over 13 000 workers involved with the construction of the Baths of Caracalla in Rome—provide some idea of the power or resources available to those commissioning a monumental project, in this example the emperor Caracalla himself. This marks a step away from a heavy emphasis on the monument as an architectural form and explicit expression of power, and toward the social factors contributing to its creation.

Within the Roman world the urban monument is also often considered a key tool in the formation of elite communities, and monuments discussed in terms of an expression of the identity of their makers (e.g. Hope 1997; Petersen 2003; Yasin 2005). Local competition in public magnificence, the process of euergetism, has been called an all-important factor driving the construction and renovation of urban monuments and, by extension, the city itself (DeLaine 2008, 115; Lomas 2003). Local families competed against each other to control the monumental landscape of a single town, as we see in the construction of higher and higher temples at the forum of Thugga (Thomas 2007,

74) (Figure 39). Competing families could also provide different types of monumental project, as with the statues provided by the wealthy landowner Pomponianus of Thamugadi in the face of the larger construction projects of the newly rich landlord Sertius (Fentress 1984). Fentress notes that the latter family may have also benefitted financially from the monumental projects he dedicated, an idea that I will return to below. This competition also expanded to tussles between neighbouring towns, each adding the monuments necessary to display civic wealth and lay claim to regional power or prominence. Elites paying for new monuments to further their own power or fame is explicitly tied to top-down models of the spread of Roman culture and the monument as a symbol of empire I will introduce below.



Figure 39. Competing construction projects at the forum of Thugga dominated by the capitolium (dedicated 167 CE).

The issue with these competition- or identity-driven approaches, as they relate to the Roman city specifically, is that they are all deeply rooted in the study of the dominance of single monuments over wider urban spaces, and of individual elites over larger, more diverse populations. Meaning is imparted in a top-down fashion; the agency to both create and use monuments is given almost exclusively to figures of power. Though the city is seen to contain certain monuments, we at best learn how one or two monuments may relate to each other and rarely have any idea how the monumental and non-monumental landscapes are articulated.

Monument as empire

The monuments of the Roman world are also often treated not just as a general expression of the power of emperors or private elites but also as a more direct sign of the empire itself. This dialogue falls into the wider debates on the role of the city in the problematic process known as Romanization, introduced in Chapter 2. Monumental urban furniture, in particular, is treated as a key element of a Roman identity and, following this reasoning, new 'Roman' style monuments act as central agents in the process of spreading the Roman urban ideal to the provinces (Keay 1998; 2001; 2006; Zanker 2000). I have already outlined the primary critiques of Romanization as a dominant paradigm for the provincial city, such as a lack of agency for indigenous populations, ties between 'Romanization' and modern colonial interests, and an overwhelming concentration on elites (Alcock 2001; Barrett 1997; Gardner 2013; Hingley 1996; Mattingly 1996).

These critiques are all valid, and I do not look to revisit them here. Yet beyond this well-trodden squabble the idea of Romanization through urban monuments rests on a larger theoretical treatment of the monuments only as objects with a direct symbolic meaning, communicating fixed ideas about the power of Rome and the idealized behaviours of its citizens (Khatchadourian 2016, 37–38). We can see in the literature examples of African populations not expressing loyalty to the "cultural sophistication" of Rome via the construction of baths until the second century (Laurence *et al.* 2011, 224); of orthogonal street layouts making explicit connections to an ordered, Roman civil life (Hingley 2005, 82); of how the forum at Wroxeter in Britain reproduces the Roman urban ideology from one generation to the next (Revell 2009, 43). In each case, and in countless others, the monument acts almost exclusively as a symbol of imperial power. Zanker even goes so far as to suggest that Roman buildings, imbued with particular values and messages by the generation responsible for their construction, "continue to communicate these same values to succeeding generations" (Zanker 1998, 3).

I do not plan to explore, following Khatchadourian, the ways in which monuments themselves push back against the society that created them (Khatchadourian 2016, 76–77). I do, however, follow her thinking—and the thinking of many others arguing for the social construction of meaning (see Layton 2006)—that assigning a fixed, overwhelmingly symbolic value to various urban Roman monuments ignores the extent to which the physical buildings themselves interact with both the urban landscape and a city's inhabitants. I also reject outright the idea that a single monument, like the

capitolium at Thuburbo Maius introduced below, communicates but a single value—not at the time of its construction, and not in the centuries to follow.

Monument as experience

A final approach to the study of monuments considers the experience of those interacting with the monument in its urban context. The experiences of the individual with a new monument certainly dominate much of the scholarship on monumentality in modern contexts, as we can see from discussions of military monuments like the Vietnam Veterans Memorial (Watkins *et al.* 2010), to commemorative monuments after terrorist attacks like the September 11th Memorial in New York City (Forest and Johnson 2012; Low 2004) or the July 7th memorial in London's Hyde Park (Brown and Hoskins 2010). A shift in attention in modern situations, from the monument as physical object with imbued meaning to the monument as individual experience, has also migrated to studies of the monuments of the past. At the level of the individual monument questions of movement or sensory experiences are common (Hamilakis 2014; see particularly Chapter 6). At the level of the monumental landscape of a city or countryside, questions of audience experience may expand to ones of ritual performance (Gilibert 2011; Langin-Hooper 2014) or collective social memory (Alexandridis 2014; Bachhuber 2014; Knapp 2009).

An experiential approach has also become particularly common in studies of the monuments and streets of the Roman city. Writings on the topography of Rome often target both the experience of viewing or interacting with individual monuments

(Thomas 2007, 207–10), the performative aspects of monumental townscapes (Zanker 1998, 3), and the wider message portrayed along different processional routes (Cleary 1994; Favro 1994; Ostenberg *et al.* 2015; Yegül 1994). The latter approach is tied explicitly to MacDonald's idea of the armature—a network of streets connecting various monuments, explicitly understood through the experience of movement from one to the next—as the essential framework for Roman urbanism (see Chapter 4). This experiential, topographic focus often approaches a study of monumentalization, as I described it above, by including specific ways in which the adding of new buildings to a processional route changes or adds to its ceremonial meanings. However there is still overwhelming attention paid to the form of completed monuments, alone or in groups, and less a concern with the ongoing process of change—both through the evolving construction of physical spaces and the shifting experiences of the monuments as a whole.

The monuments of Roman North Africa

The scholarship on Roman monuments in North Africa features the three theoretical themes above but, even more, can be delineated according to the spatial scale of its analysis: across the full area defined by the region's various Roman provinces; across a single site; or as a single structure.

North African monuments are discussed at the regional scale within exhaustive studies of a single monument type. As a result we see books on baths (Thébert 2003), theatres and amphitheatres (Lachaux 1979), or markets (de Ruyt 1983); articles on capitolia

(Crawley Quinn and Wilson 2013; Kallala 1992); dissertations on monumental fountains (Lamare 2014) or fora (Fullerton 1998; Morton 2003); multi-volume monograph series on churches (Duval 1973) or elite houses (Bullo and Ghedini 2003). In each of these examples, a specific type of monument is catalogued at all North African sites, usually with some sort of additional contextual information for the study and a conclusion tying the monument to questions of civic status or the wider themes of monumentality I have already introduced. The overall focus remains, nonetheless, on the monument as architecture and, usually, as a symbol of Roman imperial power.

Another branch of the scholarship on North African monuments looks at a certain type of activity or suite of buildings in a single city. The most obvious example is MacDonald's treatment of urban armature, namely the monuments of a city and the streets and plazas that connect them (MacDonald 1986; see discussion in Chapter 4). Monuments relating to a specific type of activity, most often ritual, have also been discussed across individual sites, such as in Saint-Amans' religious topography of Thugga (Saint-Amans 2004). These works follow a thematic interest in the monument (or monuments) as experience outlined above.

The smallest analytical scale looks at individual North African monuments, discussing their architectural qualities or potential meanings, perhaps with reference to one or two appropriate comparanda. Single-monument works are more common by far than synthetic approaches, often arising after a programme of excavation, and cover all types of buildings including entertainment structures (e.g. Lequément 1966), religious

complexes (e.g. Ferchiou 1984; 1985), defenses (e.g. Goodchild and Ward-Perkins 1953; Berthier 1978), or public buildings (e.g. Gros 1990; Trifilò 2011). The best examples of monument-specific studies address the history of changes to a given monument, and its relation to the features that came beforehand and afterward (e.g. Trifilo's analysis of the forum at Thamugadi, 2011). Situating this change within the wider urban context is less frequent, however, especially within the confines of the article or chapter format usually used for these types of work.

Each of these three approaches makes important contributions to our understandings of the Roman city through the creation of extensive data sets, or by refining our chronological understanding of individual sites and monument types. Yet they also suffer from a tendency to divorce the built monument from the surrounding city, or monumental development from urban development more generally. Existing regional studies, moreover, tend to side-step questions of chronology. Presenting all Roman baths as a single corpus, to give one example, has the unintended consequence of flattening the half millennium over which they were constructed into a single 'Roman' period, and any changes over time become merely a matter of architectural preference or technological innovation (Thébert 2003). Attempts to address chronological change in monument construction, by contrast, show little concern for the geographic distribution of monuments (Jouffroy 1986; Laurence *et al.* 2011, 165–8). Jouffroy does provide a series of maps showing the geographic spread of monuments of various functional categories over time, but her discussion only superficially addresses these distributions and makes no real mention of either the pre-Roman history of most of

these cities, nor changes to their civic status. There is room—despite the countless studies already conducted—to move the conversation of North African monuments beyond monuments and their effects to the collective adding of new buildings within wider urban developments that is the process of monumentalization.

From monuments to monumentalization

To address some of the problems I have outlined above my approach departs from the study of the monuments themselves to the construction of multiple buildings that is monumentalization. My focus is, in particular, on the changes brought about to North African cities by monumental construction, and on how repeated iterations of new monumental projects added or altered the experience of the existing urban landscape. Change is an inherently chronological concern; it requires me to look both at what came before and what was built during the Roman period that is my focus, and helps me to avoid the lack of a chronological framework plaguing many of the monumental approaches outlined above. Treating monumentalization as but one of many competing urban processes also returns the monument from its frequent publication as an individual plan, floating in abstract space, to its rightful position in the city. I treat monumental construction as but one type of urban change, best understood through the lens of wider developments such as changes to civic status, increasing local wealth, growing populations, or earlier urban traditions.

My approach also offers a new classification of North African monument types, based specifically on the perception and use of each of these buildings and spaces. Jouffroy

originally described monuments based on a series of classes: temples; buildings for spectacle; the *grands travaux* which can be loosely translated as large or public works; arches; and utilitarian buildings including baths, basilica, markets, and fora (Jouffroy 1986, 398–402). These distinctions are accepted mostly at face value by Laurence *et al.* (2011, 165–8), who repeat Jouffroy's analysis without significantly adding to the discussion.

I tweak Jouffroy's categories slightly for my analysis. Temples and spectacle undergo a minor rebranding to become ritual and entertainment, offering a broader interpretation of the activities occurring at both. Most of what Jouffroy calls *grands travaux* I consider as infrastructure, and her arches I group together with monumental gates and other commemorative works. I make a significant departure from Jouffroy's work by creating a new category for structures associated with the provision of water to the populace—baths, aqueducts, monumental fountains, latrines, and cisterns—that draws from both the *grands travaux* and the utilitarian classes. I also combine the basilica, fora, and markets into a category of public buildings, that is places of assembly and commerce, which I believe better speaks to the uses of these buildings, and also includes the provision of these spaces with various statues or other monumental trappings. This last category is admittedly problematic, as indeed ritual, water, or commemorative monuments are also serving a public function, and some public spaces such as fora are intimately tied to religious activity. I use the term in its narrowest sense, with the acknowledgement that it serves as a sort of catch-all for monuments that do not find easy homes elsewhere.

We are left, then, with the following monument classes: ritual, entertainment, water, infrastructure, public spaces, and commemoration. I explore the interaction between these classes now, first through a regional analysis of monument distributions and then with a short urban biography of the process of monumentalization at the city of Thuburbo Maius.

Monumentalization, civic promotions, and regional prominence

A regional approach to monumentalization as process, rather than monuments as architecture, addresses the chronological and geographic concerns with the study of the Roman monuments of North Africa outlined above. If a primary interest in monuments lies in their number and their distribution (Février 1982, 363; Leveau 2005, 71), it seems odd that few efforts have been made to represent these distributions geographically for monuments as a whole, rather than a single type. A focus on process also introduces a chronological element—it is not only that certain cities had more monuments than others, but that this difference was accumulated over time and tied directly to the diachronic trajectory of urban sites. The presence of so many detailed studies of individual monuments provides the data needed for a comprehensive approach, one that answers questions of regional patterns of wealth or civic prominence and speaks directly to the pre-Roman foundations of most of North Africa's cities.

Data were collected from a number of available gazetteers of various monument types, themselves of varying quality. Helène Jouffroy's *La construction publique en Italie et*

dans l'Afrique romaine (1986) provides a useful, if occasionally patchy, baseline of construction projects identified in the epigraphic record, including both new buildings and repairs of existing structures. These basic figures were augmented and dates corrected using a number of monument-specific publications: Jean-Claude Lachaux's *Théatres et amphithéatres d'Afrique Proconsulaire* (1979); Yvon Thébert's *Thermes romains d'Afrique du nord et leur contexte méditerranéen* (2003); Claire de Ruyt's *Macellum: marché alimentaire des romains* (1983). The number and dates of monuments were also adjusted or confirmed for the more prominent cities, where existing scholarship made this possible. Cities with less than five monuments in total were not verified; in these cases, even if the epigraphic materials are somehow incorrect, the presence of a small temple or baths can still be safely assumed and the overall totals roughly accepted.

There are certainly issues with this data—possible cases of monuments missed, repetition of past misidentifications, or extra buildings added. The data presented by Jouffroy are organized by century and not by more meaningful distinctions, such as the difference between Augustan and Trajanic monumental programmes. The large number of undated inscriptions in Jouffroy's work is also problematic, above all for the infrastructural works that are probably missed in other sources. Yet, as with my approach on the whole, considering the data regionally minimises the impact of any one omission or problematic site on the wider trends observed. It is to these regional trends that I will now turn my focus.

The result of collecting data from the sources outlined above is a data set of over 370 recorded monuments, at over 90 cities. When working with such data at the regional scale, the trends or patterns identified depend to a large extent on the ways in which the data are categorized, manipulated, and visualized—ask a different set of questions, or approach the data from a different angle, and a new or contradictory conclusion can emerge. In the following discussion, I consider first the chronological and geographic distribution of monuments before turning to their functional characteristics. Some basic observations on monument distribution at a regional level are tied into wider questions of civic origins, administrative status, and urban wealth—that is, the process of monumentalization more generally.

Chronological developments

Mapping monumental construction projects by chronological period is limited to the century-by-century analysis that characterises Jouffroy's earlier data, although occasionally more detailed dating can be gleaned. There are relatively few monuments recorded in the earliest periods of Roman control—noted by Jouffroy in a single chronological bin for the 1st century BCE and the 1st century CE—and the distribution of these earliest monuments shows a marked preference for sites along the coast (Figure 40). That the earliest monumental construction occurs along the coast, in the port cities following Lassère's functional distinction, is unsurprising. The discussion on foundation (Chapter 3) and growth (Chapter 4) shows the importance of the coast in the earliest phases of Roman control; a tendency for the same cities that are expanding most

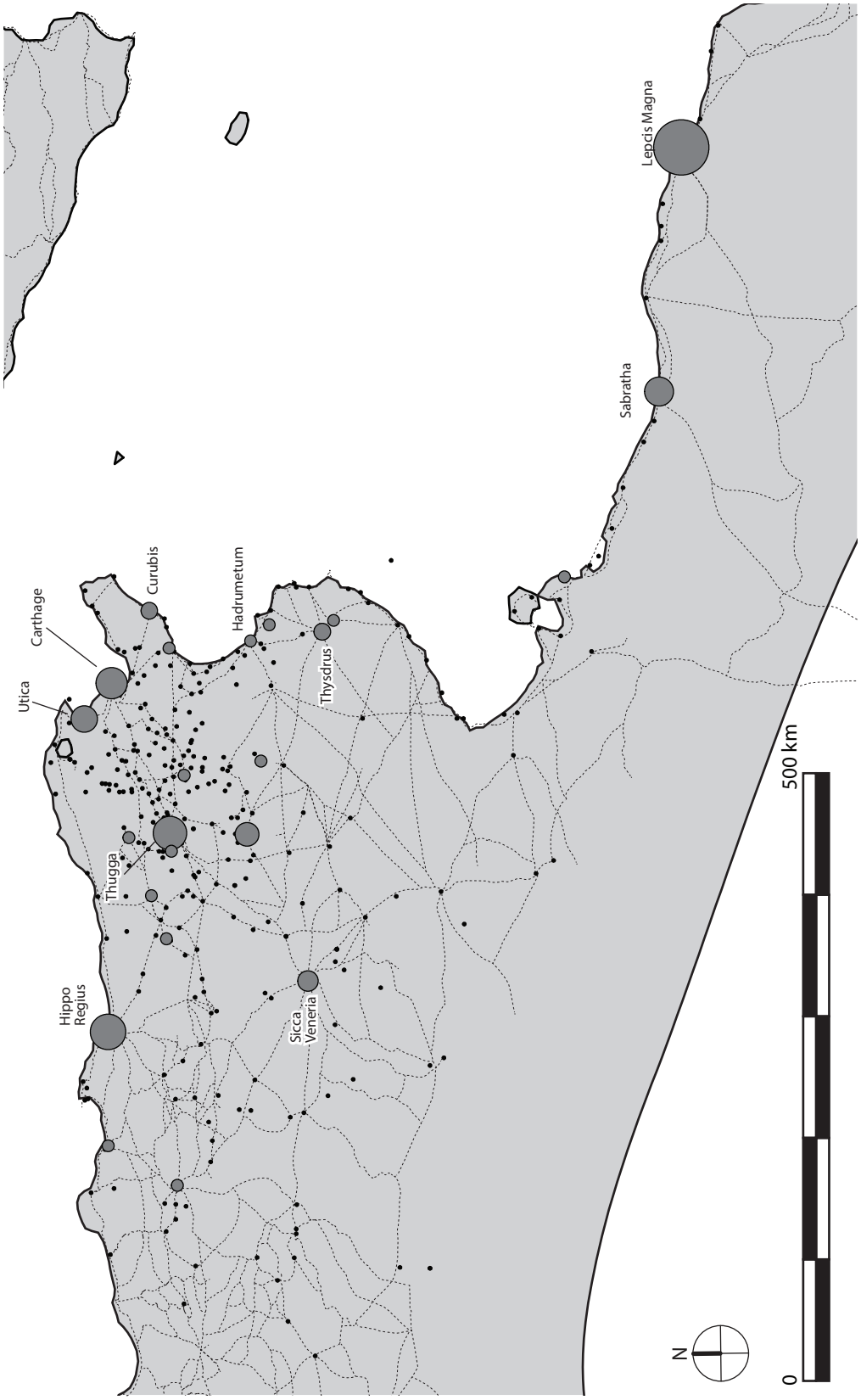


Figure 40. Map of monumental construction projects in the 1st century CE. Point size in this and the following figures corresponds with total number of monuments.

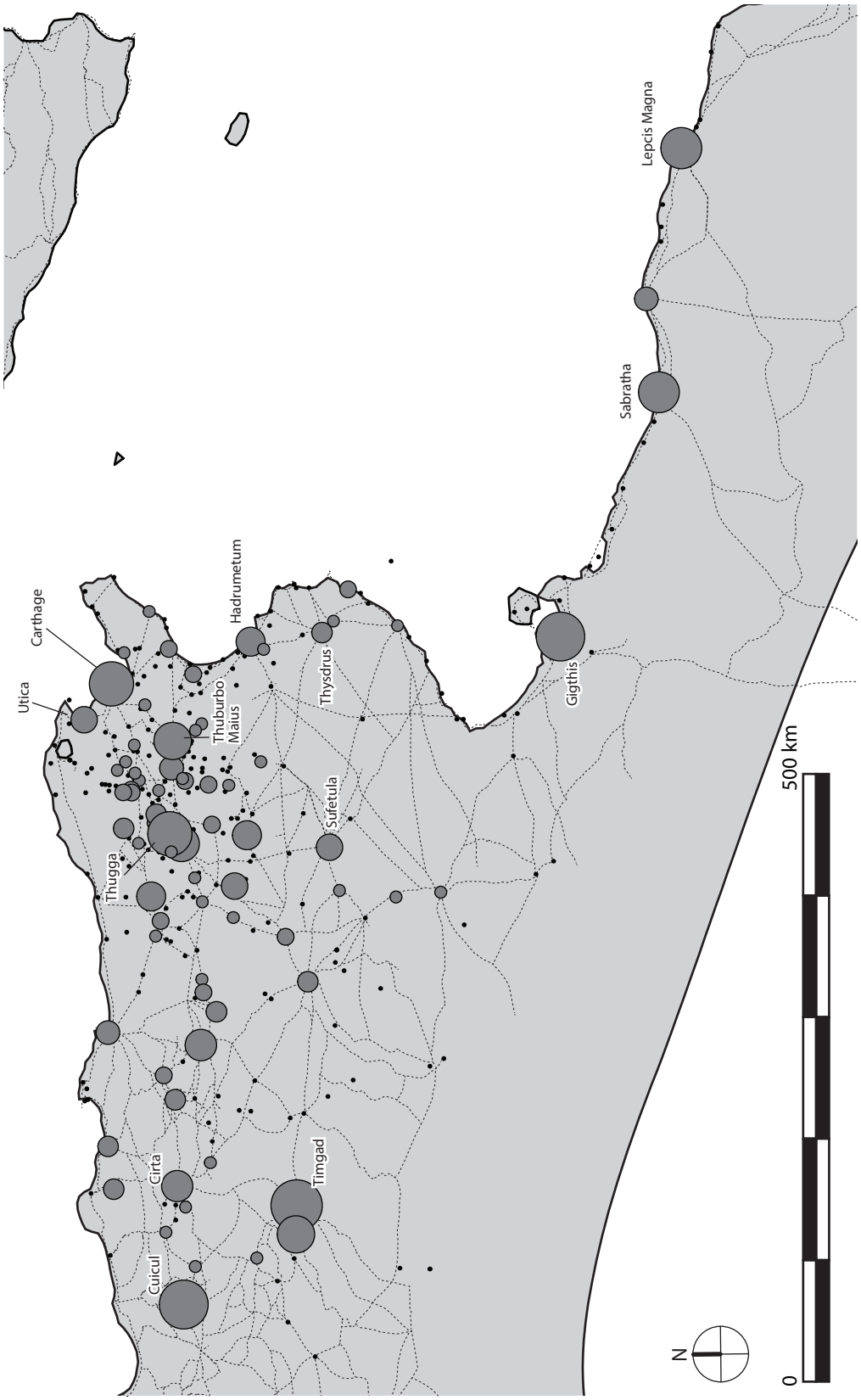


Figure 41. Map of monumental construction projects in the 2nd century CE.

rapidly or receiving new populations of Roman colonists to also be the first to feature new, ostensibly Roman monuments should be expected. Extensive building is noted at sites such as Lepcis Magna, Carthage, and Utica. Yet there is also construction at less obvious ports, such as Curubis on the Cap Bon where fortifications were constructed, complete with towers and defensive ditches (Jouffroy 1986, 411).

The almost total absence of cities inland with new monuments in the first centuries BCE and CE, in contrast, is at least to some degree a question of the available evidence; note that the non-coastal city with the most evidence from this period, Thugga, is also a site that has received considerably more scholarly attention than most. The overall pattern for earlier monumental construction on the coast remains striking nonetheless, and was noted by Jouffroy in her earlier work (Jouffroy 1986, 449).

In the second century there is a much wider distribution of monumental projects, particularly inland (Figure 41). This is most obvious in the valley of the Medjerda, where the first century concentration of monuments at Thugga is joined by construction projects at a number of sites, including six new monuments at Bulla Regia (Jouffroy 1986, 410); 13 monuments dominated by the construction of Winter Baths and the restructuring of the forum at Thuburbo Maius (Ben Akacha 2011b; Jouffroy 1986, 418; see below); and nine new monuments, overwhelmingly temples, at the neighbouring site of Mustis (Jouffroy 1986, 414, 439). The Numidian frontier also features heavy monumentalization, particularly at the new foundations of Thamugadi and Cuicul, or the legionary fort and later town of Lambaesis. These new inland centres of

monumental construction are paralleled by continued activity at most coastal sites to create an impression of the heaviest investment in Roman monuments at positions of prominence in regional networks, at towns and cities relatively evenly distributed across the North African territory as a whole and often at the crossroads of multiple major roadways. I have argued elsewhere that the greatest numbers of monuments, particularly those associated with entertainment, occur at regional centres (Dufton and Fentress, forthcoming). The overall numbers of monuments support and expand on this claim, and cut across sites of all stripes within Lassère's purely functional categorization. Or, to approach the results from another angle, these regional distributions suggest that although many settlements achieved a title commensurate with a degree of urbanity during the first centuries of Roman rule, far fewer received the monumental urban furniture we might expect of a Roman city during this same period.

