Urban systems in the Roman Near East: historical and functional dimensions of urbanism in Roman Syria, Mesopotamia, Palestine and Arabia

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Chapter 5 General conclusions

The first two chapters of this thesis gave a reconstruction of the urban system found in the provinces of the Roman Levant. All regions show that the complex interplay between geography, path dependency and human agency created different results. Geography might very well determine the preferable spots for settlement. With necessary conditions fulfilled, i.e., access to water, ground suitable for construction and cultivable soil, chances are good that some type of settlement would emerge, even if little more than a small village. And with the rich history of the Levant, people had probably already been living at that spot for hundreds, if not thousands of years. Beyond the confines of the 'fertile crescent', in the steppe- and desert-like conditions towards the east and south, permanent settlement remained very limited indeed.

But geography alone does not create cities. For a variety of reasons people flock together at specific sites rather than others. Some of these reasons might be geographically determined, but still depend on the specific needs of people at a specific time. Defensibility could for instance be an important factor in more uncertain times, causing people to cluster on and around hilltops, or in the safety of already existing, well-fortified cities. Over time, preferences might shift towards more easily accessible sites. Access to specific sea routes, passes and rivers could be valuable, but with changing economic and political conditions, these routes might become obsolete again. Access to particular resources might be in demand in one era, but not in another. Even with such shifting preconditions, some of these settlements remained dominant settlements, for the simple reason that they had been so for a long time.

The city of Petra provides a good illustration: without the Nabatean success in caravan trade – and the power vacuum left by the disintegrating Hellenistic empires – would the city have grown to anything more than any other Nabatean sanctuary? A place of religious importance, with the occasional nomadic group visiting? In the centuries before Roman annexation Petra became the capital of the Nabatean kingdom; and as it came to fall under Roman control, it remained a vibrant and regionally important metropolis, even if by now sea-borne trade by way of Egypt eclipsed the value of any land route via Petra.

Overall, it is clear that in all regions, the development of the urban system continued along trajectories that had already been set in motion before Roman annexation, with incorporation into the empire at times acting as a catalyst. One major, well-known difference is visible between the former zones of control of the Seleucid and Ptolemaic empires. In the southern, formerly Ptolemaic provinces, a dense network is visible of mostly small cities, while in the northern, formerly Seleucid territory, large dominant urban centres controlled vast territories in comparison. As seen in Chapter 3, the total urban area of Coele Syria alone accounted for a third

of the total urban area in the entire study area, more than that of Syria Palaestina and Arabia combined. Yet Coele Syria contained less than half of the actual cities found in those two provinces. These basic facts highlight the contrast between a northern zone in which we find a handful of unusually large cities and a southern zone characterised by the existence of many small towns. It is generally argued that in the south, a more decentralised form of regional control based on village-level toparchies had been in place, contrasting with the more centralised approach of city 