Functional distinctions

We can see a different set of patterns by turning from chronological distinctions to functional ones. What does North Africa look like if one maps the total figures according to the functional categories I establish above (Figure 42)? First, there is an obvious predominance of ritual buildings at most sites with monuments recorded, and across the region as a whole. That ritual buildings make up almost half of all monuments has already been noted by Jouffroy (1986, 400) and repeated by Laurence *et al.* (2011, 165–8). The geographic distribution of monuments only reinforces this impression, particularly at many sites in the Medjerda valley where no other monument

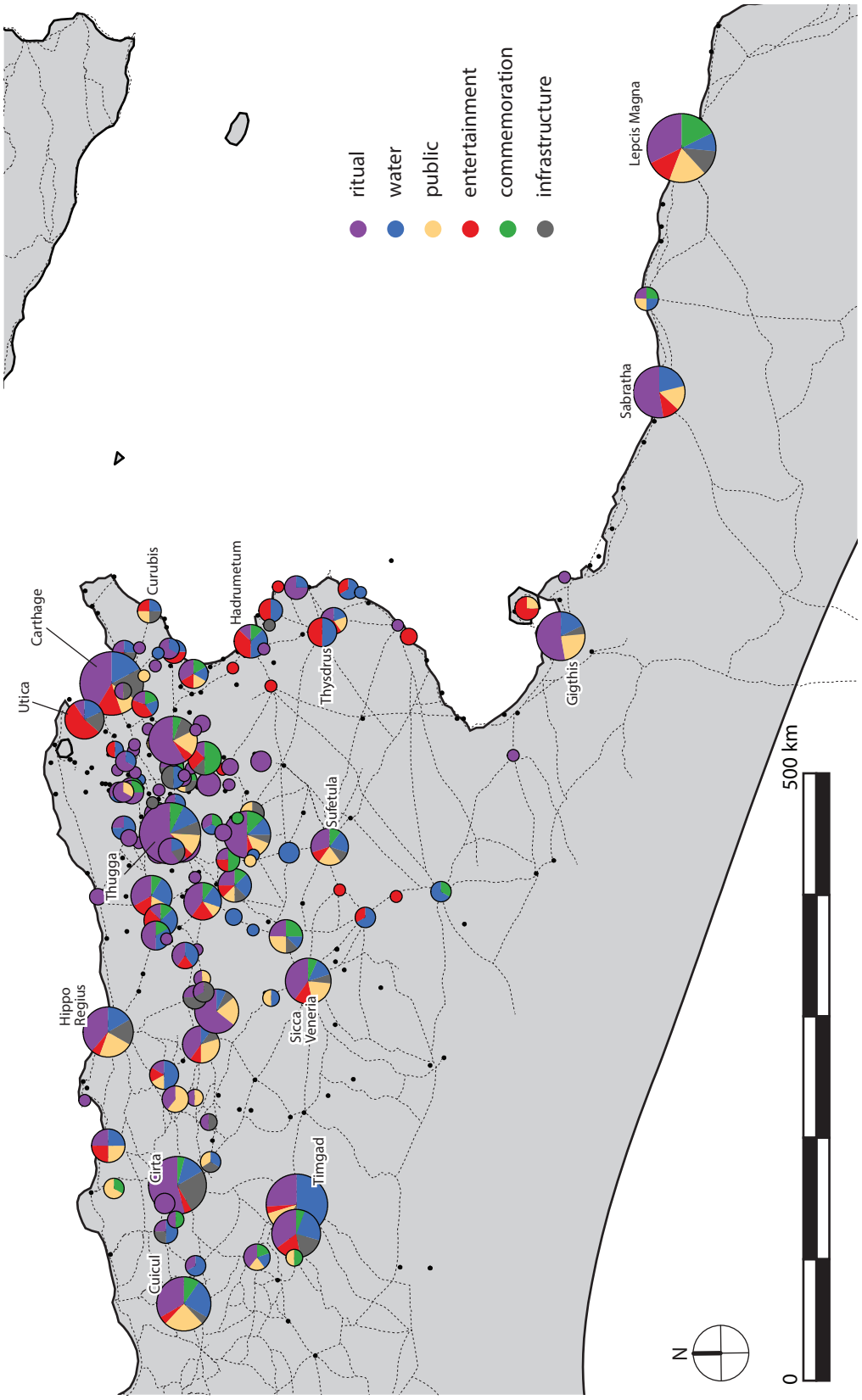


Figure 42. Map of monuments showing functional categories.

types are recorded. The importance of this ritual topography to North African cities, and Roman cities more generally, has already been covered in better detail and with greater insight than I wish to offer here (Saint-Amans 2004; Leone 2013).

Yet the overwhelming numbers of ritual monuments constructed in the first centuries of Roman control are also problematic for questions of monumentalization more broadly. There is a substantial difference between the resources needed for the construction of a small sanctuary or shrine to a deity, such as the sanctuary to Neptune alongside Iron Age burials at Thugga (Saint-Amans 2004, 344–45) or the numerous shrines to Ba'al Saturn on the highest plateau at Tiddis (Berthier and Leglay 1958), as compared to the erection of a *capitolium* of the scale and grandeur of that observed in the forum at Thugga, to give but a single example. These differences also have drastically varying impacts on a city's inhabitants, the former shrines replacing or repackaging local traditions and co-existing alongside earlier small-scale religious practices, and the latter representing a complete re-presentation of the religious topography of a city. These inconsistencies in scale are far beyond the differences in scope we see with other monumental projects, and make it difficult to understand connections between religious monuments and regional prominence or wealth. Couple this with the omnipresence of temples even at sites of tiny size or questionably urban status—lesser-known sites such as Alma or Aradi have recorded temples, without any other notable remains or record of civic status (Jouffroy 1986, 409)—and it becomes evident that, while the construction of ritual spaces played an outsized role in the monumental aspirations of ancient inhabitants, more meaningful ideas on the process

of monument construction can be gained by temporarily removing this broad range of ritual buildings from the equation.

We can ask different questions by looking at the distribution of monuments of the various functional categories after setting ritual buildings aside. In the first centuries BCE and CE there is a marked and somewhat surprising absence, given the importance ascribed to the aqueduct or baths in ideas of 'Roman' urbanism, of construction projects associated with water—the only exception is the construction of an aqueduct at Thysdrus (Jouffroy 1986, 424) (Figure 43). Instead we see the dominance of other construction projects often typified as 'Roman' or 'Classical'—a theatre and amphitheatre constructed at Utica (Lachaux 1979, 147–53); a new forum and market built at Hippo Regius (Suméra 2005; Delestre 2005); another market and the paving of the forum at Thugga (Aounallah 2010a, 28; C. Poinssot 1958, 38). The relatively small number of total monuments recorded during this period, particularly once ritual buildings have been removed, makes it difficult to infer much more from their overall distribution.

The importance of water is reinforced in the second century with the widespread construction of aqueducts, baths, cisterns, or fountains (Figure 44). Thébert, for example, records no less than 20 baths dating to the period from Trajan to Commodus, including the East and North Baths at Thamugadi (2003, 230–1, 235–6), the Baths of the Capitol and South Baths at Cuicul (2003, 194–8), and the Winter Baths at Thuburbo Maius (2003, 170–1; see below). The construction of baths was often associated with

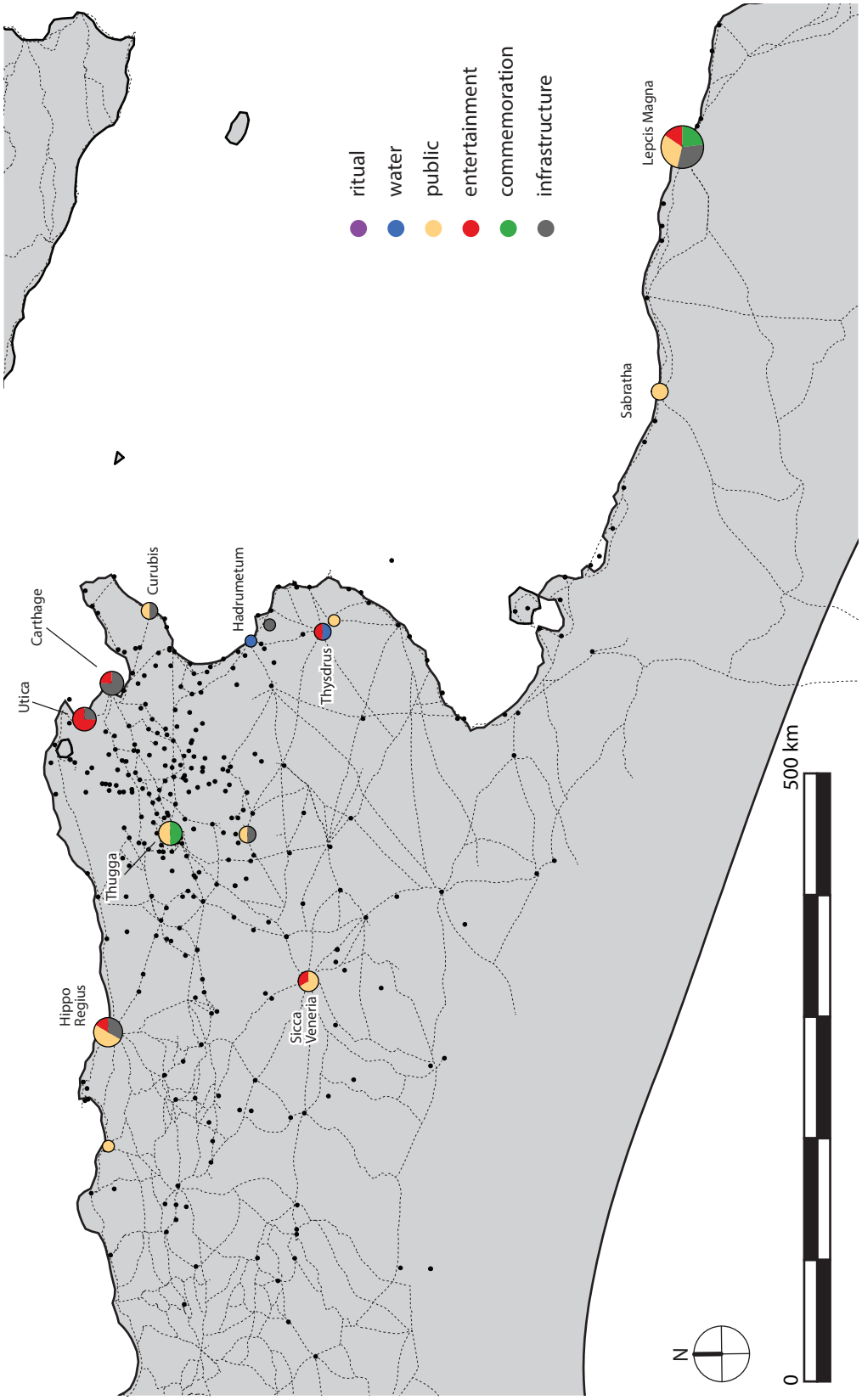


Figure 43. Map of monuments by functional categories, excluding ritual, constructed during the 1st century CE.

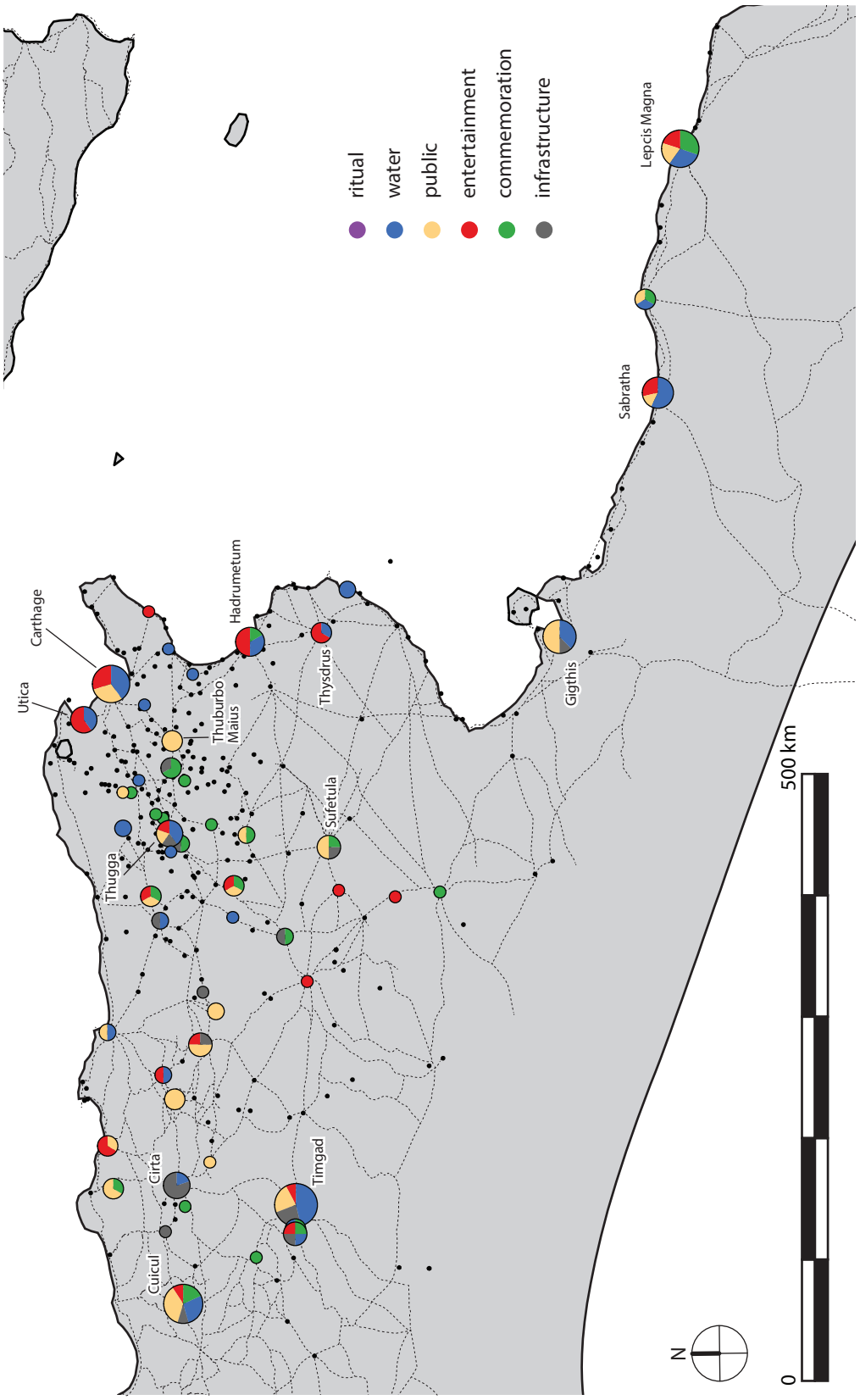


Figure 44. Monuments by functional category, excluding ritual, constructed during the 2nd century CE.

monumental works to bring water into the city and distribute it to citizens, such as the Zaghouan aqueduct at Carthage (Jouffroy 1986, 411; Wilson 1998, 79–81). Entertainment structures also feature heavily from the 2nd century onwards, their relatively even scattering and rare occurrence at neighbouring towns evoking their importance for regionally prominent centres. Beyond these straightforward monumental concerns, there is also an interest in commemorative works, particularly in the Tunisian Tell. Arches and monumental gates are noted at 22 sites in this period, including arches at some sites—such as Capsa in Proconsularis or Arsacal in Numidia—with no other recorded infrastructural or public works (Jouffroy 1986, 421, 427).

The long-term contexts of regional monumentalization

Understanding these chronological and regional patterns requires us to situate Roman construction projects within longer urban traditions, and to move from monuments to monumentalization as one of many competing urban processes. It has been suggested elsewhere that after the reign of Augustus the monumental development of cities was shaped less by imperial forces and more by local needs (DeLaine 2008, 115). If we accept this claim, the development of different functional categories in North African cities gives us clues to the desires of those living within them. These preferences are especially telling in pre-Roman sites given the at-best moderate influx of Roman colonists I have discussed in Chapter 3.

The preference for water is reasonably straightforward, particularly inland where summer temperatures regularly hit ranges above 30° C and monuments providing

citizens with access to fresh water or bathing facilities are an obviously popular choice even if, somewhat surprisingly, we have little evidence for monumental projects tied to water until the end of the 1st century CE.

This focus on urban water supply also continues from pre-Roman practices. A Numidian sanctuary constructed at what was thought to be the source of the Medjerda at Thubursicum Numidarum springs to mind—with my apologies for the unavoidable pun here—as an example of a pre-Roman monument, later reconstructed during the 1st century, tied to water provision (Gsell 1914, 85–98). The sits-baths recorded in most residential contexts at Kerkouane are a similar example of the importance of bathing to North African populations (Fantar 1984), and also to Punic populations in the western Mediterranean at sites such as Selinunte (Helas 2009). Drawing strong conclusions on the preference of citizens for expressing fealty to Rome through the construction of monuments with such practical benefits, therefore, is misguided (Laurence *et al.* 2011, 224; Hingley 2005, 79–82).

There is also a focus on commemorative monuments in North Africa (Laurence and Trifilò 2015, 110) that is arguably tied to the pre-Roman origins of many settlements. Only three port sites (c. 4% of all ports, or c. 12% of ports with recorded monuments) feature recorded arches or gate inscriptions, whereas over 20 cities (c. 7% total sites, c. 21% of sites with recorded monuments) had such construction projects inland (Jouffroy 1986, 446). Most of the latter are in the area of the former Numidian kingdoms, and continue a much longer tradition of monumental commemoration. At Thugga, for

example, tower tombs were constructed to both the north and the south of the Numidian city during the 3rd century BCE, the most well-known being the celebrated Mausoleum of Atban (Crawley Quinn 2013). Two arches, both no longer surviving, are attested in the epigraphic record from the first century CE, dedicated to Tiberius and Claudius (Jouffroy 1986, 419). Two additional arches of the third century CE fall outside the chronological scope of my work, but are worthy of mention here. A similar connection can be made between the Punic tower mausoleum and later dedicatory arch to Trajan at Mactaris (Ben Akacha 2011a; Moore 2007).

The largest arches are almost exclusively dedicated to the various emperors, and so represent a slightly different phenomenon than earlier tower burials which are both royal and elite more broadly (Moore 2007, 78–79). Yet if we expand this picture to also consider gates, following Jouffroy's example, the continued importance of commemoration is more convincing. Inscriptions do record the dedication of various gates to the city or the forum by local elites as, for example, at the gate of Iulius Crescens at Cuicul (Jouffroy 1986, 427). It is possible that elites in the Numidian heartland turned to an improvisational use of Roman urban ideas, such as the gate, to continue an earlier tradition of commemoration.

A final point relates to regional patterns of monumental construction. This is the relationship between euergetism, and changes to civic administrative status. I have already discussed the many different civic classifications assigned to the cities of North Africa and their associated implications for citizenship rights. Although the distinctions

between the civic statuses of *municipium* or *colonia* that I outlined in Chapter 2 can be confusing to both modern scholars and Romans alike, the active pursuit of a bump in status was a significant factor in monumental building programmes, and new construction projects tend to cluster around the periods immediately prior to and following a promotion. As I discuss below at the city of Thuburbo Maius, for example, the promotion of the city to *municipium* by Hadrian was directly followed by the renovation of the forum and the construction of a new temple to Mercury to its southwest (Ben Akacha 2011b, 92–93), and a further burst of activity surrounds the promotion of the city to *colonia* under Commodus (Ben Akacha 2011b, 96–100). Changes in municipal status were not just passively awarded by benevolent emperors, in other words, but actively solicited by local citizens, and particularly connected to the provision of the appropriate urban monuments (Gascou 1972, 66).

The relatively coarse dating of the regional epigraphic and archaeological data makes it difficult to determine, across North Africa as a whole, the exact number of monuments constructed before or after a city received a civic promotion. We can, however, compare the distribution of monuments to those sites receiving a status upgrade in a given century (Figure 45). All but one of the cities with the most recorded and securely dated first- or second-century monuments received a promotion to *municipium* or *colonia*; this includes all cities receiving five or greater construction projects across this period. The lone exception, Thugga, was promoted to *municipium* in the early third century under the Severans; the city presents an exceptional case in many ways, and will feature as a case study in Chapter 6.

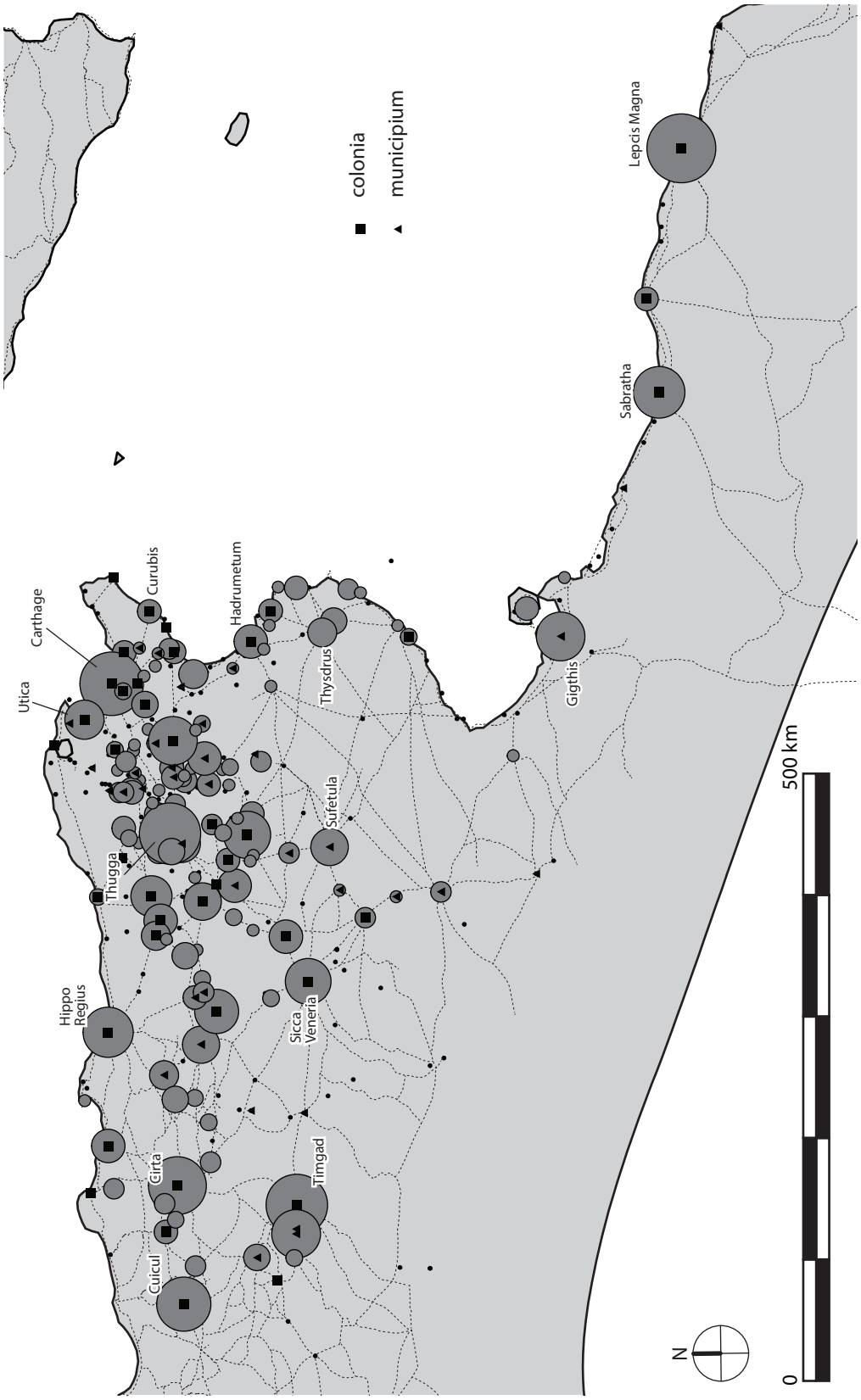


Figure 45. Map of monumental construction and civic promotions.

The monumentalization of these towns must thus be considered in connection to their growing wealth, status, and regional prominence. The costs of monumental projects could be met by a combination of contributions: from local elites, grants of funds from emperors taken from the tax base of the city, tax breaks, or imperial authorization to collect new taxes for construction works (MacMullen 1959, 210). The costs of entertainment structures, some of the most expensive of all building types, are informative. The reasonably modest theatre at Madauros reportedly cost 375 000 sesterces, a sum comparable to the 400 000 sesterces spent for the construction of the more elaborate theatre at Calama (Gsell 1922b, 81). Hosting gladiatorial games or theatrical productions at such venues was also costly—a sum of 50 000 sesterces is noted for a single event at Carthage, although this must be above the average cost (Duncan-Jones 1962, 64). Allowing for an average fortune of 50 000 – 60 000 sesterces for ruling *decurions* in North African towns (Duncan-Jones 1963, 169), and notwithstanding any potential contributions from the imperial household, the construction and maintenance of monumental infrastructure must be seen as a considerable financial commitment from a city and its citizens. The growing number of large, ornate houses appearing from the late 2nd century further points to an increasing influence of the urban elite (see Bullo and Ghedini 2003). I touch upon the impact of this wealth on the renewal of urban spaces, from the perspective of both elite and non-elite populations, in Chapter 6. For now I conclude this discussion of monumentalization and regional prominence by stressing the interplay between monumental building projects, earlier urban traditions, increasing local wealth, and changes to civic status.

A century of monumental construction at Thuburbo Maius

The interplay of monumentalization and civic prominence identified at a regional scale must also be understood according to its local, more human impacts. Monument choices are tied to local traditions, and reflect the growing wealth or importance of some cities, but who is deciding on or paying for these works? And how do monumental construction projects change the nature of a single city? A short biography of the city of Thuburbo Maius sheds light on these questions. This town, founded as early as the 5th century BCE and achieving a degree of regional importance by the end of the 2nd century CE, saw the construction of a number of modest monuments—including as many as four public baths, an amphitheatre, a *capitolium*, and six other temples or sanctuaries. Examining these monuments in detail reveals little evidence for a comprehensive plan for the city's monumental landscape; instead, the impression is of a city constructing monuments on a case-by-case basis. Furthermore, I argue it was the process of monumental construction, and not just the finished monuments themselves, that had the greatest impact on urban populations.

Geographic overview and past excavations

The city of Thuburbo Maius is located approximately 50km to the southwest of Carthage, within the fertile valley of the Miliana. The site, roughly 40 ha in size, is positioned on a circular series of hills sloping gently down to the river and the modern city of El Fahs. Thuburbo Maius occupies a location at the heart of an area densely occupied in antiquity, and on a number of important travel routes. To the northeast, a road passes from the ancient city of Simmingi (Smindja) by Uthina, before arriving at

Maxula; to the west, the route runs from Thugga to Avitta Biba and Thaborra (Feuille 1950, 79). Roads passing through the south continue on to the heights and cities such as Lemta, Seressi, and Mactaris (Figure 46).

The site was identified by Charles Tissot during his travels in the region in 1857, when he was fortunate enough to discover an inscription noting the name of the town when investigating the spoliation of the site for construction of a nearby bridge (Tissot 1884–88, 545–8), and the ruins were revisited throughout the late 19th century for the retrieval of texts. Excavations at the city began in earnest in 1912, beginning with the open area thought to be the forum (Sau 2000, 602). These works continued for a number of years—even relying on German prisoners for labour during the 1914 and 1915 seasons (Feuille 1950, 80)—and resulted in a number of publications on the

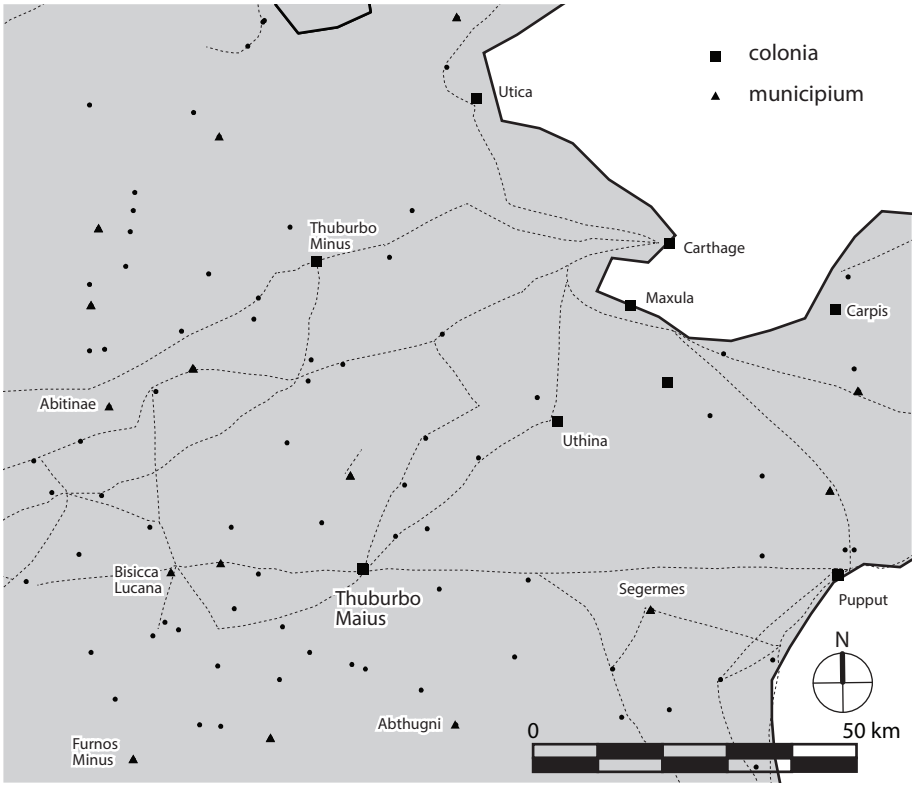


Figure 46. Map showing Thuburbo Maius in its broader regional context.

monumental structures of the city (Merlin 1922; Poinssot and Quoniam 1953), on statues or other objects recovered (Merlin 1915), or on epigraphic discoveries (Desanges 1959; L. Poinssot 1940). Further excavations were completed in the 1950s under the guidance of A. Driss of the Bardo Museum (Sau 2001, 607). Two short visitor guides to the site also date to this period (Feuille 1950; Lézine 1968b); these resources remain two of the most comprehensive works on the site as a whole (see Sau 2001 for a full account of the first century of archaeological discovery).

Thuburbo Maius remains lesser-known than other comparable Tunisian cities, such as Thugga, yet despite its lower profile the site still features with relative regularity in more recent archaeological scholarship and even sees occasional fieldwork. The mosaics of the site have been extensively studied and published, most notably in the four-part, second volume of the Corpus des Mosaïques de Tunisie (Alexander *et al.* 1980; Ben Abed-Ben Khader *et al.* 1985; Ben Abed-Ben Khader 1987; Alexander 1994) (Figure 47). Research by Wilhelmina Jashemski, the specialist in Roman gardens responsible for the excavation of countless sites in the shadow of Vesuvius, recorded details of planted, productive gardens in both the house of Bacchus and Ariadne, and the East Temple (Jashemski *et al.* 1995; Jashemski 2013). These results, combined with the presence of an oil mill in the house in question, have resulted in further studies of the productive capacity of households in the town (Bermejo Tirado 2010; Guizani 2011). Workshops for the production of the various mosaics have also been subject to scholarly discussion (Ben Abed-Ben Khader 2001), as has the evolution of domestic space more generally (Novello 2002; Bullo and Ghedini 2003, 211–56). Epigraphic



Figure 47. Mosaic of the boxers from Thuburbo Maius installed at the Bardo Museum, Tunis.

materials have been examined and re-examined to answer questions of ritual practices (Kleijwegt 1994), and of the euergetism responsible for the ongoing monumentalization of the city (Ben Akacha 2011b).

Municipal history

One particularly contentious question surrounding the city of Thuburbo Maius is the nature of municipal administration at the town in the centuries following the Roman conquest. The city was founded at some point in the pre-Roman period—the name, Thuburbo, shares similarities with a number of other indigenous foundations such as Thubursicum Numidarum, Thubursicum Bure, Thuburnica, Thubactis, or the nearby Thuburbo Minus (Feuille 1950, 79; Lézine 1968b, 4). A Carthaginian influence at the city

is likely from around the 5th century BCE, given its close proximity to Carthage proper, even though the only remains from before the Roman conquest are a handful of architectural fragments and sculptural elements (Lézine 1968b, 4). To date there has been little systematic excavation down to pre-Roman levels. In the absence of archaeological materials from the earliest occupations at Thuburbo Maius the exact date of this foundation is unknown.

The early city was managed by appointed *sufetes*, following a system of municipal administration common amongst many cities with Punic origins (Ben Akacha 2011b, 92). There has been some debate, however, as to whether a colony of veterans was also established at the city under Augustus in 27 BCE, living alongside a *pagus* of Carthaginian citizens. Early writings on the city identified these two parallel communities, based primarily on an abundance of Carthaginian names appearing in epigraphic materials (Quoniam 1959; 1960). According to this argument, the two communities lived side-by-side until they were eventually united at the end of the 2nd century CE.

This conception of civic evolution has since been correctly challenged. For one, the colony established at Thuburbo is now identified as the city of Thuburbo Minus (modern Tébourba), rather than Thuburbo Maius (Lézine 1968b, 5). Furthermore, Gascou rightly states that epigraphic references to the local Arnensis tribe or Carthaginian citizens can equally imply the presence of these populations in the city without the necessity of the municipal distinction of an independent *pagus* (Gascou

1972, 72). A much more likely explanation, and one largely accepted in more recent scholarship, is that the city continued to be governed as a *civitas peregrinus*, a foreign town, until a series of promotions granting broader Roman citizenship in the second century CE.

We know for certain that the city was promoted to the status of *municipium* under Hadrian after his visit to the area in 128 CE, and eventually achieved the status of *colonia* under Commodus in the later 2nd century (Ben Akacha 2011b, 92; Desanges *et al.* 2010, 256–58; Sau 2000, 608; Gascou 1982, 203–4). A particular prosperity for the site arose around the time of these promotions, resulting in numerous construction works. The overall area of the city is between 35 and 40 ha, and estimates for the total population fall within the range of 8000 to 10000 inhabitants at its height in the late 2nd and early 3rd centuries CE (Lézine 1968b, 7; Wilson 2011, 184).

Urban development

The urban development of Thuburbo Maius—particularly the construction of the city's various monuments—is best understood in direct relation to the changes in municipal status outlined above. I now turn my focus to the various monumental construction projects of the city.

Although little is known of the earliest settlement, the highly irregular plan of the city's core reflects to some degree the configuration of pre-Roman occupation, with later Roman development following the alignments of earlier structures and spaces

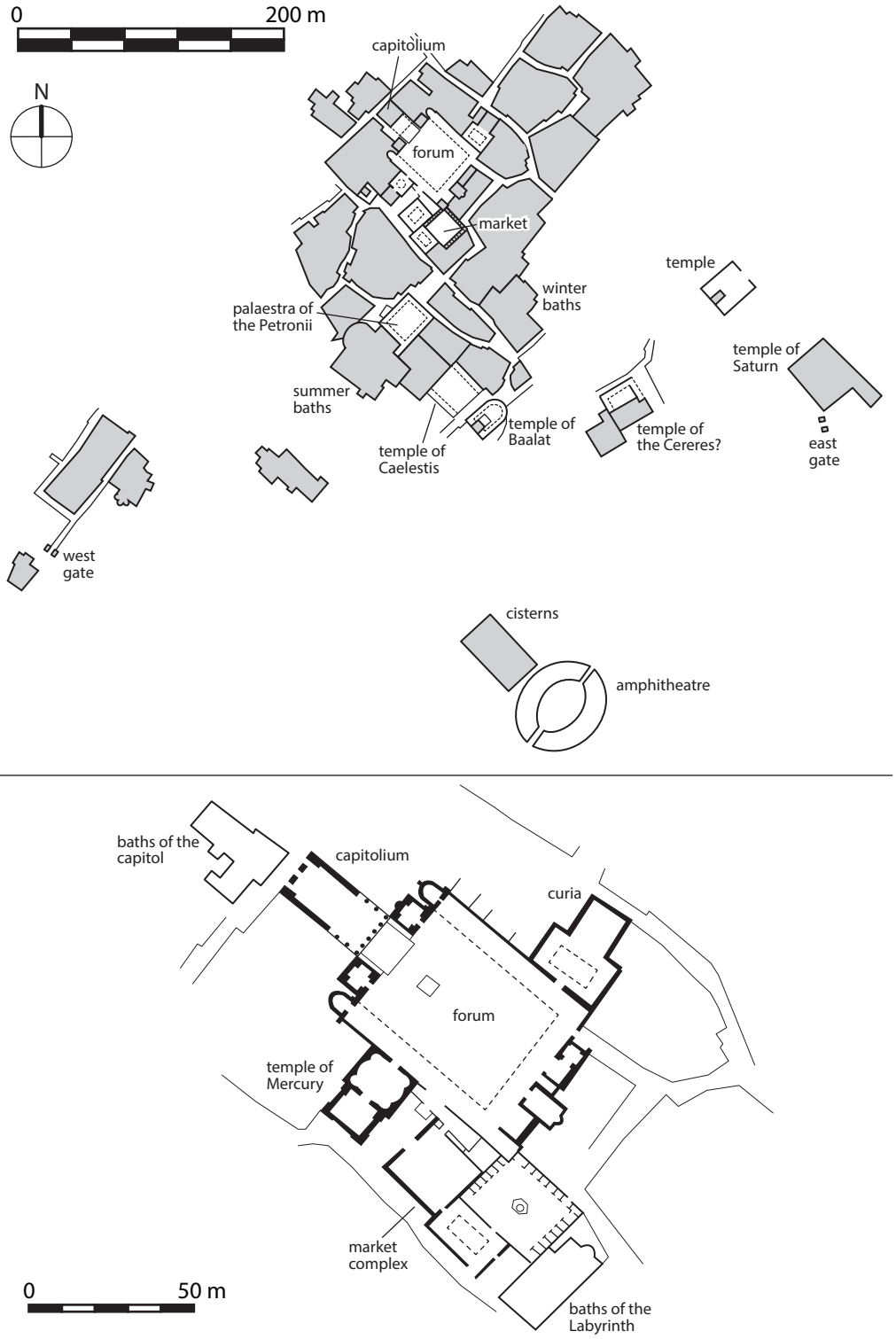


Figure 48. Plan (above) and forum detail (below) of the city of Thuburbo Maius at its greatest extent.

(Figure 48). Residential blocks in the southwest, adjacent to what Lézine somewhat misleadingly calls the western gate, show much greater regularity and may represent a reasonably small Roman expansion from the core of the earliest settlement. We should not draw overly drastic conclusions from a city plan alone; in one example playing particularly fast and loose with chronology, Feuille goes so far as to suggest the narrow and winding streets of the city have more in common with the Arab quarters of Tunis than truly Roman settlements, such as Thamugadi (Feuille 1950, 83). The relatively modest nature of many of Thuburbo's monuments was also swayed by the lack of high quality building materials in the immediate vicinity of the settlement. The nearest stone for building, located some 2 km from the city, was a type of yellow limestone that is difficult to work with any precision and presented serious limitations to larger building projects (Lézine 1968b, 7). As a result concrete blocks were often used as orthostats in construction—a unique take on the standard masonry type of opus africanum that used ashlar blocks as orthostats—and monuments show a heterogeneity of materials and techniques (Figure 49).

Beyond a basic recognition that the city and monuments we can see today were shaped by the pre-Roman settlement we have no direct evidence for monuments, or any other development, at Thuburbo Maius until the 2nd century CE. Instead we see a sudden burst of monumental construction following Hadrian's visit in 128 CE and the promotion of the town to *municipium* at some point in these same years immediately after this visit. Of certain date are a temple to Mercury Augustus, known from an inscription to be constructed in the ten years following Hadrian's visit (i.e. 128–138 CE),



Figure 49. Photo of opus africanum masonry using concrete in place of orthostats.



Figure 50. Capitolium (background) and market (foreground) at Thuburbo Maius, facing west.

and a temple to Frugifer dated by an inscription to the reign of Antoninus Pius (i.e. 138–161 CE), both buildings whose physical remains are unknown to us (Ben Akacha 2011b, 110; AE, 1961, 71; ILAfr, 238; AE 1915, 22). A complex alternately referred to as the town's *curia* (Feuille 1950; Ben Akacha 2011b) or a temple to peace (Lézine 1968b) is on a slightly different alignment than the forum and at a slightly higher elevation. Lézine uses these clues to suggest a date earlier than that of the forum (Lézine 1968b, 15); in the absence of any more secure dating, this hypothesis is more reasonable than a later alternative. This places the construction of the temple/*curia* on a par with a number of other temples constructed following Hadrian's visit and sees monumentalization culminating in the completion of the forum and *capitolium* in 168 CE.

The biggest building project of the mid-2nd century was the creation of the city's forum, most likely occupying the space of an earlier market or plaza (Figure 50). The forum measures approximately 49 m and is square in plan, with a portico running along three sides and the fourth flanked by the city's *capitolium*. The overall area, entered from the southeast by the so-called rue de l'Aurige and from the south by a street—subsequently blocked—alongside the later Temple of Mercury, is comparable in size, shape, and roughly contemporary in date to the original forum of Cuicul (Gros 1990). The city's *capitolium* flanks the forum on the northwestern side, a standard hexastyle construction with six columns along the facade and two returning on either side. It was entered from a set of steps up from the forum (Feuille 1950, 83–85). An inscription decorating the portico of the forum mentions the reigns of Marcus Aurelius and Commodus, giving a broad range from 161-192 CE for its construction. The dedication of the *capitolium* in

168 CE, however, helps us to narrow this window considerably (Ben Akacha 2011b, 110; IlTun 699), as the temple and forum share a single alignment and form a cohesive plan they both were probably conceived of and constructed in short succession.

A few other projects can only be roughly dated, and so their relationship to the town's promotion remains speculative. To the south both a small sanctuary dedicated to Saturn, as well as the temenos of a larger temple to Caelestis which contains it, date to the 2nd century, and thus may be roughly contemporary to the works at the forum (Ben Akacha 2011b, 110). A temple to Saturn overlooking the city from a high point in the east—almost certainly replacing an earlier temple to Ba'al, as we see at sites such as Thugga (Saint-Amans 2004, 348–59)—also can only be broadly dated to the first half of the 2nd century, built either prior to or as a result of the city's promotion. A small sanctuary to Aesculapius, covered by the later construction of the Palaestra of the Petronii and known from a detailed inscription of the rituals of purification required of those wanting to enter (Kleijwegt 1994), further adds to what has become a lengthy list of 2nd century religious construction projects.

These mid-2nd century religious projects gave way to a new focus for the monumental works at the end of the century and surrounding the promotion of the site to *colonia* under Commodus. A large market complex was constructed shortly after the rank of *colonia* was achieved, paired with the construction of a new portico surrounding the forum in 190–191 CE (Ben Akacha 2011b, 110; IlAfr 265; AE 1995, 1654). The market consisted of three courtyards, two with porticoes, one facing the street to the west and

the second to the south; the third courtyard was bordered on three sides by boutiques and contained a central well (Lézine 1968b, 16) (see Figure 48). As many as three bath complexes were also constructed during this period. The largest, the Winter Baths, were constructed either in the second half of the 2nd century (Lézine 1968b, 18) or the beginning of the 3rd century (Ben Abed-Ben Khader et al. 1985), and were entered from the rue de l'Aurige running from the forum to the northwest. They were only modestly decorated (Thébert 2003, 170–71). Two smaller baths on either side of the forum, that of the Capitol to the west and of the Labyrinth to the southeast, also date to the late 2nd—as determined on the basis of their stratigraphic position after the construction of the forum yet before the dedication of the new markets or Temple to Mercury, below—and thus correspond to the period of the city's promotion (Ben Akacha 2011b, 96–100; Thébert 2003, 172–74).

The city continued an intense process of monumentalization after its promotion to *colonia* and into the 3rd century. A second temple to Mercury was constructed on the southern side of the forum, dated by its dedicatory inscription to 211 CE (Ben Akacha 2011b, 110; CIL VIII 12366). The temple would have been entered directly from the forum, with visitors passing through a small, round, and porticoed courtyard before entering a square cella. To the south of the forum the elaborate Palaestra of the Petronii was dedicated in 225. Ben Akacha (2011b, 106–7) argues convincingly that this project was contemporary with—and not later than (as Feuille 1950, 89; Lézine 1968b, 19)—the construction of the summer baths, and dates both to the early 3rd century. The amphitheatre, placed at the southern outskirts of the city, is no earlier than the same

period; the reuse of two inscriptions from the late 2nd century establishes a *terminus post quem* for the amphitheatre's construction (Lachaux 1979, 127–28). An early- to mid-3rd century date compares to other entertainment buildings in the vicinity, most notably the amphitheatre at Thysdrus constructed in 238 CE (Lachaux 1979, 140). The addition of a regular, orthogonal residential neighbourhood to the southwest of the city centre beginning in the late 2nd century CE and the construction of a number of elite houses in the 3rd and 4th in this same area centuries mark a parallel renewal of residential life (Bullo and Ghedini 2003, 211–56; Leone 2007, 49; see Chapter 6). While the works of this period fall outside the chronological scope of my work, it is nonetheless worth noting how the trajectory beginning in the early 2nd century continues unabated throughout the Severan dynasty.

The many impacts of monument building

We can raise a number of points from the monumentalization of Thuburbo Maius. First, and most importantly, the history of construction from at least the early 2nd century CE well into the 3rd century CE and beyond shows the ever-changing nature of the monumental plan of the city and resonates with the chapter's opening vignette of the Mall in Washington. Individual monuments or complexes, such as the markets, followed the rudimentary rules of Roman architecture—as much as these rules can be said to exist, given the immense variety of monumental forms in the provinces. Yet there is little reason to suggest the collective monumentalization of the town was following any

sort of pre-determined order or comprehensive plan, to borrow a term from urban development of the early 20th century in America.

There are a number of awkward architectural choices that lead to a conclusion that the building programs were rather haphazard (see Figure 48). The forum is constructed off-axis to the existing *curia*, and on a lower elevation; the southern entrance to the forum is itself off-centre and off-axis to both the forum itself and the later markets, likely respecting an earlier entrance to an open market at the same location. The market annex, constructed only 30-odd years after the forum, is again on a different alignment and rather clumsily abuts the forum's southeastern corner. The Winter Baths were completed in the late 2nd century, only to be dwarfed by the Summer Baths less than 100 m to their southwest less than 30 years later; this is perhaps tied to a lack of reliable, year-round water supply at the former (Feuille 1950, 93). Of course not all Roman towns need to follow a rigid programme of perfectly articulated temples, plazas, and public buildings—indeed most do not. The overwhelming impression of the process of monumentalization at Thuburbo Maius remains, nonetheless, one of decisions taken on a monument-by-monument basis.

Given the piecemeal process by which the city was assembled, there is thus no great benefit in treating the monumental form of the city as any sort of static whole, particularly in the 1st and 2nd centuries CE. We must then, instead, look at Thuburbo Maius as a work constantly in progress, leading to the vital question: what are the factors contributing to this ongoing monumentalization? Civic status and the favour of

various emperors was certainly a contributing factor to the city's developmental trajectory. The first burst of monumental projects directly following the city's promotion to *municipium* under Hadrian were financed primarily by private citizens, from what we can understand based on dedicatory inscriptions (Ben Akacha 2011b, 110). Of these, both the temple of Aesculapius and the temple of Mercury were erected by the family of L. Numisius Vitalis, although there is some debate whether both were constructed by a single individual or the temple to Mercury constructed by a father, and that to Aesculapius completed by his son (Ben Akacha 2011b, 93; Desanges 1959, 277–78; Merlin 1962). In any case, the younger Vitalis later erected a podium at the temple of Aesculapius with a rather puzzling inscription prohibiting anyone to enter the temple barefoot, or without abstanining from women, beans, pork, the barber, and public bathing for at least three days (Kleijwegt 1994, 211; IlAfr 225). Kleijwegt argues these restrictions are tied to a combination of the ideas of Neo-Pythagoreanism and mystery cults more generally—which found a sympathetic audience across much of North Africa—drawing direct comparison to the writings of Apuleius of Madauros on the topic (Kleijwegt 1994, 218). We can only guess that the Vitalii family responsible for enshrining these cult practices at Thuburbo Maius may have shared a similar appreciation for mystery religions.

The Vitalii mark the only family providing more than a single monument, but three other private donors were active in a contemporary period, responsible for the construction of the temple to Saturn (Diophantus Bassus; IlAfr 254), the temple to Frugifer (L. Decianus Extricatus, IlAfr 238), and an excedra, statue, and accoutrements

for an unknown temple (Celer and his wife, Aufidia Quartilla, IlAfr 242) (Ben Akacha 2011b, 110). Further details of the professions of these families, or their backgrounds, are unknown and, as a result, we can say little of any competing visions of the civic landscape of the city.

The *capitolium* was funded by the *municipium* and, as such, makes a notable exception within the earliest construction projects, probably due to the building's central importance to the religious life of the city (Ben Akacha 2011b, 110; ILTun 699=ILAfr 244). The second burst of activity surrounding the upgrade to *colonia* was funded much more by the city itself, probably either as a series of grants of funds from the tax base granted by the emperor, or special taxes levied to support construction projects (MacMullen 1959, 210).

The monumentalization of Thuburbo Maius can be seen as a 'liberal Romanization' by elites tied to internal developments and in direct response to or pursuit of civic promotion (Ben Akacha 2011b, 109). This interpretation makes a solid attempt to bridge the Romanization/resistance dichotomy (introduced in Chapter 2), but I question whether invoking Romanization is even necessary. The important observation here is that the construction of new monuments at Thuburbo Maius relies on a combination of local and Mediterranean influences, and in this way the city follows the trajectory of monumental projects across most of North Africa. The extent to which this process is Romanization, liberal or otherwise, is somewhat beside the point of the longer-term development of the city.

We can also ask questions of how various monumental buildings were constructed, what materials were used, and who was providing labour for different stages of works. While there are dedicatory inscriptions for completed projects at Thuburbo Maius, there is little to indicate the length of time needed for the completion of individual works. A growing body of literature is dedicated to calculation of labour costs for various Roman monuments, particularly within the city of Rome itself (DeLaine 1997; 2000; Bernard 2012; Barker and Russell 2012). There are obvious difficulties in transferring calculations on the availability of labour or materials from the capital of the empire to a small provincial town of, at best, moderate regional importance. These studies also tend to consider monumental projects at the grandest of scales—note that the central block of the baths of Caracalla that DeLaine uses for her analysis are 2.4 ha in size, more than 5% of the total size of Thuburbo Maius. Labour studies also usually assume either brick or ashlar construction, or a combination of the above. To my knowledge there is no calculation of the labour investment involved in the *opus africanum* masonry technique, especially that making use of concrete orthostats as observed at Thuburbo Maius—although presumably this process is less intensive than strictly ashlar construction.

To create a convincing and comprehensive hypothetical model quantifying the construction times and labour force for the monumentalization of Thuburbo Maius, then, requires more words than are possible here—but a few basic observations are possible. The population of Thuburbo Maius is roughly one quarter that of Ostia (Wilson 2011, 182–84); we might then reasonably assume the workforce to also be one quarter

the size. In the case of Ostia, 350 members are noted in the *collegium* of the *fabrii tignarii*, the association of the builders, each the head of a small group of no more than five or six labourers (DeLaine 2000, 121). At Thuburbo, the number of builders would thus be no more than 525 at the very most, approximately 5% of the total population, and probably much lower than this figure. Even moderately-sized monumental projects at smaller regional towns such as this would have required the cooperation of local builders, and the labour supply at Thuburbo Maius was unlikely to be able to support more than one or two monumental projects at any given time. The construction of contemporary capitolia at many neighbouring towns of the Medjerada valley—dedications are noted at Thugga (167 CE), Numluli (170CE) and Belalis Maior (138–161CE), all within 80 km of Thuburbo Maius, whose *capitolium* was dedicated in 168 CE (Crawley Quinn and Wilson 2013, 34–35)—must have placed further restrictions on the availability of specialist labour or building materials.

Although we do not have exact construction dates or date ranges for most of the Thuburbo monuments, there are nevertheless some clues to the labours involved in their construction (Figure 51). The terracing for the podium of the *capitolium* involved building a large retaining wall that extended across the entire western side of the forum, and suggests this terracing was contemporary with the removal of soil to create a level platform on the forum's eastern side (Lézine 1968b, 10). Other mid-2nd century construction projects, a series of four temples or sanctuaries to the south and east and two more with unknown locations, most likely clustered on either side of these works. By the end of the second century work had at least begun and, in some cases, been

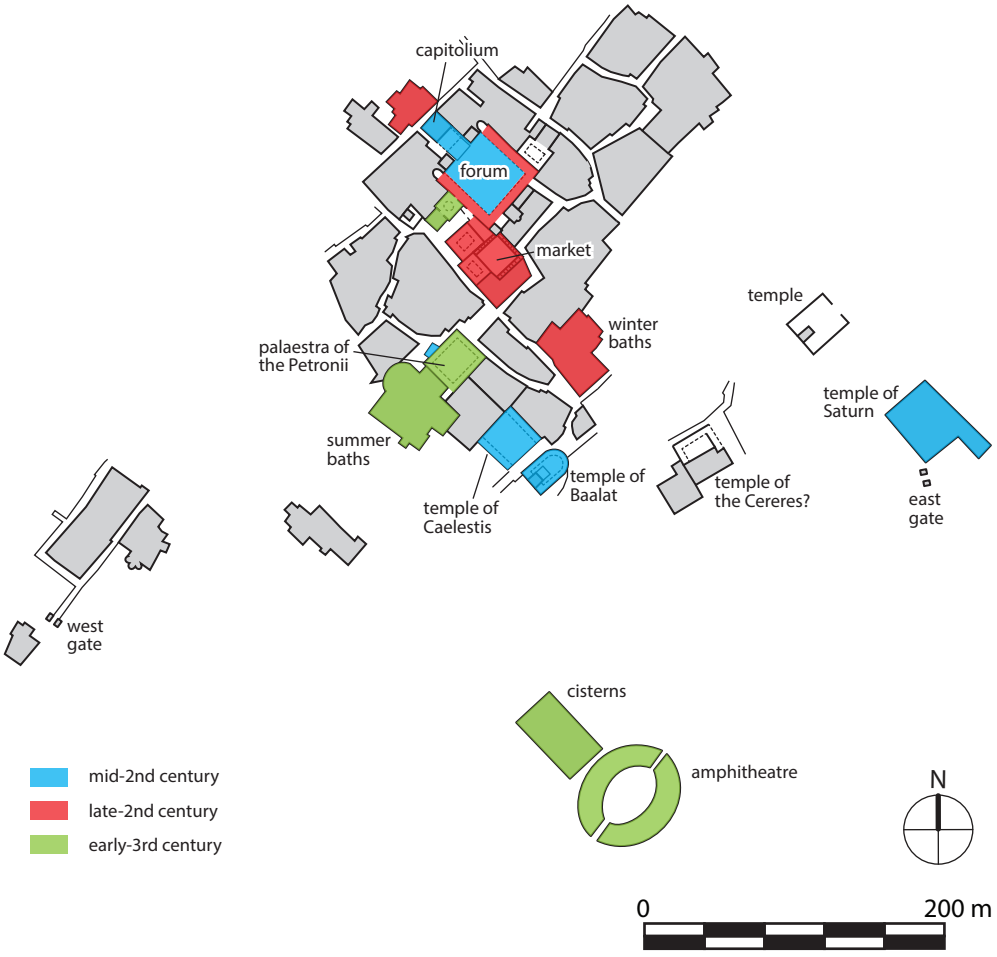


Figure 51. Plan showing phases of monumental construction at Thuburbo Maius.

completed on three small baths, the portico of the forum, and the three buildings of the market complex. These works gave way immediately to yet another bath building, the city's amphitheatre, and the Temple of Mercury. The combined time for these construction projects is dependent on too many factors to posit a total number of years for each. The Winter Baths, to give a single example, are roughly 10% of the total area of the Baths of Caracalla— but without the (on average) 7200 men employed by the latter, the baths at Thuburbo would most certainly have taken longer than 10% of the construction time (DeLaine 1997, 193).

Yet in just over a hundred years no less than 18 monumental projects were completed—each taking years to complete and involving large teams of workers, supervisors, and specialist labour—not to mention others we may not know of or that are not securely dated, like the various gates to the city. To this tally of ongoing construction must be added a number of housing projects completed in the second half of the 2nd century CE: the House of Nicentius, the House of the Palms, the House of the Floral Panels, and the House of the Three Basins (Bullo and Ghedini 2003, 221–22, 224–25, 230–33, 237–39; see Chapter 6). At Ostia, where we have the benefit of a substantial body of archaeological and historical evidence, DeLaine has observed a constant stream of minor building works punctuated by periods of greater activity (DeLaine 1995). It is reasonable to suggest from my observations here that a similar phenomenon was occurring at Thuburbo Maius; in most years from the visit of Hadrian in 128 CE until the mid-3rd century there was at least one monumental construction project underway at any given time. Although we cannot say with any certainty, this steady pace of works

may also have resulted in an increasing number of local workmen entering the building trades, as well as additional labour from enslaved peoples, which would have further increased construction speeds and contributed even more to a sense of a booming industry. This visible construction was arguably as important as the monuments themselves both to ideas of civic prominence and to the lived experiences of the city's inhabitants; I explore some of the wider implications of this observation in the discussion to follow.

Discussion

Returning to where we started—on the Mall in Washington, D.C.—reminds us of the ever-changing nature of a monumental landscape. Yet studies of the monuments of North Africa, and Roman monuments more generally, too-often treat urban monuments as the product of a cohesive, comprehensive urban vision, and consider finished monuments primarily as fixed signs of elite power or imperial culture. The final monument itself is but one part of a wider process of ongoing urban change, a change I define as monumentalization. Focusing on the change as an object of study, rather than the buildings that result, allows me to go beyond some of the chronological challenges of the existing literature.

At the regional scale, the earliest monumental development is on the coast; this mirrors the urban sprawl we observed in coastal sites in Chapter 4. It is not until the 2nd century CE—over 200 years after the first Roman province was established in North Africa—that we see widespread construction of the Roman monuments considered by some to be

so essential to the imperial civilizing mission. Competition between the populations of neighbouring cities was undoubtedly an important aspect of the monumentalization of the urban landscape (DeLaine 2008, 115). There is, of course, no evidence of a single monument type that is needed for a city to be promoted (Kallala 1992); monumental building does, however, often cluster in the periods immediately before and following civic promotions. The active pursuit of municipal status by local citizens, as noted in Chapter 2, further contributed to private sponsorship of the monumental urban furniture worthy of the highest civic titles. Mapping the distribution of different functional categories of monumental projects combined with civic status demonstrates the importance of the more expensive building types, particularly those involved with entertainment, in understanding an individual city's prominence in wider regional networks.

A functional consideration of monumental construction also gives us clues as to the longer-term local needs of urban populations. The importance of the ritual landscape of cities is easily established, and temples or sanctuaries make up almost half of all monumental construction projects. Monuments associated with the provision of water—baths, aqueducts, fountains, cisterns—are also prevalent after a while, markedly further inland where summer temperatures are highest. A surprising preference also emerges for commemorative monuments, such as arches or city gates, particularly in the area of the former Numidian kingdoms. In each case, the monumental preferences observed in the Roman period can be seen as part of established, longer-term practices, of the improvisational use of Roman ideas to

continue with pre-Roman, local traditions. Treating Roman monuments as a direct expression of imperial power, or an expression of the loyalty of North African elites to Roman ideals, is obviously problematic in light of this analysis.

A look at monumentalization at the town of Thuburbo Maius reinforces the importance of local developments and shows us that the regional scale is but one part of a wider picture—a picture too-often obscured by a scholarship more focused on North African trends than on the daily negotiations involved in monumental construction. During the 2nd century CE, elite citizens of the city relied on monuments to demonstrate their status and wealth, creating a boom in building projects as a direct response to the visit of Hadrian in 128 CE and a promotion to the status of *municipium*. Yet these monuments took years to construct and resulted in an almost constant state of visible building works across the city, and a consistent output of financial resources by elites. Local workers both drawn from the city's pool of builders and relying at times on temporary labour were certainly used for monumental works—particularly the earliest projects sponsored by private families—resulting in an influx of money or in-kind payment to the non-elite economy (DeLaine 1997, 220–24; Garnsey 1998, 87). Construction was also often accompanied by new infrastructure to facilitate the movement of raw materials, new workshops to process said materials, storage facilities, or new markets or other places to exchange various construction supplies (Garnsey 1998, 87). Urban populations did not receive inherent cultural benefits through exposure to supposedly enlightened Roman architectural forms, but they did experience tangible economic benefits from construction works.

Monumental works such as the construction of the town's forum and bordering temples served as daily reminders of elite power, yes, but also of a vibrant and developing townscape. Or, put another way, it is not that cities such as Thuburbo Maius required certain monuments to achieve or display their status, but rather that they needed to be seen to be constructing monuments at all. Individual acts of construction contributed to a broader pretence of monumentalization, and thus take on a secondary element of performance. DeLaine recounts the movement and erection of the obelisk at the Vatican in Rome during the 16th century; the process used 800 men, 120 horses, and four months to move the stone only a few hundred metres (DeLaine 2000, 131). We can imagine a similar spectacle—of redirecting traffic and blocking adjacent streets to drop off building materials, of the noises of the workmen—as four solid Numidian marble columns were installed at an annex to the Winter Baths of Thuburbo Maius, each over 3 m in height and almost certainly imported from Simitthus (Figure 52). These types of building works arguably had a greater impact on the city and its citizens than the finished monuments themselves, and were more important to towns even though the latter dominates discussion by archaeologists.

As we saw in the brief history of the monuments of the Mall in Washington, there is a constant tension between the desire of monuments and their makers to create a fixed historical reference and the realities of the changing landscapes and shifting memories of city life. The construction of monuments in Thuburbo Maius suggests the process has a greater collective impact than the finished buildings might, impacting not only elites



Figure 52. Columns of the winter baths, Thuburbo Maius.

chasing social status but also wider communities. The process of construction is fresh in the minds of the urban populations encountering work sites on a daily basis, and so has less flexibility of meaning or opportunity for indifference than the finished monument might. To judge the importance of monuments to competitions between local elites, rivalries between neighbourhing towns, and changes in civic status based solely on the structures in their completed forms is to miss a large part of the story. It is not that elites or the city rely on the monuments but rather that they rely on the ongoing process of construction to establish their power and position. For non-elite populations it is not only the finished monument but also the daily experiences with monument building that sends a message of urban prosperity.

Chapter 6. A grassroots effort for urban renewal

The gentrification of New York City has become something of a popular fascination. The caricature of the bearded hipster wandering the streets of Brooklyn for 'authentic' experiences, all the while destroying the diversity of the communities he seeks to explore, is a common trope in popular media (see Mallonee 2015 for but one example of an ironic lack of self-awareness on the role of hipsters in demographic patterns). This popular interest is mirrored in scholarly discourses, with almost 20,000 articles or books appearing in a Google Scholar search for publications on "gentrification New York" from the last decade alone. The process of New York's gentrification—and the associated displacement of earlier communities—has been attributed to factors as wide-ranging as an influx of artists (Aure and Bergaust 2012), an active nightlife (Hae 2011), commercial boutiques (Zukin *et al.* 2009), and even the rise of the internet and blogging culture (Belkind 2008). The only agreement amongst most of these works is that the impacts of gentrification are largely negative.

These latest trends tie into a much longer, more complex connection between a search for the genuine in the streets of New York and the regeneration of the city. The idea of working class neighbourhoods as a more 'real' urban experience has been creating tourist destinations out of slums since the late 19th century. Manhattan's Bowery district was an early destination for 'slumming parties' of middle- and upper-class citizens drawn to its enclaves of Chinese and Irish immigrants (Romeyn 2008, 54–59) (Figure 53).



Figure 53. An early plan (1776) of Manhattan (courtesy of the John Carter Brown Library, Brown University).

A need to cater to the needs of slummers—a group with a greater degree of disposable income than the regular residents of the neighbourhoods they frequented—created new, commercialized 'authentic' spaces for non-residents. A corollary need to distinguish these 'touristic' slums from other urban areas led to the increasing spatial segregation along lines of class and race (Heap 2009, 19). Criminal activity and poverty in the Five Points neighbourhood bordering the Bowery has similarly been romanticized in both fiction and non-fiction for much of the 20th century (Asbury 2001; Sante 1991; Yamin 2001, 156). Data from recent archaeological work present a more varied picture of the displacement of artisans by immigrant communities and a working-class world with material characteristics distinct from the middle- and upper-classes (Yamin

2001)—that is, a picture of long-term urban change—but these narratives are still largely overlooked.

From the mid-20th century, authenticity took an even more central role in urban redevelopment. A middle-class desire to preserve a sense of history in neighbourhoods such as Brooklyn created a largely imagined landscape, a 'Brownstone Brooklyn' simultaneously in revival and decline and calls back to a sense of permanence in an otherwise shifting urban environment (Osman 2011, 11, 19, 100). The earliest gentrification of Brooklyn—beginning in the 1950s before the term had even been coined (Osman 2011, 86)—was organic and gradual, offering a chance to 'unslum' without the confines of a centralized authority (Osman 2011, 154). Grassroots efforts by activists and public intellectuals, such as Jane Jacobs, attempted to highlight the strengths of historic architecture and mixed-use neighbourhoods, to celebrate the diversity of inner-city streets where poor and middle-class interact on a daily basis (Jacobs 1961, 50–54). At its best, this romantic vision presents New York as a city of overlapping populations, of intimately local connections and yet in a constant state of flux (Osman 2011, 176).

Yet in practice, the renewal of Brooklyn resulted in a number of unintended consequences: an exclusively white upper middle-class displacing poorer, more diverse communities; a shifting of functional or industrial buildings away from increasingly elite residential blocks; speculation by property investors and developers in an improving area, further compounding social stratification; the freezing of a single Victorian past,

and its associated architecture, at the expense of other buildings and periods; new tensions between the bohemian hipsters moving into gentrifying neighbourhoods and the perceived threat of existing (non-white) populations (Osman 2011, 175). Despite an honest concern for diversity amongst the city's architecture and its inhabitants, the unintended result of gentrification was exactly the opposite—a homogenization of the urban fabric, and the creation of an inauthentic city experience.

The ongoing renewal of New York is a far cry from the change in North African cities, but yet can provide an interesting perspective for the Roman period. For one, the grassroots development that is characteristic of early gentrification shares the decentralized, piecemeal nature of ancient renewal efforts. Many factors are involved in urban regeneration, and the constant interplay between renewal and decline results in a renewal expressed in many different forms. Yet in the case of New York these forms ultimately led to a lack of neighbourhood diversity. So too does the renewal of the North African city get conflated with the creation of cities that are undeniably 'Roman'—a trope that I admittedly also fall back upon when describing the scope of this project. Overplaying the Roman nature of urban regeneration, and the role of elite euergetism in these efforts, flattens the complexity of this process and the actors involved. A fundamental question remains whether the renewal of urban space in the first centuries of Roman rule does, in fact, follow any set trajectories, or result in a lack of diversity in the urban spaces of the broader region.

This chapter looks at the interplay of various local interests throughout the ongoing renewal of North African cities. I examine renewal by explicitly looking at the relationship between new urban construction of all types—streets, monuments, houses, etc.—and what came before in these same spaces, either earlier Roman remains or pre-Roman materials. To begin, I consider some of the literature tied to regeneration, focusing particularly on the conflict between centralized and local forces. These works have resonances with the study of cities of the ancient world—and Roman cities more specifically—even if in most literature on the Roman city the process of renewal itself is not explicitly invoked. I then turn my attention to a regional overview of how renewal plays out in the North African city under Rome, identifying four key trends: development respecting earlier alignments and uses of space; the deliberate restructuring of the earlier landscape; the displacement of urban production; and the construction of larger and more elaborate housing for the elite.

Each of these four processes is observed to some degree in a biography of the development of the Numidian town of Thugga. Changes to the city from the 1st century CE onward show both the important contributions of piecemeal, decentralized renewal efforts and the degree to which practical concerns shape urban redevelopment. Although Thugga is a city constantly in flux, the resulting cityscape nonetheless takes on an increasingly uniform character. Earlier mixed-use neighbourhoods are replaced with primarily residential ones, and the cityscape takes on the largely ritual focus that it is known for even to the present day. In the case of Thugga, as in the case of many of the examples invoked in my regional analysis and conceivably even as in the modern

example of New York, grassroots renewal at the local scale had a perhaps unintended consequence for the demographics of the Roman city.

Gentrification and grassroots redevelopment in the modern city

Regeneration has received much attention in urban geography, from the mid-20th century to the present day. A common thread unifying much of this literature is the ongoing struggle between top-down powers dictating the pace of renewal, and local citizens fighting to reshape their neighbourhoods on their own terms. These interactions between global and local inform my methodological choices, and have already emerged as a central theme across the processes of foundation, growth, and monumentalization. The following summary thus looks in particular at ideas of gentrification and globalization as two areas where the modern world has much to offer the North African past.

In its early stages the urban renewal order, to borrow a term from Klemek (2011, 20), implied the practical ways towns and cities could manage growing populations; account for the increasing infrastructural needs of automobiles, more common in North America; reconstruct the European city after a second, devastating conflict; and renew the fading urban fabric of the industrial city (e.g. Rossi and Dentler 1961; Ahlbrandt and Brophy 1975; J. Q. Wilson 1966; see Klemek 2011, 21–77 for a discussion of renewal in Europe and its American response). Both this literature and the renewal itself concern, very broadly speaking, the top-down imposition of regeneration efforts by a centralized authority, often at the expense of vast swaths of existing cityscapes (see Anderson

1964 for a particularly critical summary of 1950s urban redevelopment). The underlying modernist trends of mid-century developments resulted in a number of large-scale renewal projects across the cities of the western world. These projects share characteristics of the urban processes of earlier chapters—the foundation of a new designed cities such as Milton Keynes (M. Edwards 2001), Brasilia (Holston 1989), or Canberra (Gordon 2002) to account for growing populations or administrative needs (see Chapter 3); or white flight and the growth of the suburbs in cities like Los Angeles (Avila 2004) or Phoenix (Ross 2011)(see Chapter 4).

This focus on top-down renewal was met with a growing resistance by writers holding a more romantic view of city life. These hybrid activist/scholarly works include many of the writings of Jacobs introduced in the history of New York City, above (Jacobs 1961; 1969; 2016), but also Herbert Gans' history of the loss of neighbourhood in *The urban villagers: group and class in the life of Italian-Americans* (1962), the edited volume *London: Aspects of Change* (Glass 1964), and even to an extent Michel de Certeau's discussion of walking in the city from the first volume of *L'invention du quotidien* (*The Practice of Everyday Life*)(1984). The emerging gentrification literature—to borrow a term used by Osman (2011, 167) to describe the school of thought shared by many writings around the time of the first mention of gentrification by the urban geographer Ruth Glass in 1964 in the edited volume on London cited above—can be characterized by a romantic vision of the everyday interactions of urban street life, a rediscovery of the historic fabric of the cityscape, a commitment to mixed-use neighbourhoods, and a

firm belief in the importance of local, grassroots development over centralized authority.

Since these early, primarily positive works, the concept of gentrification has increasingly been studied as one of the key processes of change in the late 20th and early 21st century city. The sheer scope of gentrification studies in urban geography and urban anthropology show an increasingly global phenomenon (Figure 54), covering western metropoleis like New York, Paris, or London (Butler and Robson 2001; Carpenter and Lees 1995; Osman 2011), but also cities in the Middle East such as Beirut (Sawalha 2010), in the previously communist states of eastern Europe (Sýkora 2005), or in the Global East (Fujitsuka 2004; Matthews 2011; Shin *et al.* 2016). With a greater focus on gentrification has also come a greater focus on whether it represents a positive

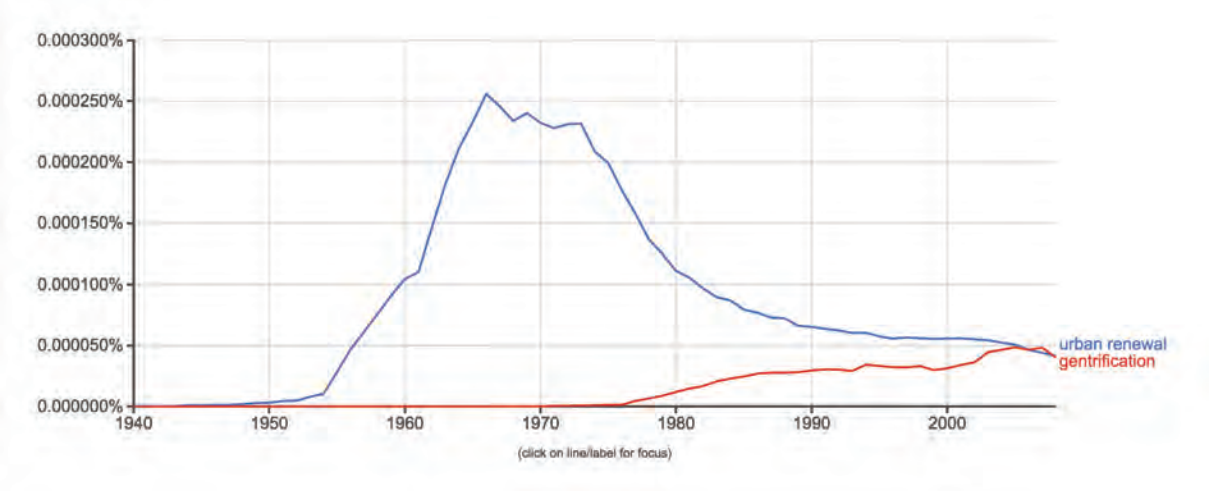


Figure 54. Google Ngram showing frequency of use for the terms renewal and gentrification.

or negative force, on whether we should be using the term at all, and most frequently on its discontents (see a number of conflicting views in Atkinson and Bridge 2005). Potential negative effects of what often started as bottom-up renewal efforts include the displacement of existing communities (Freeman 2005; Freeman and Braconi 2004; Herzfeld 2010; Newman and Wyly 2006; Paton 2014, 183–84; Van Criekingen 2009), causing the increasing segregation of cities along racial and class lines (Mullins 2006; Mullins and Jones 2011), and, as we saw in the example of New York that opened this chapter, a lack of that diversity in gentrified communities that was part of their appeal to gentrifying forces to begin with.

Many of the negative aspects of gentrification—and the wider forces of globalization that are intrinsically imbricated with these debates—are tied to the post-industrial city. These should not be projected back millennia to Roman North Africa. For the purposes of my work, rather, I follow Butler's rallying cry for the continuation of gentrification studies. Loosely speaking, the concept remains a useful way to understand the mediations between global processes and local identities and senses of belonging (Butler 2007)—namely, the dynamic interplay between the North African- or Mediterranean-wide expression of imperial power and the local conditions at individual towns that is at the heart of this dissertation.

Renewal from a Roman perspective

It is somewhat surprising, given the centrality of renewal to modern urban studies, that the terms 'renewal' or 'regeneration' are much less frequently mentioned in studies of

the cities of the Roman world. A search of the index of the *Journal of Roman Archaeology*, for example, yields not a single mention of 'renewal' or 'regeneration' in paper titles or abstracts. A similar search of the *Journal of Roman Studies* makes no mention of either term in papers related to urban development. This is an admittedly superficial coverage, but does serve to illustrate the degree to which renewal has yet to make much impact on our thinking of the Roman world.

This does not suggest, however, that renewal was not of central concern to the life of the Roman city, even if modern scholars only rarely address it in these terms. We have some surviving legal restrictions on house demolition, even though this evidence is often ambiguous. A municipal charter at late Republican Tarentum, for example, obliges anyone who demolishes or unroofs a building to also be responsible for its restoration, or be liable to a fine (Garnsey 1998, 71). The later *Senatus Consultum Hosidianum* of 45 CE was held as the basic statement of Roman authority on demolition until the Severan period—applying to Rome, Italy, and likely the provinces. This fined anyone who purchased and then demolished a house a fee double the sale price of the house, while at the same time voiding the sale unless the house was reconstructed of the same or better quality (Garnsey 1998, 72–75).

Rebuilding derelict houses was also an explicit responsibility of the *curatores rei publicae,* roughly translated as a type of local superintendent, in the *Digesta seu Pandectae* compendium of Roman law of the 6th century (*Dig.* 39.2.46.1; Lomas 2003, 30). The earliest record of the *curatores* in North Africa is found at Sufetula in 196 CE (Lucas

1940, 56), and thus just outside the chronological scope of my work, even if the practice is known much earlier in Italy. The role in North Africa, as elsewhere, was usually held by a man of senatorial rank from outside of the community in question (Lucas 1940, 61). While there do not appear to have been a systematic set of responsibilities for the *curatores*, a number of inscriptions speak to the position's general importance in overseeing the repairs of derelict buildings (Lucas 1940, 66).

Salvage and reuse of materials was also controlled by legal texts, not as a means of stopping the process but rather as a way to regulate supplies of architectural elements (Barker and Marano, forthcoming). The presence of these restrictions on de-construction implies that demolition was a potentially lucrative undertaking—probably as the spoils in question were more valuable than the labour required to collect them. It also suggests that these materials were taken and re-used elsewhere, in some if not all cases for an active and complementary process of urban renewal.

Mentions of renewal in the scholarship of the Roman city touch only briefly on the actual process of destruction, or on the relationships between earlier and later buildings. Although renewal is invoked in the titles of some works, their interest lies primarily in the fresh construction of public buildings or monuments, and the process of public benefaction or euergetism that pays for them (DeLaine 1999; 2008; Lomas 2003)—all ideas that I cover under the idea of monumentalization (Chapter 5). The buildings are understood primarily as a means of competition between individuals, families, or communities, and only secondarily as a way of updating the urban fabric;

non-monumental buildings are only rarely considered as renewal at all. There is also an underlying assumption, sometimes explicitly stated (Raja 2012, 193), of a degree of overall organization or Roman planning of renewal and development efforts. In North Africa, scholarly considerations focus on this civic benefaction but ultimately rarely class these actions as an act of regeneration.

There are some examples, however, that look more to renewal as an ongoing process, as I outline above. The Pompeii Archaeological Research Project: Porta Stabia (PARP: PS), completing fieldwork in 2012, traces the development of a single neighbourhood through time with a particular focus on the contributions of non-elite, working class citizens to urban spaces (Ellis et al. 2015; Ellis and Devore 2007). An early work by Janet DeLaine follows a similar approach at the Insula of the Paintings at Ostia, effectively demonstrating the piecemeal construction and unforeseen events that contribute to city-wide renewal (DeLaine 1995, 100). Hanna Stöger goes so far as to identify the insertion of luxury dwellings into Insula IV at Ostia to a process "similar to gentrification known from today's cities," although the rest of her space syntax-driven analysis focuses more on the definition of neighbourhoods than on their chronological changes over time (Stöger 2015, 69). These cases all show an important departure from top-down impositions or civic benefaction to draw out some of the bottom-up factors contributing to regeneration efforts. It is with these local concerns—and modern thinking on decentralized, grassroots redevelopment—that I turn to province-wide trends of renewal in the cities of North Africa.

Regional trends in North African regeneration

The question of urban renewal calls for a different regional approach than I adopted in Chapters 3, 4, and 5. In each of these preceding chapters I traced specific types of foundation, growth, or monumental construction to create a series of regional maps. As I have suggested above, regeneration is a much more amorphous process, covering a much wider range of urban change at both city-wide and extremely local, household scales and tied directly to each of the processes introduced in earlier chapters. As such, there is less opportunity to produce the same type of regional picture we saw for more straightforward questions. There are different types of change going on in all cities all the time, much like the constant monumental construction works I closed with in Chapter 5; my deliberately open definition of renewal allows me to investigate this dynamism more fully, but also limits my options for a truly province-wide categorization.

Instead, my regional analysis of renewal divides regeneration works into four broad types. I consider each of these types of renewal in turn, drawing examples from various cities as appropriate. The resulting regional or thematic discussion is necessarily selective in its coverage, and does not include the type of regional mapping of all sites showing a certain type of regeneration that featured in the previous chapters. The reasons for this are twofold. First, tracing any single one of these phenomena—such as the shifting locations of the productive landscape—could easily be a full chapter in and of itself; my intention here is to provide a broader look at the many different ways renewal shaped North African cities, not to become bogged down in a single type of

activity. Second, this overview shows how many towns frequently cut across the different renewal types I outline here. It is not that a city either respects original alignments or restructures urban spaces, displaces production or constructs elite housing, but that in most cases all of these things can be happening concurrently. The interaction of all different types of renewal at a single site, and their impacts on urban populations, are covered in the biography of the development of Thugga that follows.

Respecting the past and present

Urban renewal respecting the alignment or functional characteristics of earlier spaces represents, by far, the most common form of this process. That later development should respect earlier configurations is logical. For one, I have already touched upon the relatively stable local populations, and the lack of widespread colonization or forced migration within Rome's North African territories (see Chapter 4, Foundation). Construction works to completely change the layout of existing towns would be costly and—with the exception of some examples I cover below—there seems to be little political imperative for such a strong message when population demographics remain relatively stable. The process of urban renewal appears to be taking place—much like monumentalization—on a case-by-case basis, improvised by locals and most frequently respecting previous townscapes.

The most common examples of renewal respecting the alignment of earlier structures are connected in some way to the monumental construction projects I covered in Chapter 5, a factor both of the need for new monuments to fit within the wider

townscape but also the extent to which monuments and their foundations have been more heavily studied than other types of construction. Thus we see at recent excavations under the *capitolium* of Althiburos (a building constructed during the reign of Commodus, 180–92 CE) that the alignment of the monumental core of the Roman town is mostly on the same or a very similar alignment to remains from the middle or late Numidian periods (c. 5th–2nd century BCE)(Kallala and Sanmartí 2011, 38). A new forum at Gigthis dominated by a new temple to Serapis/Isis, both built around the time of the city's promotion to *municipium* by Antoninus Pius (Gascou 1982, 192–93), also shares the same orientation of the earlier town (Constans 1916, 16). Buildings surrounding the forum were probably replaced on a property-by-property basis, thus further reinforcing the prior plan of the early town. At Cuicul the addition of a basilica alongside the forum slightly changed the axis and access of the latter, but the forum remained otherwise unchanged (Gros 1990). At the city of Utica, too, later monumentalization works respected some of the key topographic features of the Punic town. A grand avenue constructed in the early 2nd century takes advantage of the earlier fortification ditch that separated the first Punic settlement from the peninsula to the south (Lézine 1968a; Ben Jerbania *et al.* 2015). This is but one example of practical concerns—in this case, a c. 55 m wide ditch with buildings at much higher elevations on either side—resulting in considerable continuity of urban form over time (Figure 55). A forum of Trajan, roughly contemporary in construction, also follows directly the alignment of the earlier rampart.



Figure 55. The grand avenue at Utica, taking advantage of the alignment of an earlier fortification

Not all renewal of this sort was monumental. At Thamugadi, for example, the city wall of the original foundation was deconstructed in the southwest quadrant by M. Plotius Faustus and his wife—a couple known also as Sertius and Sertia— to make way for their own large residence, a series of small houses and shops, and storage facilities (Dufton and Fentress, forthcoming; Lassus 1966). Although the fortification was removed, its line is still clearly seen in the later topography and, in some cases, new developments upheld standing segments of the city walls as boundaries between properties. At Sabratha, also, the angle of the earlier plan of the core of the city was maintained through extensive later development. In the case of *Insulae* 5–8 of *Regio* II, the area north of the forum, Roman developments maintain the early layout of the Punic town

(Kenrick and Bailey 1986, 12). A serious earthquake during the reign of Vespasian resulted in the reconstruction of much of the monumental landscape of the city, and must have also had a great impact on the residences of *Regio* II (Kenrick and Bailey 1986, 314). Yet even though earlier buildings were often altogether removed and—in cases such as the Casa Brogan (Kenrick and Bailey 1986, 153)—walls cut down to their foundations, the redevelopment of the early core of the city still kept the same alignment of buildings and streets.

These examples all relate to urban renewal respecting the alignment of earlier structures, but just as many cases exist of Roman development also respecting the earlier functional uses of a city's spaces. The most obvious, and widespread, relates to a continuity of the ritual landscape. Temples to Saturn frequently replace earlier religious structures to the Punic Ba'al, as we can see at Tiddis (Berthier and Leglay 1958), Thinissut (Leglay 1966, 276), Hippo Regius (Leglay 1966, 278), and also Thugga (Saint-Amans 2004, 348–59; see below). At Tiddis, in fact, the entire plateau that made up the earliest occupation of the site was left undeveloped in the Roman period apart from a handful of scattered sanctuaries, continuing the pre-Roman openness of this area (see Chapter 3). Similarly, the Roman reuse of the Punic tophet at Carthage for cultic activity to Saturn, and the construction of a terraced temple complex to Caelestis at the site of an earlier sanctuary to Tanit on the hill known as Koudiat el Hobsia, show the continuity both of urban form and cultic attributes from Punic times (Hurst 1999, 101). This type of religious continuity has also been observed elsewhere in the empire, as at Lavinium

(Moser 2014), suggesting the importance of ritual spaces often persists through other changes to the urban landscape.

Public space exhibits a similar longevity across the generations. I noted in the example of Thuburbo Maius in the preceding chapter that the Roman forum, constructed by 168 CE, likely replaced an earlier, open site of the local market (see Chapter 5). The old Numidian 'forum' at Mactaris similarly acted as a public plaza throughout the life of the city, dictating to an extent the irregular plan of the southwest quadrant (Derudas 1990) (Figure 56). At Sabratha, again, a series of postholes recorded in the pre-Roman levels of the forum mirror those recorded in the 1st century CE, and were probably caused by the erection of stalls at an earlier marketplace in continuous use from as early as the 3rd century BCE (Kenrick and Bailey 1986, 12). The residential properties that made up the bulk of both pre-Roman and Roman cities also show considerable continuity in functional use, if not always in form, as I touch upon below.

Most regeneration, then, followed this first trope and respected the alignment or function of what came before. This continuity must have been dictated both by a degree of respect for earlier traditions, as in the case of ritual buildings, but also as a result of pragmatic concerns. Public, open spaces were maintained into later periods, if under a different guise. Housing often followed along the foundations of earlier residences. Materials for construction may have been recycled from earlier structures—if not architectural elements, which are infrequently found reused in later contexts, then the smaller stones or blocks between ashlar orthostats in *opus africanum*



Figure 56. The old (Numidian) forum at Mactaris.

construction. Urban renewal was first and foremost a question of improving city spaces as they existed, and not a forced departure from the past to make way for a new, Roman city.

Restructuring the cityscape

In direct contrast to maintaining earlier spaces or urban forms, there are also examples of renewal efforts that completely destroyed earlier buildings and spaces. As I explain above, this type of restructuring is far less common than new development respecting earlier materials—but this does not mean that restructuring is completely absent. Such a restructuring can be used to send a deliberate message, but might also emerge

through a practical need to clear large areas for the construction of the monuments discussed in Chapter 5.

The most obvious example is, of course, the complete destruction of the settlement of the Byrsa hill at Carthage for the construction of a new Roman forum and the "brutal intrusion" of an urban grid at the site (Dufton and Fentress, forthcoming; Rakob 2000, 82). The city was supposedly destroyed in 146 BCE at the end of the Third Punic War and its administrative role shifted to nearby Utica, although given the size of the city we might expect some degree of continued occupation or squatting in the outskirts even after this date. Accounts of the total destruction of the city, and the salting of the earth, have been rightfully dismissed (Ridley 1986). However, after the decision by Augustus to refound the city as the capital of Africa shortly after the death of Caesar (Gascou 1982, 141), a symbolic gesture was needed to respect the earlier rhetoric surrounding Carthage's complete destruction. The houses on the Byrsa, in an area previously flanked by a necropolis and near to the core of the Punic city (Fantar 1993, 137–38, 155; Sears 2011, 18), were backfilled and the ground raised on massive concrete pillars to create enough area atop the hill for the construction of a forum, complete with the monumental urban furniture expected of a Roman capital (Figure 57). The political importance of Carthage, its destruction, and its symbolic rebirth required an act of urban renewal that made a similar departure from the past.



Figure 57. Destruction of Punic houses under the Roman forum at the Byrsa Hill, Carthage.

Although we do see symbolic erasure elsewhere in the Roman world, as with the complete razing of Aelia Capitolina (Jerusalem) after the Jewish Revolt of 70 CE, no other city in Africa shows this same degree of almost gleeful destruction. Yet this should not lead us to believe that spatial restructuring was not also a regular part of the process of regeneration at other urban sites as well. In particular, the open space required for the Roman forum often resulted in the clearance of earlier, residential quarters. At Utica the construction of a new temple and *temenos*, likely to the imperial cult, replaced earlier cisterns and domestic structures (Ben Jerbania *et al.* 2015). A basilica to the north of this also truncated earlier cisterns and residences. These

monumental structures, like many others in the city, reused in their foundations ashlar blocks taken from the city's earlier Punic fortifications — a feature that must have been removed prior to the creation of the new monumental core (Ben Jerbania *et al.* 2015).

At Sabratha, also, the eastern end of the forum replaced both earlier housing and the original fortification of the city, although the alignment and extent of these houses remain largely undetermined (Kenrick and Bailey 1986, 11–12); the western end of the forum, conversely, showed continuity of function as mentioned above. The forum and *capitolium* of Uthina is also believed to occupy the core of the earlier, Punic city, although there is little archaeological evidence from pre-Roman levels (Ben Hassen *et al.* 1998, 32). Roman monumental construction at Mustis also displaced earlier, residential structures. A tabouna—a particular type of oven of Levantine origin still in use across North Africa—was recorded in Numidian levels during reconstruction works at the temple here to an unknown deity, adjacent to an arch with three bays that marks the road toward the forum (Ferchiou 1986, 279). A tabouna was also recorded under the forum at Althiburos, implying private structures occupied this space, in addition to the traces of metallurgical production to be introduced below (Kallala *et al.* 2008, 90).

These are but a handful of known examples of what is most certainly a much more common practice. If many cities showed examples of the continuity of alignments of uses of space, others without pre-existing public or monumental structures often needed to destroy pre-Roman housing to make room for symbols of an increasing civic status. This destruction certainly had some symbolic impact, but was also tied to

practical concerns: a need for a large, open space at the core of the city, where no earlier open space may have existed.

Replacing urban production

A third trend in regeneration observed at many sites across the region is the changing location of urban production, most often from the core of the city to its margins. The appearance of clusters of urban craftsmen in the periphery of the Roman city has been noted elsewhere (Goodman 2007, 57–58; 2016), as have a number of productive quarters inside North African cities in particular (Wilson 2002; 2004). Beyond a statement on the growing importance of the periphery of the city more generally, these new craft quarters are often explicitly tied to renewal in the urban core at many sites that remove older productive facilities.

We see a shift to suburban production from as early as the 1st century CE, mostly in the coastal sites where the rapidest urban growth occurred (see the discussion of urban sprawl in Chapter 4). At the port of Utica, for example, the latest excavation results near the monumental core of the city recorded a Punic kiln, exposed by a modern trench for a since-abandoned railway. Activity at the kiln dated to the 2nd century BCE, but the production was later replaced by a residence dating to the 1st century CE (Fentress, pers. comm.). While there is no direct link between the two, it is worth noting that a suburban ceramic production centre emerged at the city no later than the late 1st century CE and is therefore roughly contemporary to the changes noted closer to the city centre (Ben Jerbania *et al.* 2015, 25). Leptiminus recorded similar new kilns along

the periphery beginning in the late 1st century (Stone *et al.* 2011, 224–28). A lack of widespread excavation in the area of the earliest city means we do not have stratigraphic evidence for the earliest industry, but it is fair to assume that production increasingly occurred in the suburbs from the 2nd century, if not earlier.

At Sabratha, the cellar of the Casa Brogan (*Insula* 10) recorded vats with a circular pedestal for some sort of unidentified production, dating to the early 1st century CE (Kenrick and Bailey 1986, 152). The pedestal and vats are reminiscent in size and shape to the fulling tubs at Thamugadi, although no other evidence for textile production is noted at Sabratha (Wilson 2001; 2004). The cellar was filled sometime shortly after 30 CE, according to stratigraphic and ceramic evidence (Kenrick and Bailey 1986, 155), before the house was again refurnished with vats in the late 2nd century. No finds were associated with this latest renovation, although Andrew Wilson suggests their use for fish salting (Wilson 2002, 241–50). Excavation at the coastal city of Meninx also recorded evidence for industrial exploitation of maritime resources under the later Roman forum. A trench opened to establish the chronology of the later basilica excavated, at its lowest levels, a series of cut pits dating to the 2nd century BCE and filled entirely with shells of small sea snails (*cerithium vulgatum*) that were not used for food or dye production, but more likely were used as bait in baskets to catch the murex (Fentress 2009, 75–76). This murex production continued throughout the Roman period, but shifted to other locations in the city with the construction of the forum and the rapid growth of the town in the 1st century CE. The fluctuating intensity of fish

salting is also noted at Neapolis and will be discussed in relation to residential changes, below.

The movement of production facilities to the outskirts, or the construction of new production in the suburbs, is not limited to coastal sites, but there is considerably less evidence for this shift in inland cities. Excavations under the *capitolium* at Althiburos recorded considerable quantities of iron slag, suggesting the working of iron at the city—and specifically in the area later replaced by the Roman forum—from as early as the 6th century BCE (Kallala *et al.* 2008, 84). At Thugga, a site of ceramic production was left disused and later replaced by an elite residence (see below). A number of inland cities also feature clusters of industrial activity in the 2nd century visible in surface remains, such as an extensive concentration of rubble and ceramics on the road out of Thelepte (Wilson 2002, 254). In the absence of stratigraphic excavations reaching the earlier levels of sites such as these we cannot say for certain whether new industrial quarters replaced earlier, smaller-scale facilities moved from elsewhere in the city.

There is, conversely, also considerable evidence for industry continuing within the earliest confines of urban sites, and I do not mean to suggest by this regional overview that all industry was displaced by Roman housing or monuments. Notable examples of continued production include the textile works at Thamugadi (Wilson 2001; 2002; 2004), the considerable fish salting enterprise emerging in the core of 2nd century Sabratha (Wilson 2002, 241–54), and the smaller-scale craft metallurgy from at least the 1st century in an artisanal quarter to the immediate southwest of the forum at

Thysdrus (H. Slim 1985, 74–75). It is worth noting here that these surviving sites of urban production occur in industrial quarters, rather than as single, discrete examples, and also that much of this production intensified from the 2nd or 3rd centuries CE. The replacement or consolidation of sites of production is but one of many shapes of the process of regeneration that resulted in a more segmented urban landscape, as I explore below.

Constructing residences for the elites

The final broad pattern in urban renewal I will touch on here involves the construction of new elite housing, usually at the expense of earlier, more modest structures (Figure 58). A central question, of course, is what classifies as 'elite'. Bullo and Ghedini's excellent summary and gazetteer shows the beginnings of a regional shift to large, elaborate housing from the 2nd century, reaching a peak in the early- to mid-3rd century CE—the authors' titular large and magnificent house. The residences listed in this catalogue all feature open displays of wealth, including decorative mosaic flooring and architectural features, multi-room plans covering large areas, multiple street entrances, public-facing reception rooms, and additional functional spaces such as private baths. Many of these residences fall into later periods outside the scope of my work; the inclusion of productive facilities and burials in the late antique period, in particular, has been effectively covered elsewhere (Leone 2003; 2007). There are still many, however, that date to the pre-Severan period. Taken collectively these demonstrate the importance of elite construction to urban renewal from the 2nd century onward.

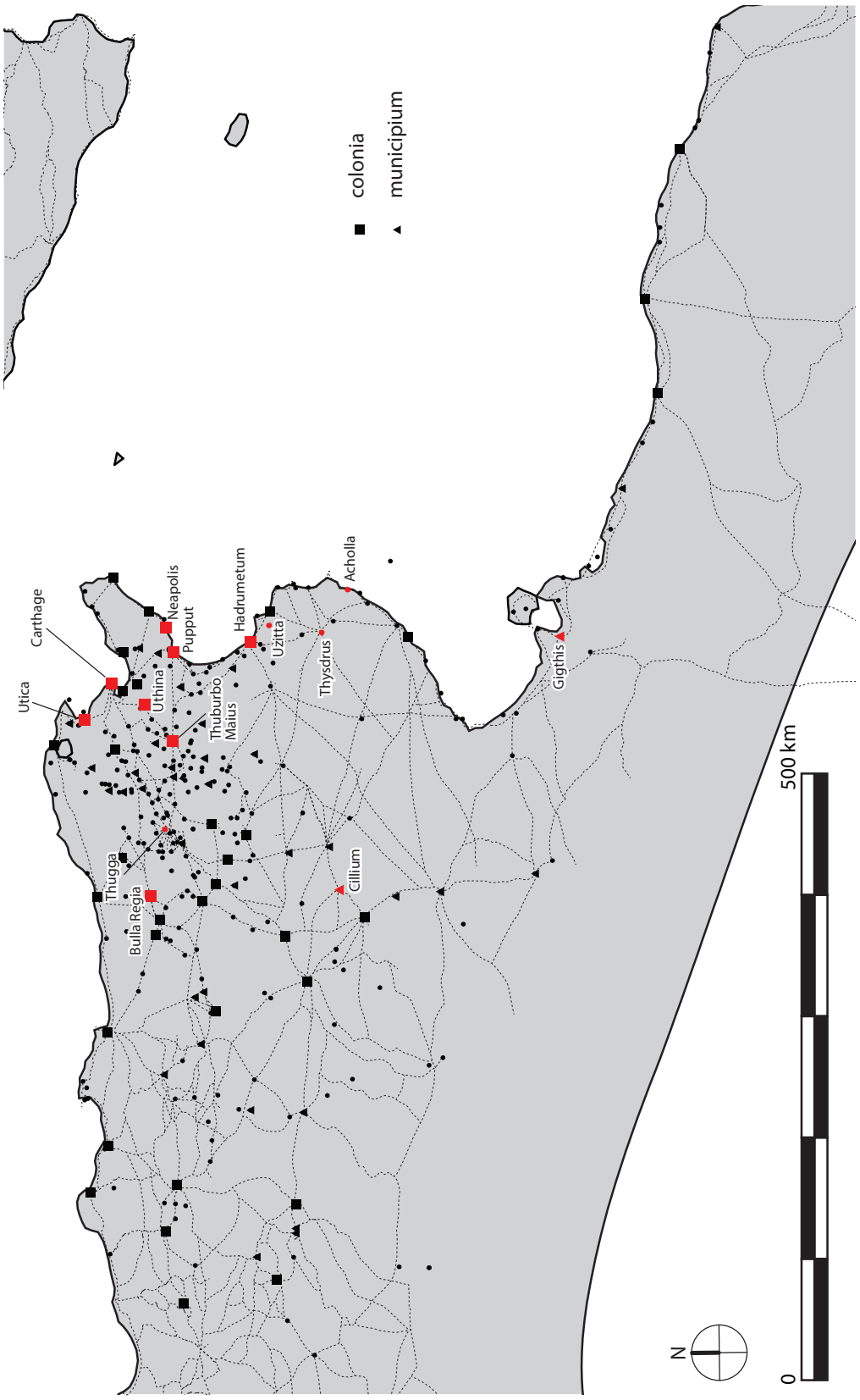


Figure 58. Map of sites with elite housing constructed in the 2nd century CE.

These new residences can both result in new neighbourhoods of elites—as part of the urban growth I discussed in Chapter 4—or replace earlier buildings of some kind, though the details of earlier structures are often unknown. I have already touched upon not only a burst of monumental construction from end of the 2nd century at Thuburbo Maius, but also the renovation of several houses on either side of the forum as well as the construction of a new residential quarter to the south of the city's monumental core (see Chapter 5). Thuburbo Maius is but a single, if particularly well-documented example. The 1500 m^2 House of the Laberii at Uthina shows a similar pattern of elite renewal tied to urban growth, alongside a public bath funded by the same family and the city's amphitheatre, all constructed in the first half of the 2nd century (Bullo and Ghedini 2003, 235–39). At Thysdrus, also, a cluster of houses constructed from the mid-2nd century to the south of the forum are likely constructed during the sprawling growth recorded at the city (Bullo and Ghedini 2003, 283–84, 289–95, 301–5, 317–19).

In addition to the construction of new elite housing, the 2nd century also featured the renovation and expansion of existing residences to cover larger and larger areas—a process more directly tied to a dialogue on renewal. I already touched upon the restructuring of the southwest quadrant at Thamugadi as an example of renewal respecting the alignment of earlier features, but the construction of a large house for the Sertii—the patrons of these works—also falls into this discussion (Lassus 1966). To this example we can add a number of others. At Acholla, the House of Asinius Rufinus Sabinianus was first constructed under Tiberius, likely at the time the Asinii family, members of the Horatio tribe, were first settled (Bullo and Ghedini 2003, 12–14). The

house was expanded in the early 2nd century, probably under the reign of Hadrian, to create a new southern entrance and add a storey to the top of the building, more than doubling its size (Gozlan and al-Waṭanī lil-Turāth 2001, 27; Bullo and Ghedini 2003, 12–14). The House of the Rotonda at Carthage shows a similar history of 2nd century restructuring and expansion of an earlier 1st century residence, both occupying the site of an earlier Punic necropolis (Bullo and Ghedini 2003, 129–31). The House of the Hunt at Bulla Regia likewise shows evidence for expansion, in this case involving the realignment of walls facing the street to create a more regular, rectangular *insula* at the same time increasing the size of the residence (Beschaouch *et al.* 1977, 16; Bullo and Ghedini 2003, 51–53). Utica, as well, demonstrates a tendency toward expansion and restructuring, including the amalgamation of a number of plots in the *Insula 2* to create new, larger properties such as the House of the Cascade or the House of the Treasury (Lézine 1968a; Bullo and Ghedini 2003).

There are countless other examples of this type of consolidation, expansion, and embellishment, but an example from the coastal city of Neapolis makes an effective close to this regional discussion. A large factory for fish salting was established in the last quarter of the 1st century CE at a site with evidence for fishing and fish processing from at least the end of the 1st century CE (L. Slim *et al.* 2007, 23) (Figure 59). At some point during the second half of the 2nd century, a new residence was constructed that replaced the western half of this factory, replacing a number of vats with a peristyle courtyard and reception room decorated with mosaics, flanked by sleeping quarters (L. Slim *et al.* 2007, 24; Bullo and Ghedini 2003, 183–84). Evidence for fish salting continued



Figure 59. Fish salting vats alongside an elite residence at Neapolis.

until the end of the 3rd century—suggesting that for a period residential and productive urban landscapes were effective neighbours—until an expansion of the house in the 4th century to over four times its original size put an end to fish processing altogether.

Neapolis, then, represents the twin trends of renewal through the construction of elite housing and, as a direct result, the displacement of industry. I turn now to another example of the interaction of these different types of renewal, with a biography of the city of Thugga.

Development, diversity and displacement at Thugga

The city of Thugga presents both the chronological depth and archaeological history needed for a closer look at the processes of urban renewal at the local scale. Settled well before the Roman conquest—at least as early as the 5th century BCE—the city has been of regular interest to scholars for its surviving architecture and rich epigraphic corpus. Thugga also flourished in the Roman period, beginning a series of regeneration works from the 1st century CE that continued almost without interruption well into the 3rd century. These structural changes included each of the types I identified above: construction respecting earlier spaces or functions, new buildings completely replacing earlier alignments, the displacement of production, and the consolidation of housing into larger, elite residences. Taken together, the town's development shows an interplay between practical concerns and grassroots renewal that gradually results in a more uniform urban landscape.

Geographic overview and previous archaeological works

Thugga is located approximately 100 km to the southwest of Tunis, on a high ridge dominating the fertile valley of the Oued Khalled (Figure 60). The town is part of a particularly dense cluster of occupation south of the Medjerda and along the road from Carthage to Sicca Veneria (el Kef), including the nearby towns of Uchi Maius, Mustis, Numluli, Thubursicum Bure, Agbia, and Thignica—all sites that achieved a status of *municipium* or higher, the latter four sites promoted under the Severans (Gascou 1982, 210–11). The site occupies a striking location, bounded on the north by an abrupt scarp with the core of the city sloping gently to the west and more sharply to the south—this

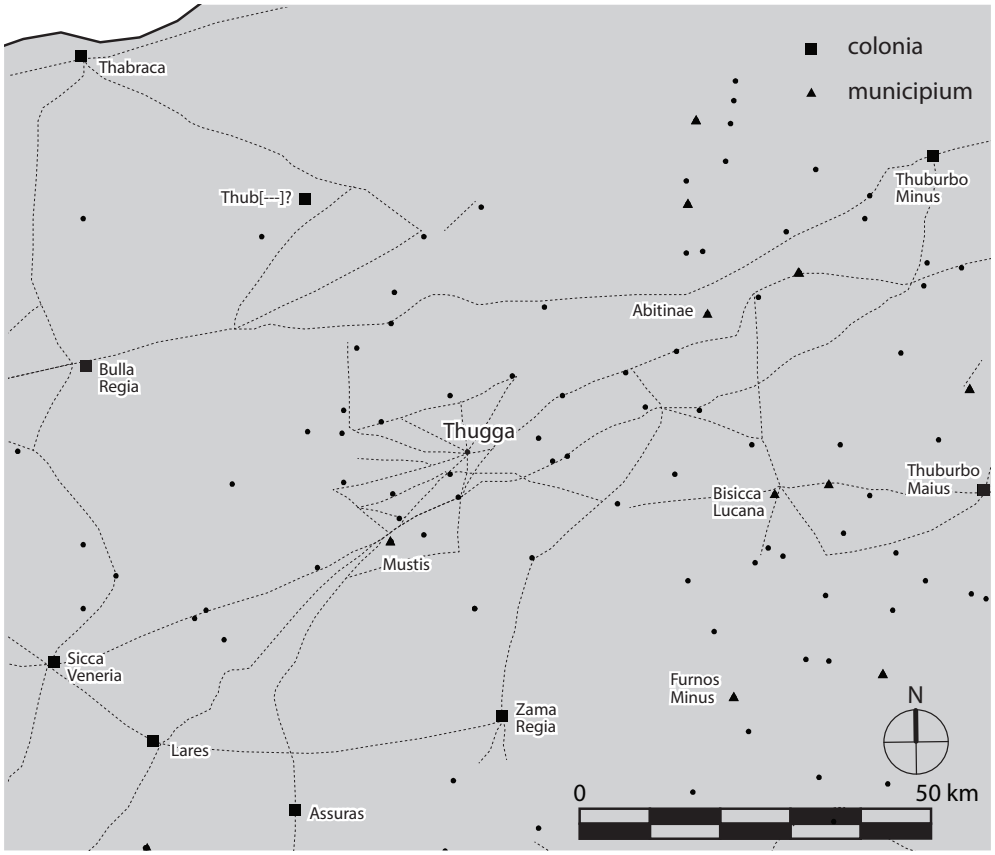


Figure 60. Map of Thugga in its wider regional context.



Figure 61. The challenging topography of Thugga.

topography is particularly pronounced toward the southwest quadrant of the city, which drops vertically more than 100 m over a distance of less than 750 m (Khanoussi 2003, 132; C. Poinssot 1958) (Figure 61). From this lofty position the city has an unobstructed view of the surrounding landscape of agricultural fields still in regular use and responsible for much of the prosperity of the Roman town (de Vos 2000; 2013; de Vos and Attoui 2013). We have some idea of the overall size of the city from a number of peripheral features and monuments, such as the Numidian tower tombs in the north, the Mausoleum of Atban in the south, and the arches to Septimius Severus in the southeast and Severus Alexander in the northwest. The total size of the city at its height in the 2nd century CE has been estimated at approximately 25 ha; the area subject to archaeological excavation is at most half of this figure (Wilson 2011, 184).

Archaeological interest in the site began as early as the 17th century. In 1631 the traveller Thomas D'Arcos wrote one of its earliest descriptions and, indeed, one of the earlier descriptions by European scholars of North African sites more generally (C. Poinssot 1958, 17). Born in Provence, D'Arcos was captured by Corsaires and held in Tunisia until 1630, at which point his long-time correspondent, the French antiquarian Nicolas-Claude Fabri de Peiresc, arranged for his release (Tolbert 2009); this initial description paved the way for a steady stream of travellers throughout the 18th and into the 19th century. The beginnings of scientific exploration of Thugga began in 1882–3 under the guidance of a number of the leading archaeologists of the day, including Réné Cagnat and Henri Saladin, and around this time a law was created to prevent the destruction of the buildings on the site (1883) and to create a protected archaeological

area (1913)(C. Poinssot 1958, 17). Regular fieldwork was established by the Direction des Antiquités et Arts (today's Institut National du Patrimoine) in the late 19th century and continued until 1939, yielding a number of publications about the site's monumental buildings (L. Poinssot and Lantier 1925a; 1925b; Lantier and Poinssot 1941; C. Poinssot 1963) and houses (L. Poinssot and Lantier 1922; 1925c).

Thugga's status as a well-known, World Heritage site has ensured a continued scholarly and touristic interest in the site. Works in the late-20th century and early-21st century include studies of the ritual landscape of the town (Golvin and Khanoussi 2005; Saint-Amans 2004); investigations into epigraphic funerary materials and onomastics (Khanoussi and Maurin 2002) and the city's burial monuments (Crawley Quinn 2013); excavations at the House of the Trifolium (Khanoussi *et al.* 2006); and an extensive survey of the city's hinterland (de Vos 2000; 2013; de Vos and Attoui 2013). The heritage of the city itself, its connection to Tunisian identity, and the impact of contributions from UNESCO have also been studied (Lafrenz Samuels 2012). This list is not exhaustive—Thugga holds a place of prominence in the archaeology of the region and, as a result, has the fine-grained information needed for a detailed study of the city's urban renewal in the Roman period.

Municipal history

The city has a long and relatively well-documented history of inhabitation before the Roman conquest. The toponym itself, Thugga, is a Roman adaptation of TBGG/Tukka, the Libyan or neo-Punic name for the site (C. Poinssot 1958, 9). There are no references

within the textual record to Thugga's foundation, although archaeologists working on the site agree to some form of town by at least the beginning of the 5th century BCE (Khanoussi 2003, 132). The earliest historic reference to the city is in relation to the military expedition of the ruler Agathocles of Syracuse in the early 3rd century BCE, during which the city (noted as Toccai) was one of the first sites taken by the Syracusan forces. Diodorus of Sicily notes the city as "of a good size" (Diod. Sic. 57.4) which, coupled with its inferred military importance, has led some to argue the site was one of the most important cities of the region at this time (Khanoussi 2003, 134).

Roman control of Thugga began in 46 BCE, after the defeat of Juba I and the transformation of his kingdom into the Roman province of Africa. Textual sources show the Roman city was divided into two administrative units, a new Roman *pagus* and an existing *suffete* continuing earlier Punic traditions in the region (Lepelley 1981, 218). This political division has resulted in a long-held assumption that two distinct settlements originally coexisted at the site, a Numidian city to the north associated with the necropolis and fortification walls, and a new Roman city based around the later forum (C. Poinssot 1958, 10–11). Some form of spatial differentiation between colonizer and colonized communities is a common feature of French colonial activity in North Africa (see Abu-Lughod 1980; Çelik 1997), and it is probable this history has impacted upon earlier archaeological interpretations. More recent scholarship has rightly debunked this myth of total segregation, showing the Numidian city occupied a much larger area than initially believed, and that Numidian, Punic, and Roman inhabitants of the city relied on the same central spaces even in the period immediately following the

Roman conquest (Khanoussi 2003). Roman colonists more likely settled in the surrounding countryside, where we see an increase of settlement around the time the Roman *pagus* was established (Hitchner 2016; Stone 2014).

Despite the establishment of new citizens in the city or its territory, Thugga did not receive an upgraded civic status during the period of my study. The city was promoted to *municipium*—resulting in a greater degree of self-governance—during the reign of Septimius Severus, part of a much wider batch of promotions that finally dismantled the territory within the control of Carthage since the late 1st century BCE (Gascou 1972, 230; 1982, 207).

Urban development

The earliest evidence for activity at Thugga—in the form of two articulated skeletons excavated 3 m below Roman levels and radiocarbon dated to the second millennium BCE (Khanoussi *et al.* 2006, 51)—dates to over a millennium before the permanent settlement of the site. This date falls within a period of relative obscurity in the chronology of the broader region, up to 500 years before the widespread construction of megalithic tombs, demonstrating the potentially much longer history of pastoral activity at many of the cities discussed largely in terms of their later Iron Age or later developments. The foundation of a permanent settlement at Thugga, however, is generally assumed to date to the second half of the first millennium BCE.

This earliest settlement occupies an area defined by funerary monuments. A large necropolis dominates the northern site area, containing megalithic tombs of both the rectangular dolmen and the rounded *bazina* type. Fortifications running to the east have long been assumed to share the Iron Age date of the rest of the necropolis (Camps 1995b, 2523; C. Poinssot 1958, 10), although more recent fieldwork indicates a more realistic late antique date corresponding with the renewed fortification of the city as a whole (Khanoussi 2003, 135; Khanoussi *et al.* 2006, 48). This change in the chronology of the fortifications is accompanied with, and based upon, the identification of two large structures—often thought to be towers within the fortification—as an earlier type of Iron Age funerary monument.

The presence of such large built monuments in the north corresponds with a more well-known funerary monument in the south—the so-called Mausoleum of Atban, a monumental tower-tomb dating approximately to the late 3rd century BCE. The mention of Atban in fact appears to be a later inscription, making the original occupant of the tomb unknown, but the elite Thuggensis who commissioned the monument nonetheless drew on both local and Mediterranean-wide elements in his choice of materials, architectural design, and decoration (Crawley Quinn 2013). A recently-excavated, dry-stone monument with circular base at the level of the earliest street suggests the area of the mausoleum may have been part of a wider urban necropolis, and not a boundary marker some 750 m to the south of the earliest city as once believed (Khanoussi 2003). These excavations also recorded a modest courtyard house

dating to this period 100m to the north, suggesting the city extended approximately as far in Numidian times as it did in the later Roman period (Khanoussi *et al.* 2006, 52).

Thugga entered into a period of wealth under the Numidian kingdom of Massinissa (202–148 BCE), and this period provides the first evidence for the monumentalization of the urban core. A temple dedicated to the ruler Massinissa, the dedication recorded in an inscription, dates to the reign of Massinissa's successor, Micipsa, in 139 BCE (RIL 2); the foundations of this temple have been associated with an ashlar building visible under and following a similar alignment to the later *capitolium* (Khanoussi 2003, 142; Saint-Amans 2004, 44–49). Another early monumental structure survives as foundation only on the southwestern side of the later forum (Dufton and Fentress, forthcoming; Heisel and Strocka 2002, 72–75). An open-air sanctuary to Ba'al (later replaced by a temple to Saturn) on the hill above the town, adjacent to the tower burials noted above, also dates to the pre-Roman period (Khanoussi 2003, 135; Saint-Amans 2004, 348–57).

The earliest changes to the city after it fell under Roman control in 46 BCE are also noted in the area surrounding the forum (Figure 62). A temple to Tiberius was constructed on the western side; the dedicatory inscription is now associated with an extant building, roughly 10 m square in size, incorporated into the later Byzantine fortifications (Saint-Amans 2004, 301–2). The construction of this temple was followed by the paving of the forum itself in 36 CE, offering a formalization of what was most certainly an earlier plaza; at the same time were built a temple to Saturn facing the

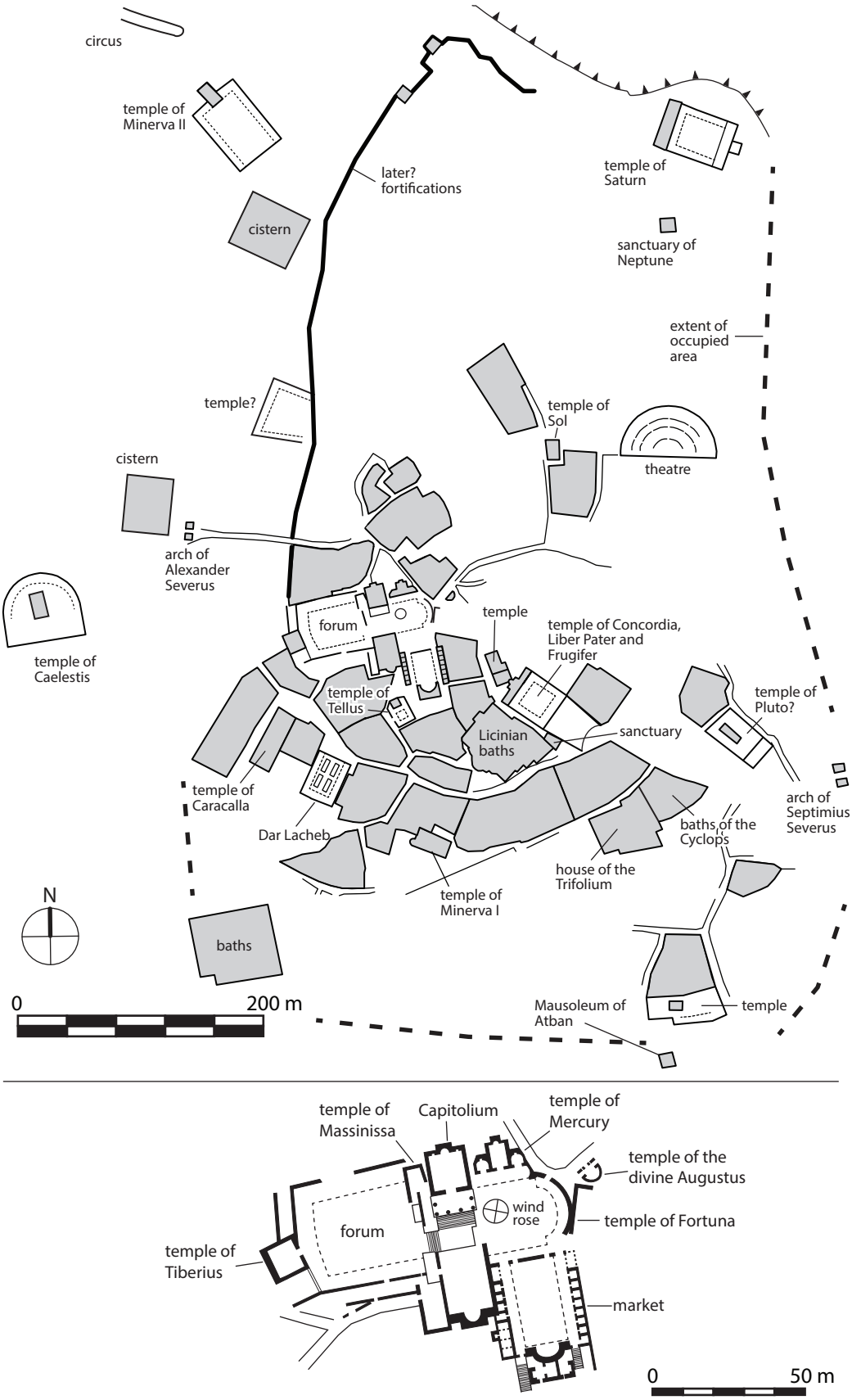


Figure 62. Plan (top) and forum detail (bottom) of the city of Thugga at its greatest extent.



Figure 63. The market and plaza adjacent to the capitolium at Thugga.

forum and an arch marking its entrance (Aounallah 2010, 28; C. Poinssot 1958, 38; Jouffroy 1986, 419; IlAfr. 558) (Figure 63). The resulting irregular space was confined by the earlier temple to Tiberius on the west and the still-standing temple to Massinissa on the east, a space showing ritual connections to the communities of both the Roman *pagus* and the earlier, indigenous *civitas* (Dufton and Fentress, forthcoming). A market was constructed adjacent to this new forum shortly thereafter, dated again by epigraphic inscription to 54 CE (Aounallah 2010, 32–33; IlAfr. 559). A first version of the temple of Venus Concordia, later renovated under Hadrian, also dates to the reign of Claudius and the mid-1st century CE (Saint-Amans 2004, 315), as does the first iteration of a cella to Ceres adjacent to the later theatre (Saint-Amans 2004, 284–85).

After this early burst of activity, there are relatively few known changes to Thugga until the 2nd century. From the reign of Trajan, however, monuments begin to appear regularly each decade, dotted haphazardly across the landscape—at least in relation to one another—but always with an eye to the local topography (Dufton and Fentress, forthcoming). These monuments, like most constructed across North Africa, are predominantly ritual in nature (see Chapter 5). A temple to Minerva, located roughly 250 m south of the forum, and a temple to the Pius Augustus were each constructed under Trajan, the latter occupying a position alongside the road toward the forum from the eastern quarter of the city (Saint-Amans 2004, 338–39, 346–48). Under Hadrian, a poorly-understood complex of three temples was constructed to Concord, Frugifer, and Liber Pater (Saint-Amans 2004, 287–98). A second series of temples to Fortuna and Venus Concordia were also completed to the east of the market (Saint-Amans 2004, 315–19). Under Antoninus Pius a portico was constructed on the northern, western, and southern sides of the forum (Dufton and Fentress, forthcoming; CIL VIII 26524); a second temple of Minerva was constructed around this time on the outskirts of the city and immediately to the west of the Iron Age necropolis (Saint-Amans 2004, 340–44).

The *capitolium* that dominates the landscape of the modern archaeological site was constructed during the rule of Marcus Aurelius and funded by the local Marcii family; the temple was built from 166–8 CE (Saint-Amans 2004, 281–84; Thomas 2007, 74; Crawley Quinn and Wilson 2013, 165). Much has been made of the location of the *capitolium* and its relationship with the earlier temple to Massinissa it replaces, and I will come back to this discussion shortly. The reign of Marcus Aurelius also saw the

construction of the city's theatre and the probable temple known as the Dar Lacheb. The former was dedicated the year after the *capitolium* in 169 CE, in a position taking spectacular advantage of the town's topographic prominence and overlooking the valley below (Lachaux 1979, 133–35). The latter was completed in the years immediately prior to the *capitolium* in 163–4 CE, perhaps with the two temples in visual dialogue each other (Saint-Amans 2004, 307–15). Projects at the end of my chronological focus included the construction of the temple to Mercury adjacent to (and dwarfed by) the *capitolium*, facing on to a paved square decorated with a windrose (Saint-Amans 2004, 329–36), and an aqueduct to supply water to the city, perhaps in advanced preparation for the baths constructed at the beginning of the 3rd century.

Apart from the monumental landscape, the last quarter of the 2nd century also saw changes to the residences of the city. The House of the Labyrinth and the House of the Three Masks both saw internal modifications, redecoration, and minor expansions (Bullo and Ghedini 2003, 271–72). These ongoing changes can best be seen, however, through recent stratigraphic excavations at a single residence in the southern area of the city—the House of the Trifolium and the adjacent Baths of the Cyclops (Figure 64). The earliest occupation recorded to the south of the Trifolium, dated to the early 2nd century BCE, included a modest Numidian house built around a single courtyard. Finds recovered from this context consisted of local Numidian ceramics with some imported Italian wares. The courtyard featured evidence for two hearths, one, smaller, probably used for daily cooking and similar to those recorded at the coastal Punic site of



Figure 64. Street running to the north of the House of the Trifolium and the Baths of the Cyclops at Thugga.

Kerkouane, and a larger oven possibly for the baking of bread (Khanoussi *et al.* 2006, 54).

The house continued in use unchanged after the Roman conquest, with a series of minor modifications in the middle of the 1st century CE. However, the activity taking place within the house—and perhaps in the neighbourhood more widely—is seen to shift at this time. In the latest occupation layers, over 10,000 fragments of coarse wares were recorded, covered in a layer of ashy silt. The excavators have interpreted this as evidence for a pottery workshop nearby, producing local cookwares for distribution to

the city's residents (Khanoussi *et al.* 2006, 58). The duration or extent of this production is unknown.

During a phase of nearby construction in the early 2nd century CE, the main courtyard of the House of the Trifolium was left derelict except for an area of postholes facing the street possibly used for shopfronts. The original Numidian structure was finally destroyed in the mid-2nd century CE, and the area was covered with new elite housing and a paved street following a different alignment. The development of this neighbourhood thus shows a single structure submitted to various renovations over time, eventually abandoned, and replaced with a wealthier residence—changes that can serve as a valuable reference to the process of renewal at the city more generally.

Monumental continuity and residential gentrification

The temporal and spatial range of construction from the beginnings of Roman control of Thugga in the 1st century BCE until the end of the 2nd century CE is striking. During this period, at least one monumental work was completed in each decade, with a flurry of activity clustered around the first half of the 2nd and 3rd centuries, a situation very closely mirroring the monumentalization of Thuburbo Maius covered in Chapter 5. Elite residential construction occurs slightly later than the first monuments but shows a similar consistent pace, with all houses dating to the late 1st century CE or beyond and construction continuing well into the 3rd century (Bullo and Ghedini 2003, 257–77). Even more striking when it comes to this discussion, however, is the ways in which the ongoing renewal of Thugga touches on many of the wider regional trends I introduced

above: the continuity of both space and function, the displacement of industry, and the construction and enlargement of elite housing.

A first observation is the degree to which the ongoing process of regeneration of Thugga respects earlier spaces and practices. The best example of this continuity is the construction of a *capitolium* on the site of the earlier temple to Massinissa. This later temple was funded solely by local elites—and not constructed by imperial fiat—so a suggestion that this location was an attempt to suppress the commemoration of an earlier Numidian ruler is unlikely. Rather, it seems locals are maintaining a continuity of religious practice by creating the new temple on the same location, and on a similar alignment, as the Numidian structure constructed almost three centuries earlier (Figure 65). This continuity can be seen in the forum more generally, which replaced an earlier plaza and featured monuments both to Numidians—as with the temple to Massinissa and a second early structure—and to later Roman leaders, as with the temple to Tiberius and the later temple of the Pius Augustus flanking the road to the forum. Other continuities include the conversion of an earlier temple of Ba'al to a Roman temple to Saturn, and the maintenance and continued use of the Iron Age necropolis at the north of the city into the Roman period. The latter reuse is a noteworthy departure from the restructuring of burials at other, largely coastal sites, such as Utica, where sprawling growth often resulted in construction over the earliest necropoleis (Cintas 1951; 1954; see Chapter 4).



Figure 65. Earlier foundations of a temple to Massinissa under the Roman capitolium at Thugga.

Although continuity from the past was a central feature of renewal at Thugga, there are also examples of works completely removing buildings and restructuring spaces. The best example falls slightly outside the chronological scope of my analysis; the construction of the Licinian Baths in the early 3rd century CE required a substantial clearance and terracing of land (Thébert 2003, 176–79), and this truncation to make room for the baths is seen at a number of structures neighbouring the complex. The examples from earlier centuries are less drastic. Yet the construction of later 1st and 2nd century housing at the site of an earlier circular funerary monument recorded during the excavations at the House of the Trifolium, and an associated realignment of streets in this area, both imply that at the same time as the northern necropolis was

maintained, a southern area of burials may have been removed with the organic growth of the town.

Thugga also offers an example of the displacement of production. There is, overall, very little evidence for industry at the city—perhaps because much of this activity is located in the productive agricultural landscape, as recorded by extensive pedestrian survey of the surrounding region (de Vos 2000; 2013; de Vos and Attoui 2013). Yet excavations at the House of the Trifolium did record evidence for storage of ceramics for a nearby pottery workshop, certainly active in the 1st century and yet no longer making use of property by the early 2nd century. This displacement of production occurred not to make way for a monumental centre, as with the coastal examples of Meninx and Utica introduced above, but to allow the neighbouring House of the Trifolium to expand—a process similar to the expansion of residential quarters at Neapolis, and also reminiscent of the gentrification of previously industrial neighbourhoods so common to regeneration of the western city.

What can we conclude from this interaction of continuity and change, of displacement and consolidation? The ongoing renewal of Thugga shows a continuous, dynamic process of change from the Iron Age until (at least) the 3rd century, with no real interruption to the city's development either immediately before or following Roman rule and the settlement of a *pagus* of Roman citizens at the site. The varied nature of this development suggests a lack of centralized control or strict planning, but rather a series of individual decisions taken on a property-by-property basis—a process

reminiscent both of the local choices contributing to monumentalization I discuss in Chapter 5, and of the grassroots redevelopment heralded in the early gentrification literature of the 1960s. The House of the Trifolium presents our best-documented example of the redevelopment of a single property, but the presence of many other similar houses by the mid-3rd century suggests this trajectory is at least somewhat representative of the city's renewal as a whole.

The result of this grassroots regeneration is, arguably, a city with an increasingly uniform residential landscape. In contrast to sites such as the specialized production of Thamugadi or Meninx, identified above, or the later agricultural processing facilities of Madauros (Chapter 3) or Thuburbo Maius (Chapter 5), there is little direct evidence for urban production at Thugga from the 2nd century CE on. Most of the residences excavated share characteristics with the House of the Trifolium: they are larger residences designed for more affluent households. There is less evidence on the extent or location of more modest housing, although the possibility exists that at least some of the less wealthy inhabitants of the city were displaced to one of the many farms dotting the surrounding landscape from the 1st century CE (de Vos 2000, 72–75). While the city is quite rightly highlighted for the quantity and diversity of its ritual complexes, this variety seemingly occurred at the expense of other forms of urban diversity.

Discussion

The renewal of the North African city, when considered from both a regional and local perspective, is shown to be a dynamic affair. In some cases, earlier structures are

maintained and their alignments or functions respected. In others, the cityscape is drastically altered. Many cities move the location of urban production, usually to the suburban periphery, and many more create larger and more elaborate housing. Cities such as Utica or Thugga show multiple types of contemporary regeneration. In the case of the former, production sites from the Punic city core were replaced with kilns in the Roman suburbs; an earlier defensive ditch was transformed into a grand avenue, respecting the earlier alignment of fortifications; and adjacent residential plots were bought and consolidated into larger, more elaborate housing. At Thugga, similarly, the excavations of the House of the Trifolium show continued occupation of earlier Numidian- or Punic-style housing until at least the 1st century CE, and no real interruption to the urban life of the site after the Roman conquest (Khanoussi *et al.* 2006, 59). Renewal projects in one part of any given city often had a direct impact on the redevelopment or expansion of a neighbourhood elsewhere.

Some of this regeneration is dictated as much by pragmatic concerns as larger ideals. The reuse of existing open spaces for later temples, plazas, or public buildings shows a continuity from earlier periods, yes, but also reduces some of the practical needs for demolition or spatial restructuring. Similarly, the destruction of earlier residences, usually to build large monumental or bathing complexes, was a necessity, given the lack of suitable unoccupied spaces in the central location of most towns that is required by these types of projects. A preference for renewal respecting earlier alignments and functional uses for certain types of construction—and redevelopment removing earlier

buildings for other construction projects—is visible both in the redevelopment of the single city of Thugga and also at a number of other sites across the region.

Aside from these practical concerns, other processes of renewal were controlled by decentralized efforts, local or even individual, that share some of the characteristics of modern gentrification in a city such as New York. The Roman state had a clear interest in the continued redevelopment of urban property, and legal restrictions ensured cities or neighbourhoods were unable to fall into a state of ongoing decay (Garnsey 1998, 71–75; Lomas 2003, 30). The choices made in this redevelopment, however, were taken on a property-by-property basis and seemingly lacked any top-down plan or city zoning. I identified a number of examples of new organic developments replacing earlier productive facilities across the region, including the use of the courtyard of the House of the Trifolium as a storage area for a nearby pottery workshop until the early 2nd century CE. A similar yard is noted at the Insula of the Paintings at Ostia, in this case holding building supplies for nearby construction projects (DeLaine 1995, 83), and we can reasonably assume the temporary use of residential plots for storage or informal gardening between periods of occupation. Both of these earlier functional spaces were also replaced with housing, as were many of the other examples of shifting productive topographies noted in my regional analysis.

What is clear from the regional analysis and urban biography presented here, therefore, is the degree to which different types of renewal are intertwined and the ways in which these competing processes result in a cityscape that is increasingly segmented along

lines of function and—in some cases—social class. Individual production sites are moved to suburban areas and give way to larger productive quarters at sites such as Utica or Sabratha; at other sites, such as Thugga, production seems to leave the city altogether. The expansion or consolidation of multiple plots for larger properties results in neighbourhoods of an increasingly uniform character, perhaps displacing earlier populations—as we frequently see with modern regeneration, and which may correspond to the increased number of rural sites in this period noted in areas with extensive field survey (de Vos 2013; Hitchner 2016; Stone 2014)—or perhaps representing an increasing wealth or status for local families. While the renewal of a city like Thugga may happen in a bottom-up, decentralized manner, the result of these individual actions is a uniform urban landscape lacking much of the functional variety of earlier, and later, periods.

This interweaving of different types of renewal can also be read as a microcosm for the interactions of the four urban processes my work addresses more broadly. I now turn my attention to the interplay between foundation and growth, between monumentalization and renewal that define the many trajectories of Roman North African cities in flux.

Chapter 7. The city as a work in progress

North Africa is in many ways a region defined by colonial interjections (Laroui 1970, 32–34; Mattingly 1996). From Phoenicians to Romans to Arabs and Ottomans, the city holds an important place as both a centre of administration and the place where competing visions are negotiated. Tensions between local citizens and centralized entities are often featured in studies of the modern city, which benefit from the opportunity for direct ethnography and a more detailed archive than we can possibly possess for the distant past. The picture is one of cities as dynamic spaces, where identities are negotiated and renegotiated through daily street-level interactions and improvisational, individual choices that shape the physical environment alongside the imperatives of larger organizations.

Discourses on the city during the first centuries of Roman control, however, have often been divorced from these dynamic relationships. The architecture of individual buildings, city planning, epigraphic hints of civic administration or individual wealth, and questions of the economy dominate. Each of these pursuits is worthwhile, and has contributed to an extensive set of data surrounding these cities, their origins, their buildings, and administrative status. What has failed to materialize from this firm foundation, however, is a new generation of scholarship on the North African city in the Roman period that focuses explicitly on the dynamism and change that typify studies of the modern world.

In the preceding chapters I present a case for the study of the North African city not as buildings and civic statutes, but as urban *processes*—foundation, growth, monumentalization, and renewal—examined from both regional and local analytical scales. My approach deliberately looks not to the centralized uniformity of a supposedly 'Roman' city, but to the diversity, haphazardness, and improvisation that best characterize urban life in the period of Roman control. The aim of this method was to bring to the fore the tensions between top-down projects and bottom-up regeneration, the regional trends and grassroots developments of my title. Apart from the individual successes or failures of this thematic experiment, a few outstanding questions remain. What might a history of the North African city anchored in local histories look like? And what does studying the city as a collection of processes tell us that we might otherwise miss when using a more traditional approach?

This concluding discussion pulls together some of the themes that cut across the previous chapters. A first point concerns the importance of both global and local forces in shaping a cityscape. My methodology was designed specifically to account for competing narratives at different scales, and the importance of this 'glocal' tension is evident throughout. A simultaneous push and pull of larger demographic factors leads to a second theme, the movement of populations both across the region and within individual cities.

A third idea emerging from these processes is the importance of lived experience to our understandings of urban change. What does it mean to live in the North African city,

and how does this urban lifestyle change with new developments under the power of Rome? Although I did not set out to complete a phenomenological study of life in the North African city, or to engage in a dialogue about daily life, many of the changes observed nonetheless return to notions of the impact of physical changes on personal experiences. From the lifetime of an individual to the *longue durée*, in the end I arrive at the ways in which the patterns observed here over the first centuries of Roman control fit into a chronologically broader urban trajectory of North Africa.

It is by placing Roman-era towns into their longer historical context that some of the true strengths of conceptualizing the city as process are realized. I finish this discussion with a look to the extensibility of my approach—the new periods, places, and processes we can apply to questions of the dynamic city, influenced by global trends but tied to local histories.

The glocal city

A first theme cutting across the urban change at the heart of this work is the ways in which the city is influenced by both local and global developments—the idea of the city as 100% global *and* 100% local I borrowed from Laurence and Trifilò in Chapter 2 (Laurence and Trifilò 2015, 117). The order in which my processes were presented here speaks to a decreasing influence of centralized imperial power in urban development. The first two phenomena I addressed, foundation and growth, have the greatest potential to be structured by top-down forces. Foundation requires the direct involvement of the Roman state. Land is partitioned, colonists are moved from

elsewhere; a masterplan is created for the city; and surveyors set out the streets, properties, and public monuments. City growth is in some cases tied to state-sanctioned migration and the creation of new Roman *colonia* at the sites of earlier, indigenous settlements. In other cases—such as the sprawling growth at Utica—there is no top-down, forced movement of populations. Nonetheless, the shifting economic importance of coastal cities and regional hubs in Mediterranean-wide trade networks explain many of the sites that show the greatest size increases. In these examples, global forces are at work.

The importance of the grassroots, in contrast, dominates my discussion of the processes of monumentalization and renewal. New monuments are often treated as a sign of the degree to which indigenous populations adopt, or reject, the Roman urban ideal. Yet a closer look at the choices behind when or where to build a monument reveals that this process was oftentimes haphazard and improvised. Local individuals or families sponsored construction, and often decided on projects that continued from earlier traditions or respected previous spaces. Renewal efforts also relied heavily on the choices of individuals or families to consolidate housing or to both create and displace productive facilities. There are often contradictory and concurrent processes of regeneration ongoing within a neighbourhood, amongst the construction projects of a single family, or in different parts of a city.

Yet for each of these processes, an opposing view of urban change is also possible. In the case of foundation, the history of cities like Madauros demonstrates the importance

of later creole generations in shaping the urban fabric in ways far removed from any original intentions of a Roman power. This tension between the experiences and expectations of transplanted colonists and indigenous peoples is borne out in historical accounts, the epigraphic record, and the physical environment. Growth also shows local adaptations and continuities, through the maintenance of earlier, Punic architectural practices at Utica or the gradual infill and downslope accretions at the town at Tiddis. Both foundations and growth are often discussed as primarily global phenomena, but both are intimately local in their impacts on colonists and indigenous populations alike.

Global trends can appear as a result of individual choices in the cases of the more local developments of monumentalization and renewal. Competing families may choose what amenities to sponsor, but these individual choices contribute to an emerging regional homogeneity. Note that the *capitolia* of the neighbouring cities of Thugga and Thuburbo Maius—each independently commissioned and privately-funded—were nonetheless completed within a few years of each other. Renewal also presents an example of a series of grassroots choices resulting in an increasing uniformity across individual cities, and certain trends appearing at cities across the wider region. Although these processes are described primarily in local terms, they are also contributing to global patterns.

A recent interest in local responses to globalization in the modern world has given rise to an emerging scholarship on the tensions I describe here using the term 'glocalization'. There is no agreement on a definition for the glocal beyond the obvious, that it relates

to the interplay between the global and local from which the word is formed (Roudometof 2016, 4). There is also a danger of falling down a rabbit hole of neologisms and portmanteaux surrounding modern global forces and into a debate on the nuanced differences between grobalization (Ritzer 2007, 7), lobalization (Chew 2010), or logalization (Lyu and McCarthy 2015). The glocal can be treated, broadly speaking, as a subset of larger dialogues on the meeting of two or more different cultures, such as hybridity or creolization, in that it explicitly specifies that one of the involved viewpoints must be based on local traditions and experiences (Roudometof 2016, 14).

The regional and individual trends that I observe here show the refraction of global ideas, in this case a supposed 'Roman' urbanism, through various local experiences to create a series of glocal landscapes and practices. Different perspectives at each city result in unique choices, expressed at a number of spatial scales: at the level of an individual property, across neighbourhoods, and between cities. These glocal improvisations may have helped their inhabitants understand and control larger changes, to "remove the fear that globalization resembles a tidal wave erasing all differences," in the face of a growing imperial control (Khondkher 2005, 187; Roudometof 2016, 49).

Populations on the move

A second point emerging from my work relates to the question of mobility. The urban developments outlined here each have implications for the movement of peoples, both

across North Africa and within individual cities. At the largest spatial scale, foundations and growth show immigration from across the Mediterranean world and beyond. Lassère makes a convincing argument that veteran colonists, at least in the early Julio-Claudian period, are primarily from Gaul (under Caesar) or Italy (under Augustus)(Lassère 1977, 147–48, 231). New foundations in later eras are less frequent, but still result in the movement of new populations to sites such as Madauros or Thamugadi. Urban growth at coastal sites is, in many cases, a result of the process of refoundation of many cities under Caesar and Augustus as part of a larger strategy to secure the region and consolidate power. In other examples—as with the sprawl observed at Utica—an influx of population can be drawn to a city's emerging commercial potential or administrative importance. The physical changes that go hand-in-hand with these demographic shifts present some of the most direct evidence of migration during the period in question.

Both monumentalization and renewal offer more oblique clues about population shifts at the scale of the individual city. In some cases, such as the destruction of housing to clear the space necessary for new monumental centres at cities such as Carthage or Gigthis (see Chapter 6), there is a clear and certain displacement. Those who had lived in the earlier core of the city had their houses destroyed and were forced to relocate elsewhere. The consolidation of housing is slightly more ambiguous, but a convincing case can be made that the purchase of multiple plots to create a single, larger residence results in the displacement of at least some (poorer) families to a new neighbourhood.

In other examples, such as the shifting city-wide location of productive spaces, the evidence is equivocal. We cannot equate the process of renewal or gentrification seen at many sites directly with the displacement we so often connect to this process in modern contexts. A change from production to residential use at some properties, such as Thugga's House of the Trifolium in the early 2nd century CE, paired with new productive facilities emerging on the periphery of the city can equally show the improving situation of a single family. This is probably the case at Utica, for example, where a new productive quarter on the periphery of the city is alternately used as a residence between periods of production (Ben Jerbania *et al.* 2015, 27).

Beyond these long-term observations, a focus on process also draws out the importance of daily or seasonal mobility. Regular interaction with the productive hinterland at Tiddis, for example, is seen in the construction of a granary within the earlier city and the expansion outside the pre-Roman walls. The creation of a periodic market (*nundinae*) alongside the road leading from the north gate further speaks to short-range travel. We might think of the trips taken by rural inhabitants into town on market days to exchange their produce and buy supplies, passing by the pre-Roman *bazina* burials across the street from the market and perhaps stopping to take advantage of the suburban baths less than 100 m to the south. At Madauros, similarly, the identity of the creole generations was tied both to the urban past of the original colonists but also the nomadic history of the indigenous population. Mobility plays out in references to an itinerant past—Apuleius' nod to the half-Gaetulian, half-Numidian heritage of the town.

In all the examples listed above, a lack of detailed household assemblages is a consistent barrier to questions of population movement and, more specifically, *who* is doing the moving. It would be a mistake, given the nature of the available evidence, to overstate these observations as a firm example of displacement of indigenous peoples by colonists, or the urban poor by a growing elite. These concerns notwithstanding, the point remains that urban processes like those explored by this work are often connected to populations on the move. Changes to the built environment may be, in many cases, our only clues to fluctuating urban demographics.

Living through the process

The impacts of urban development on lived experiences mark a third idea arising to varying degrees in each of my chapters. The importance of 'being' in the spaces of the city is a common feature of urban theory: de Certeau's "pedestrian speech acts" (de Certeau 1984, 97–99); Benjamin's *flâneur* encountering a city of transistivity and improvisation (Benjamin 2016; recurring in Amin and Thrift's 'new urbanism' of propinquity and flow, 2002); Jane Jacobs and the street ballet of daily interactions in a neighbourhood of Brooklyn (Jacobs 1961, 50–54). Archaeologists struggle to access these ideas for the cities of the past, sometimes resulting in quantitative techniques for mapping the spatial characteristics of vision (isovists) or connectivity (space syntax)(after Hillier and Hanson 1984), and other times in more descriptive texts outlining the experience of specific events or rituals like the Roman triumph (Beard 2009; Favro 1994; Ostenberg *et al.* 2015; Yegül 1994).

Yet if we want to ask questions about urban changes under Roman power, we must somehow address how these adjustments may have been experienced by those living through the process. It is only when our daily routines are interrupted that we notice the developments around us. Focusing on the physical characteristics can draw out some of the ways these changes were experienced day-to-day that might be missed by looking only at the finished product—the buildings, the city plans, the urban networks.

The act of construction arises as the most obvious and immediate impact on daily life amongst the four phenomena I cover here. A constant reminder of building works is a feature of many experiences of modern cities. We feel the inconvenience of street closures, walking around scaffolding or past workers, and hear the noises of machinery. Construction works are also touted as a central plank of economic stimulus packages, a means for central governments to create jobs and spur production (Figure 66). Being under construction materializes as an equally important part of the experience of the Roman-period town, arguably as important as the completed buildings and public works. I directly tackle this performance of urbanism, and the benefits of development for local populations, within a biography of the monumentalization at Thuburbo Maius (Chapter 5). A century of construction of monuments and houses at Thuburbo provided economic benefits to workers involved in the building trade, strengthened patron/client relationships between the local elite sponsoring most works, and presented an unequivocal display of local prosperity.



Figure 66. Ongoing roadworks, and propaganda, in the city of Providence, Rhode Island.

Yet a similar principle could easily be applied to the processes of foundation, growth, or renewal. The moment of foundation at a city such as Madauros must have been accompanied by a sense of rupture from the earlier settlement, and a noted shift in the routines and practices of everyday life for indigenous peoples encountering Roman colonists for the first time. The experiences of creole generations required regular negotiations of these different perspectives, and we can see traces of the physical results of these improvisations in the fabric of the city itself. Exponential growth of coastal cities such as Utica must have also resulted in a feeling of constant construction at the city, although we can say less in concrete terms on the possible ways these works characterized urban life.

A second connection between urban process and lived experience, particularly during the regeneration I cover in Chapter 6, is tied to the idea of memory. Much has been said about the degree to which North African populations adapted earlier traditions to align with new Roman ideas (e.g. Crawley Quinn 2003; 2010; Crawley Quinn and McCarty 2015). These choices, however, are reflected not only in continued cult practices, sacrifices in tophets, or systems of civic administration, but also in the process of constructing new spaces in the Roman period. Foundations are noted alongside earlier burial monuments in 33% of cases, showing these new sites are still imbedded in local landscape traditions (Chapter 3). Urban renewal follows existing alignments or functional uses much of the time, resulting in cityscapes in the 2nd century CE that still show many traces of their pre-Roman origins (Chapter 5). This continuity in experience is due, at least in part, to the fact that if we consider North African sites on their own terms, there is no 'Roman city' at all. Pre-existing structures continued in use alongside buildings built in the Roman period. Earlier cultural influences—Numidian, Libyan, Punic—remained as much in the present as any later, Roman additions, and not "buried beneath the [Roman] present like some souvenir" (Olivier 2011, 62).

These developments, furthermore, may occur quickly from the perspective of the 21st century archaeologist, but unfolded over the course of generations for those living in the ancient city. Put another way, the citizens of 1960s New York would be amazed at the shape of the present-day metropolis, but those who have lived through the fluctuations of the last 50 years would find the current state of the city much less jarring. So too would a Numidian Thuggensis from the 4th century BCE be surprised by the new

capitolium towering over Thugga in the 2nd century CE. The citizens who had seen the temple constructed, on the space of an earlier monument central to the identity of the city, might feel differently.

Single construction projects, or the choices of an individual in designing a public space or monument, had only a minimal effect on the lives of inhabitants. More significant is the persistence of city streets and blocks, and the use of the same spaces for ritual activity or burial. Cities of sprawling growth mark an exception to this trend, as most included more drastic restructuring than noted elsewhere and, it follows, would have experienced a more marked impact on daily routines. Yet even in these cases the persistence of the past, and the gradual workings of urban change seen in the processes I introduce here, made the experience of living in the city more constant than we might think looking only at new monuments or foundations alone.

From local to longue durée

A final theme arising from my look at the city as process is the degree to which the city of the Roman period is but a single stage of a much longer trajectory. The traditional scholarly focus on Roman administration or architecture can have the unintended consequence of reifying the developments of the Roman period at the expense of North Africa's longer urban history. The study of process provides a level of abstraction that helps us to step back from Roman materials and history and look instead to the nature of urban change. Observations made here for the period of early Roman control

are in fact part of a much earlier urban tradition, and one that continues well after my period of study.

A first observation involves the lack of widespread new foundations, relying instead on pre-existing settlements in most cases. The regional urban network of towns, villages, and cities under Rome was more formalized, aided by the construction or reconstruction of routes between major centres (Cherry 1998, 36). Urban populations also increased, as evidenced by the influx of colonists for refoundation that I cover in Chapter 3 and the growth I discuss in Chapter 4. Yet on the most basic level—the location of settlements—the regional picture under Roman control is very similar to that from before the conquest. This continuity is also seen in later periods, with a lack of foundations under the Severans and very few new settlements under the Vandals or Byzantines. The Muslim conquest, with the notable exception of Kairouan, also featured few *ex nihilo* settlements (Fenwick 2013, 15).

This does not suggest that all cities continued from pre-Roman to Roman periods, or from the Late Antique into the Medieval. What is noteworthy, however, is the degree to which regional centres remain significant across periods. Fenwick suggests in a forthcoming article that the Medieval landscape was dominated much more by fewer, larger cities than in the preceding periods, and that those sites surviving into Islamic North Africa are those previously of the greatest population size, highest civic status, or featuring the greatest number of civic monuments (Fenwick, forthcoming). My research pushes this trend even earlier, noting that those cities receiving the earliest

status upgrades are more likely to feature the monuments worthy of this status and the regional prominence that, ultimately, has some impact on their survival for centuries to come.

Aside from the question of which cities are founded, survive, or fail, a number of individual processes can also be placed within a longer historical context. There is, for example, a notable increase in urban growth under the Severans of the early 3rd century CE. This pattern is most evident at Septimius Severus' native town of Lepcis Magna, where a processional street was constructed leading to a huge new forum flanked by a basilica; new *insulae* were constructed in the south, following the alignment of an earlier Antonine expansion (Ward-Perkins *et al.* 1993). Many other sites follow this example, albeit on a smaller scale.

Similarly, the lack of sustainability observed in the sprawl at Utica can be seen at many other coastal sites in later periods, the process at Utica perhaps occurring earlier due to the silting of the Medjerda. At both Lepcis and Sabratha, for example, the fortifications constructed in the 4th century covered a drastically reduced area of each city (Leone 2007, 120). A return to smaller, protected settlement also occurs at numerous inland cities in the Byzantine period, such as the fortifications of the forum at Thugga (C. Poinssot 1958, 40–41); the public baths at Calama (Grellois 1852); a triumphal arch at Ammaedara (Baratte and Duval 1974); and the highest plateau at Tiddis (Berthier 1978). In the case of the last example of Tiddis, it is striking how in later periods the town returns, in a way, to its roots as a pre-Roman *oppidum.*

Trends on the process of regeneration also show the cyclical nature of urban change. At Utica archaic production in the core of the early city was replaced in the Late Punic period by housing. This housing was in turn destroyed and the ground levelled for the monumental core of the Roman-era city. Roman monuments were, in turn, abandoned and given over again to housing and agricultural storage (Ben Jerbania *et al.* 2015). The picture at Utica is common to many other sites—see also, for example, the abandonment of the forum at Uchi Maius in the late 4th and early 5th century (Gelichi and Milanese 2002), or the abandonment of the temple of Apollo at Bulla Regia for tomb burials (Leone 2007, 89). The clearance of earlier housing for Roman-era public spaces that I note in Chapter 6 was maintained for a time, only for these public spaces to again be given over to private use from the late antique period.

The location of production shows a similar trend. Earlier production sites were moved to the suburbs under Rome, only for productive facilities to once again be constructed in the heart of most cities from the 4th century. Such is the case at Thuburbo Maius where olive presses were installed in the *capitolium* and craft production inserted into the 3rd century CE Summer Baths (Leone 2003a; 2007, 140), or at Leptiminus where the East Baths were reused as an artisanal quarter (Leone 2003b, 270). These changes over the long term suggest an emphasis on mixed-use development, borrowing a term from modern urban planning, in the periods before and after Roman control. A preference for clusters of shared types of activity—productive spaces, groupings of public monuments—is a feature primarily of the cities of the Roman period.

Future cities, further processes

I close the chapter—and this work—with an eye to the future. The approach I have used here relies on questions of process to look at broader trends of urban development, imperial power, and grassroots response. I have outlined some of the themes emerging from this method above. Beyond these observations—each specific to the North African city—the framework and methodology I establish here has the potential to contribute to studies of other Roman cities, and of other people, places, and periods.

First, what processes are missing? There are clearly other forces at work beyond the four I have explored. Urban decay is particularly important—the process by which cities or neighbourhoods fail, rebounding in some cases and dying out altogether in others. The Roman world is so often assumed to be a place of unrivalled prosperity, particularly during the period of the early empire that is my focus. At most cities we lack the stratigraphic detail needed to fully question such assumptions. Yet in examples such as Thugga's House of the Trifolium, where suitably detailed excavations have been completed, we do see a period of disuse in the late 1st century CE (Khanoussi *et al.* 2006, 52). Recent interest in the trade in reused building materials in the Roman period (S. J. Barker and Marano, forthcoming) mirrors a long-standing concern over spoliation from the late antique onwards (e.g. Elsner 2000; Esch 2011; Flood 2006; Kinney 1997; Saradi 1997). Relying more heavily on the solid body of literature on urban decay and ruination in other periods could provide new insights on the Roman world. Decay is but a single option. There is similarly room to introduce new processes, or to break down the deliberately open phenomenon I address to smaller, more detailed changes. A study

could be completed on a single type of renewal—the displacement of industry, or the agglomeration of smaller residential plots—rather than the broad brushstrokes I have chosen here.

In addition to expanding this text to include more types of development, studying the city as process also lends itself to other cities in the Roman world, and to the towns of other periods or places. A comparison might be conducted in patterns of monumentalization, for example, or a study of the regeneration of port cities of earlier, Punic origins across the western Mediterranean. Or we can think even bigger: an exploration of growth trajectories at imperial cities of the Romans, the Khmer, and the Maya; or a search for early gentrification in North Africa from the Iron Age to the present.

These ideas are, to an extent, deliberately provocative, and push the envelope of the meaningful similarities between cities of different regions and eras. Yet to return to an idea from the urban sociologist Janet Abu-Lughod that I introduced in Chapter 2, there is a need for comparative studies to balance the detail of individual, historical trajectories with meaningful generalizations (Abu-Lughod 1976, 38). Archaeological attempts thus far have relied too heavily on quantitative measures as the sole means of such comparison (M. E. Smith 2010; 2011; 2015; M. E. Smith *et al.* 2016; Stanley *et al.* 2012). My work here shows the potential for an alternate approach, combining regional trends with local biographies and relying as much on qualitative discussion as quantitative analysis.

My use of archival data also serves as a template for future projects. Recent political events have closed large swaths of the Middle East and North Africa from the reach of western scholars, restricting the types of research that can be completed. Digital tools help us to recycle existing data in a way that was impossible even twenty years ago, and allow us new avenues of scholarship even in the face of restricted physical access to sites. My results demonstrate some of the strengths of such an innovative approach, and reflect the importance of continued technological advancements in archaeological research.

There are meaningful and under-appreciated similarities across time periods and parts of the world in urban processes such as sprawling growth or inner-city regeneration. The ancient city, furthermore, has much in common with modern examples—the dynamism of urban development; the complexity of interactions between top-down, centralized power and bottom-up, grassroots initiatives; and the resilience of a city's inhabitants in the face of global forces of change. An archaeology of the city must search for thematic trends that cut across these urban experiences. A study of the towns of North Africa under Rome shows but one way we can understand the city as a work in progress.

Appendix 1. Gazetteer of sites

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
(...)lense	Hr El-Abiod	334467						Unknown	Agricultural
(...)rdensium	Hr el Gonai	314837						Unknown	Agricultural
[---]sinsa	Hr el Haouli	314838						Unknown	Agricultural
[Ma]rag[ui] Sara?	Hr Chaâr	315068	Severans					Unknown	Agricultural
[P]hisi	Bechateur	315215						Unknown	Agricultural
A[---]	Ksar Mdouja	324652						Unknown	Agricultural
A[---]	Hr Bir el Askaria	334515						Unknown	Agricultural
Abbir Cella	Hr en Naam	314840	Severans					Unknown	Agricultural
Abbir Maius	Hr el Khandaq	314841	Severans					Unknown	Agricultural
Abitina	Chouhoud el Batin	314842	Hadrian	Severans				Unknown	Agricultural
Abthugnos	Hr es Souar	314843	Hadrian					Unknown	Agricultural
Acholla	Ras Boutria	324653						Organic	Port
Ad Ammonem?	Mellita	344284						Unknown	Agricultural
Ad Atticille	Sidi Amara	314847						Unknown	Agricultural
Ad Maiores (Nigrenses?)	Besseriani	334599			Yes	No	Unknown	Foundation	Military
Ad Medias	Taddert	334476						Unknown	Agricultural
Ad Molas	Sidi Brahim	314852						Unknown	Agricultural
Ad Oleastrum?	Hr Ferchatt	324656						Unknown	Agricultural
Ad Templum?	Kebili	344287						Unknown	Agricultural
Agbia	Aïn Hejja	314857	Severans					Unknown	Agricultural
Aggar?	Beni Hassen	324658						Unknown	Agricultural
Agger	Sidi Amara	324659	Severans					Unknown	Agricultural
Alma	Hr el Khima	314877						Unknown	Agricultural
Althiburos	Medeïna	324664	Hadrian					Organic	Agricultural
Amarea		344292						Unknown	Port
Ammaedara	Haïdra	324665		Vespasian	Yes	Yes	Loose	Foundation	Military
Apisa Maius	Tarf ech Chenah	314878						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Apisa Maius		314878						Unknown	Agricultural
Aptucca	Hr Oudeka	314880						Unknown	Agricultural
Aquae	Aïn Younes	314881						Unknown	Agricultural
Aquae Carpitanae	Korbous	314883						Unknown	Agricultural
Aquae Regiae	Haffouz	324667						Unknown	Agricultural
Aquae Traianae	Hammam Saïala	314885						Unknown	Agricultural
Aquilaria?	el-Guerria	314886						Unknown	Port
Aradi	Bou Arada	314887						Unknown	Agricultural
Asadi	Zaouia Sidi Jdidi	314891						Organic	Agricultural
Assuras	Zanfour	324669		Augustus	Yes	Nearby	Loose	Foundation	Agricultural
Astora?	Stora	305032						Unknown	Port
Aubuzza	Hr Zezza	324670						Unknown	Agricultural
Augarmi	Ksar Koutine	344302						Unknown	Agricultural
Aulodes	Sidi Raïss	314893	Severans					Unknown	Agricultural
Aunobari	Kern el Kebch	314894						Unknown	Agricultural
Avedda	Hr Bedd	315073	Severans					Unknown	Agricultural
Avensa	Bordj Hamdouna	314895	Severans		Yes	No	Unknown	Foundation	Agricultural
Aves?	Sidi Abdennour	344306						Unknown	Agricultural
Avioccala	Hr Sidi Amara	314896						Unknown	Agricultural
Avitta Bibba	Hr Bou Ftis	314897	Hadrian					Unknown	Agricultural
Bacchuiana Gens	Bacchuiana Gens	322387						Unknown	Agricultural
Bagai	Baghai	334501						Unknown	Agricultural
Bararus	Rougga	324673						Sprawl	Agricultural
Belalis Maior	Hr el Faouar	314900	Severans					Organic	Agricultural
Benefa?	Hr Flaguess	324675						Unknown	Port
Biha Bilta	Hr Behia	314901						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Biia	Aïn Batria	314902						Unknown	Agricultural
Biracsaccar	Sidi Bou Medien	314903						Unknown	Agricultural
Bisica Lucana	Hr Bichga	314908	Hadrian					Unknown	Agricultural
Bit[---]enses	Hr Brisgane	324679						Unknown	Agricultural
Bulla Regia	Hammam Darraji	314912	Vespasian	Hadrian				Organic	Agricultural
Calama	Guelma	305039	Trajan	Severans				Unknown	Agricultural
Canop(is)	Hr Sidi Bennour	314919		Hadrian				Unknown	Agricultural
Capsa	Gafsa	324684	Trajan					Unknown	Agricultural
Carpi(s)	Sidi er Reïs	314920		Caesar/ Augustus	Refoundation	No	Unknown	Refoundation	Port
Carthago	Carthage	314921		Augustus	Refoundation	Yes	Orthogonal	Refoundation	Port
Castellum [---]	Nebeur	314922						Unknown	Agricultural
Castellum Arsacalitanum	Arsacal	305043						Unknown	Agricultural
Castellum Mastarense	Mastar	305050						Unknown	Agricultural
Castra Cornelia	Kalaat el Andalous	314923			Yes	No	Unknown	Foundation	Port
Casula	Slimane	314942						Unknown	Agricultural
Cedias	Hr Oum Kif	334525						Unknown	Agricultural
Cellae	Hr Aïn Zouarine	314926						Unknown	Agricultural
Cellae Vicus?	Nadhour	324688						Unknown	Port
Celtianis	Celtianis	305058						Unknown	Agricultural
Cercina	Bordj el H'ssar	324690						Unknown	Port
Cerva?	Hr Safia	324692						Unknown	Military
Chidibbia	Slouguia	314927	Severans					Unknown	Agricultural
Chiniava	Hr Guenba	314928						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Chul	Beni Khalled	314929	Unknown					Unknown	Agricultural
Chullu	Collo	305063		Trajan				Unknown	Port
Chusira	Kesra	324693						Unknown	Agricultural
Cillium	Kasserine	324694	Trajan	Severans				Organic	Agricultural
Cincari	Hr Toungar	314933	Severans					Unknown	Agricultural
Cinyps Flumen	Oued Tareglat	344413						Unknown	Agricultural
Cirta	Constantine	305064		Augustus	Refoundation	Yes	Loose	Refoundation	Agricultural
Cit[---]	Sidi Ahmed al Hachani	324696						Unknown	Agricultural
Clipea	Kélibia	314892		Caesar	Refoundation	No	Loose	Refoundation	Port
Clucar	Hr el Amera	314939						Unknown	Agricultural
Coreva	Hr Dermoul	314940						Unknown	Agricultural
Cuicul	Djémila	305068		Trajan	Yes	No	Loose	Foundation	Agricultural
Culucitani(s)	Sidi Bou Merouen	305069						Unknown	Port
Cululis	Aïn Jeloula	324697	Hadrian					Unknown	Agricultural
Curubis	Korba	314943		Caesar	Refoundation	No	Unknown	Refoundation	Port
Cuttilula	Aïn Zouza	324698						Unknown	Agricultural
Diana Veteranorum	Aïn Zana	334536	Trajan		Yes	No	Unknown	Foundation	Military
Drusiliana	Hr Khanget el Kedim	314949						Unknown	Agricultural
Euphranta/ Macomades	Sirte	363959						Unknown	Port
Furnos Maius	Aïn Fourna	314959	Commodus					Unknown	Agricultural
Furnos Minus	Hr Msaadine	314960	Severans					Unknown	Agricultural
Gadiaufala	Ksar Sbahi	305082						Unknown	Agricultural
Gales	Hr Kharrouba	314962						Unknown	Agricultural
Gemellae	Sidi Aïch	324711	Marcus Aurelius		Yes	No	Unknown	Foundation	Military
Gergis	Zarzis	344372						Unknown	Port

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Geumi	Bordj-el-Hadj-bou-Baker	314964						Unknown	Agricultural
Gigthis	Bou Ghrara	344380	Antoninus Pius					Organic	Port
Gillium	Hr Frass	314965						Unknown	Agricultural
Girba	Houmt Souk	344383						Unknown	Port
Giufi	Bir Mcherga	314966	Severans					Unknown	Agricultural
Gumis	Bordj Cedria	314968						Unknown	Agricultural
Gummi?	Mahdia	324663						Unknown	Port
Gunela?	Hr Gongla	314969						Unknown	Agricultural
Gurza?	Kalaa Kbira	324714						Unknown	Agricultural
Hadrumetum	Sousse	324716		Trajan				Unknown	Port
Haribus?	Guellala	349597						Unknown	Port
Hippo Diarrhytus	Bizerte	315038		Caesar/ Augustus	Refoundation	Yes	Unknown	Refoundation	Port
Hippo Regius	Annaba	305090	Augustus	Flavians				Unknown	Port
Horrea Caelia	Hergla	315041						Unknown	Port
Idicra	Aziz ben Tellis	305065						Unknown	Agricultural
Inuca	Bordj Bahran	315044						Unknown	Agricultural
Iunci	Bordj Yonga	324772						Unknown	Port
Lamasba	Henchir Merouana	334569		Antoninus Pius	Yes	No	Unknown	Foundation	Military
Lambaesis	Lambèse	334570	Marcus Aurelius		Yes	Nearby	Orthogonal	Foundation	Military
Lambiridi	Kherbet-Ouled-Arif	334572			Yes	No	Unknown	Foundation	Military
Lamniana?		315060						Unknown	Port
Lares	Lorbeus	315061		Hadrian				Unknown	Agricultural
Leges Maiores	Hr Gousset	334575						Unknown	Agricultural
Lepcis Magna	Lebdah	344448	Flavians	Trajan				Sprawl	Port
Lepti Minus	Lamta	324767		Trajan				Sprawl	Port

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Limisa	Ksar Limsa	315063	Severans					Unknown	Agricultural
Locri	Zuwarah	344424						Unknown	Port
Ma[---]rensium	Aïn Tella	315105						Unknown	Agricultural
Macomades	Hr el Mergueb	334583	Unknown					Unknown	Port
Macomades Minores?	Bordj Yonga	324772						Unknown	Agricultural
Macota?	Maghraoua	324773						Unknown	Agricultural
Mactaris	Makthar	324774		Marcus Aurelius				Organic	Agricultural
Madauros	Mdaourouch	315065		Flavians	Refoundation	Yes	Orthogonal	Refoundation	Military
Manange?	Hr Faroha	324770	Severans					Unknown	Agricultural
Marazanae?	Hr Guennara	329225						Unknown	Agricultural
Marcimeni	Aïn Beïda	334586						Unknown	Agricultural
Mascula	Khenchela	334587	Trajan					Unknown	Military
Masculula	Hr Guergour	315070						Unknown	Agricultural
Matar[i]	Mateur	315071						Unknown	Agricultural
Maxula	Radès	315072		Augustus	Refoundation	No	Unknown	Refoundation	Port
Medeli	Hr Bou Rebia	315106						Unknown	Agricultural
Mediccera	Aïn Mdeker	315074						Unknown	Agricultural
Megradi		344437						Unknown	Port
Membressa	Mejez el Bab	315075						Unknown	Agricultural
Membrone?	Sidi Ahmed Bou Farès	315076						Unknown	Port
Meninx	Borj el Kantara	344440						Sprawl	Port
Mididi	Hr Midid	324783						Unknown	Agricultural
Milev	Mila	305109		Trajan				Unknown	Agricultural
Missua	Sidi Daoud	315082						Unknown	Port
Miz[eo]t[e]r[---]?	Bou Jelida	315083						Unknown	Agricultural
Mizigi	Aïn Babbouch	314936						Unknown	Agricultural
Municipiu[m Se]ptim[ium---]	Hr Debbik	315149	Severans					Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Municipium Aurelium C[---]	Hr Boucha	315084	Commodus					Sprawl	Agricultural
Municipium Nattabutum	Oum Guerriguech	305066						Unknown	Agricultural
Musti	Hr Mist	315085	Caesar		Refoundation	No	Loose	Refoundation	Agricultural
Mutia?	Hr Forma Mta Zralma	324788						Unknown	Agricultural
Muzuca	Hr Karachoun	324789	Severans					Unknown	Agricultural
Nara?	Bir el Bey	324792						Unknown	Agricultural
Naraggara	Sakiet Sidi Youssef	315091						Unknown	Agricultural
Neapolis	Nabeul	315093		Caesar/ Augustus	Refoundation	No	Loose	Refoundation	Port
Neferis	Hr Bou Baker	315094						Unknown	Agricultural
Nicivibus	Ngaous	334600						Unknown	Agricultural
Numluli	Hr el Matria	315097	Severans					Unknown	Agricultural
Obba	Ebba	324795						Unknown	Agricultural
Oea	Tripoli	344456		Commodus				Unknown	Port
Onellaba	Borj bou Larès	315099						Unknown	Agricultural
Orbita?		315100						Unknown	Port
Oviscae?	Oglet el Ajela	324798						Unknown	Agricultural
Paccianis Matidiae?	Merdja	305126						Unknown	Port
Pagus Veneriensis	Koudiat es Souda	315111						Unknown	Agricultural
Pheradi Maius	Sidi Khalifa	315113						Unknown	Agricultural
Picus	Hr el Ameri	315114						Unknown	Agricultural
Pisida	Bu Kammash	344459	Unknown					Unknown	Port
Popthi?	Ksiba	315115						Unknown	Agricultural
Praesidium Silvani?	Sidi Mheddeb	329235						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Pupput	Hammamet	315121		Commodus				Unknown	Port
Putea Pallene	Naoura	344462						Unknown	Agricultural
Rotaria?	Oum Krékèche	305066						Unknown	Agricultural
Rucuma	Hr er Roukm	315131						Unknown	Agricultural
Rusicade	Ras Skikda	305137		Trajan				Unknown	Port
Ruspae	Rosfa	324802						Unknown	Agricultural
Ruspina	Hr Tennir	324803						Unknown	Port
Rusucmona	Ghar al Milh	315132						Unknown	Port
Sabratha	Sabratah	344282		Antoninus Pius				Sprawl	Port
Sabzia	Sidi Abdel Krim	315134						Unknown	Agricultural
Saia Maior	Hr ed Douamis	315135						Unknown	Agricultural
Saltus Massipianus	Bordj el Arbi	324806						Unknown	Agricultural
Saradi	Hr Seheli	315144						Unknown	Agricultural
Sarsura?	Hr el Ksour	324807						Unknown	Agricultural
Se...?	Hr ed Damous	324808						Unknown	Agricultural
Segermes	Hr Harrat	315147	Marcus Aurelius					Unknown	Agricultural
Semta	Hr Zemda	315148						Unknown	Agricultural
Seressi	Oum el Abouab	315150	Marcus Aurelius					Unknown	Agricultural
Siagu	Ksar ez Zit	315151						Unknown	Agricultural
Sicca Veneria	El Kef	315152		Augustus	Refoundation	Yes	Unknown	Refoundation	Agricultural
Sicilibba	El Alaouine	315153						Unknown	Agricultural
Siguese	Kebouch	315171						Unknown	Agricultural
Sigus	Sigus	305150						Unknown	Agricultural
Simingi	Sminja	315172						Unknown	Agricultural
Simitthu	Chemtou	315174		Augustus				Sprawl	Industrial

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Sivali(s)	Sidi Amor Jedidi	314937						Unknown	Agricultural
Sua	Chaouach	315176						Organic	Agricultural
Sucubi	Hr Brighitha	315177						Unknown	Agricultural
Sufes	Sbiba	324815	Marcus Aurelius					Unknown	Agricultural
Sufetula	Sbeitla	324816	Flavians	Severans	Refoundation	No	Orthogonal	Refoundation	Agricultural
Sullectum	Salakta	324817						Unknown	Port
Sulluctu?	Sidi bou Zeid	305158						Unknown	Port
Sululos	Bir el Heuch	315178	Severans					Unknown	Agricultural
Suo	Hr Merah	315177						Unknown	Agricultural
Sustri	Hr el Ergueia	315180						Unknown	Agricultural
Suttua	Hr Chott	315108						Unknown	Agricultural
Sutunurca	Aïn el Asker	315181						Unknown	Agricultural
Tacapes	Gabès	344496		Severans				Unknown	Port
Tacatua	Takouch	305160						Unknown	Port
Tagamuta?	Ksar el Baroud	329244						Unknown	Agricultural
Taparura	Sfax	324822						Unknown	Port
Taphra	Gaphara	344359						Unknown	Port
Tapphugaba	Jenan es Zaytouna	315185						Unknown	Agricultural
Taricheiai	El-Mdeina	344500						Unknown	Port
Tegla	Tegla	315186						Unknown	Port
Teglata	Aïn el Khaloulia	315187						Unknown	Agricultural
Templum Veneris	Tarf el Jorf	344505						Unknown	Agricultural
Tepelte	Hr Bel Aïd	315188						Unknown	Agricultural
Thabarbus(is)?	Aïn Nechma	305161						Unknown	Agricultural
Thabbora	Hr Tambra	315191						Unknown	Agricultural
Thabraca	Tabarka	315192		Caesar/ Augustus	Refoundation	Yes	Loose	Refoundation	Port

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Thac[---]	Aïn Teki	315193						Unknown	Agricultural
Thaca	Hr Zaktoun	315194						Unknown	Agricultural
Thacia	Bordj Messaoudi	315195						Unknown	Agricultural
Thaddur(es?)	Hr el Kelkh	315196						Unknown	Agricultural
Thaenae	Hr Thina	324825		Hadrian				Organic	Port
Thagari Maius	Tell el Gaïd	315197						Unknown	Agricultural
Thagaste	Souk Ahras	315198	Trajan					Unknown	Agricultural
Thagura	Taoura	315199	2nd century					Unknown	Agricultural
Thamugadi	Timgad	334636		Trajan	Yes	No	Orthogonal	Foundation	Military
Thapsus	Ras Dimas	324827						Unknown	Port
Thelepte	Medinet el Kdima	324828		Trajan	Refoundation	No	Orthogonal	Refoundation	Military
Themetra	Souani el Adhari	324829				No		Unknown	Port
Thesacti	Hr Bou Skikine	324830						Unknown	Agricultural
Theudalis	Hr Aouan	315200						Unknown	Agricultural
Theveste	Tebessa	324831		Trajan				Sprawl	Military
Thibari	Thibar	315201	Severans					Unknown	Agricultural
Thibicaae	Bir Magra	315202						Unknown	Agricultural
Thibilis	Announa	305165						Organic	Agricultural
Thibiuca	Hr Zouitina	315084						Unknown	Agricultural
Thiges	Degache	324832						Unknown	Agricultural
Thigibba	Hammam Zouakra	321707						Unknown	Agricultural
Thigibba Bure	Djebba	315206						Unknown	Agricultural
Thignica	Aïn Tounga	315207	Severans					Unknown	Agricultural
Thimida	Tinja	315208						Unknown	Agricultural
Thimida Bure	Kouchbatia	315209						Unknown	Agricultural
Thimida Regia	La Mohammadia	315210						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Thimissua	Hr Tazma	315211						Unknown	Agricultural
Thinissut	Bir Bou Rekba	315213						Unknown	Agricultural
Thisica	Hr Techga	315216	Hadrian					Unknown	Agricultural
Thisiduo	Grich el Oued	315214	2nd century					Unknown	Agricultural
Thub[---]?	Menzel el Gorchi	315217		Augustus	Refoundation	No	Unknown	Refoundation	Agricultural
Thubactis	Bir el Gderia	344513	Unknown					Unknown	Port
Thubba	Chouigui	315218						Unknown	Agricultural
Thuburbo Maius	Hr Kasbat	315220	Hadrian	Commodus				Organic	Agricultural
Thuburbo Minus	Tebourba	315219		Caesar/ Augustus	Yes	Nearby	Unknown	Foundation	Military
Thuburnica	Sidi Ali Belkacem	315221		Augustus	Refoundation	No	Unknown	Refoundation	Agricultural
Thubursicu Bure	Teboursouk	315222	Severans					Unknown	Agricultural
Thubursicum Numidarum	Khamissa	305166	Trajan					Organic	Agricultural
Thugga	Dougga	315223	Severans					Organic	Agricultural
Thullio	Ksar Beni Fredj	315224						Unknown	Agricultural
Thunusuda?	Sidi Meskine	315226						Unknown	Agricultural
Thuraria	Chaouat	315227						Unknown	Agricultural
Thysdrus	El Jem	324835	Severans					Sprawl	Agricultural
Tichila	Testour	315228						Unknown	Agricultural
Tiddis		305167						Organic	Agricultural
Tigisi	Aïn Bordj	305168						Unknown	Agricultural
Tinfadi	Hr Metkidès	338292	Severans					Unknown	Agricultural
Tipasa	Tifech	295363						Unknown	Agricultural
Tituli	Mahjouba	324836						Unknown	Agricultural
Trisipa	Kef Terjba	315110						Unknown	Agricultural
Tubernuc	Aïn Tebournok	315230						Unknown	Agricultural
Tubulbaca?	Teboulba	344503	Severans					Unknown	Agricultural
Tubunae	Tobna	334641						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Tucca Terebentina	Hr Dougga	324834						Unknown	Agricultural
Tuccabor	Toukabeur	315231						Unknown	Agricultural
Tuniza?		315235						Unknown	Port
Turris Tamalleni	Telmine	344526	Hadrian					Unknown	Agricultural
Tusuros	Tozeur	334643						Unknown	Agricultural
Uccula	Hr Douirat	315241	Marcus Aurelius					Unknown	Agricultural
Uchi Maius	Hr Douamis	315242		Severans				Organic	Agricultural
Ucres?	Bordj bou Jadi	315243						Unknown	Agricultural
Ucubi(s)	Hr Gaoussat	315244						Unknown	Agricultural
Ulisippira	Hr el Zembra	324839	Hadrian					Unknown	Agricultural
Unknown	Burgu	344383						Unknown	Agricultural
Unknown	Ain Golea	314859						Unknown	Agricultural
Unknown	Hr Belda	314976						Unknown	Agricultural
Unknown	Ghardimaou	315262						Unknown	Agricultural
Unknown	Hr el Hammam	324729						Unknown	Agricultural
Unknown	Ain Rchine	314873						Unknown	Agricultural
Unknown	Sidi Naoui	315168						Unknown	Agricultural
Unknown	Hr Srira	324738						Unknown	Agricultural
Unknown	Hr el Abiod	314989						Unknown	Agricultural
Unknown	El Knissia	324762						Unknown	Agricultural
Unknown	Marsa Gezirah	344432						Unknown	Port
Unknown	Ras Maamoura	315129						Unknown	Port
Unknown	Argoub-el-Bania	314888						Unknown	Port
Unknown	Marsa Nouira	315069						Unknown	Port
Uppenna	Chigarnia	315245						Unknown	Agricultural
Ureu	Bourdj Ouraou	315246	Marcus Aurelius					Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Urusi	Hr Soudga	324840						Unknown	Agricultural
Usula	Inchilla	324841						Unknown	Port
Uthina	Oudna	315247		Caesar/ Augustus	Refoundation	Yes	Loose	Refoundation	Military
Utica	Utique	315248	Augustus	Hadrian				Sprawl	Port
Uzaae	Msaken	324842						Unknown	Agricultural
Uzali Sar[---]	Hr Jall	315250						Organic	Agricultural
Uzalis	El Alia	315251	Augustus					Unknown	Agricultural
Uzappa	Ksour Abdelmalek	324843						Unknown	Agricultural
Uzelis	Uzelis	305178						Unknown	Agricultural
Uzitta	Hr el Mekharreb	324844						Unknown	Agricultural
Vaga	Beja	315253		Severans				Unknown	Agricultural
Vaga?	Beja ez Zit	324846						Unknown	Agricultural
Vallis	Sidi Medien	315254	Severans					Unknown	Agricultural
Vasampus?	Morsot	324847						Unknown	Agricultural
Vasidice	Aïn Tamatmat	338299						Unknown	Agricultural
Vatari	Fedj es Siouda	334659						Unknown	Agricultural
Vazari	Hr Béjar	315256						Unknown	Agricultural
Vazi Sarara	Hr Bez	324848						Unknown	Agricultural
Vegesela?	Hr Rekba	324849						Unknown	Agricultural
Verecunda	Markouna	334662	Marcus Aurelius		Yes	Nearby	Unknown	Foundation	Military
Vicus Annaeus	Ksour Jemda	315258						Unknown	Agricultural
Vicus Augusti	Sidi el Hani	324850						Unknown	Agricultural
Vicus Bobius	Sidi Ali Raï el Ghlem	315260						Unknown	Agricultural
Vicus Maracitanus	Ksar Toual Zouameul	324776						Unknown	Agricultural
Vicus Phosphorus	Aïn Melouk	305185						Unknown	Agricultural

Ancient name	Modern name	Pleiades ref. #	Municipal upgrade	Colonial upgrade	Foundation	Earlier burial	Foundation plan	Growth	Economic function
Vina	Hr el Mden	315264	Marcus Aurelius					Unknown	Agricultural
Zacazama	Bin Jawad	364034			Yes	No	Unknown	Foundation	Port
Zama Regia	Jama	315267		Hadrian				Unknown	Agricultural
Zattara	Kef Benzioun	305188						Unknown	Agricultural
Zeta	Hr ez Zaouia	324853						Unknown	Agricultural
Ziqua	Zaghouan	315271						Unknown	Agricultural
Zitha	Ziane	344571						Unknown	Port
Zucchari	Bent Saïdane	315273						Unknown	Agricultural
Zuchis	El Biban	344576						Unknown	Agricultural

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Abbreviations for epigraphic sources

AE = *L'Année Épigraphique*
CIL = *Corpus Inscriptionum Latinarum*
IlAfr = *Inscriptions latines d'Afrique*
IlAlg = *Inscriptions latines de l'Algerie*
IlTun = *Inscriptions latines de la Tunisie*
RIL = *Recueil des inscriptions libyques*

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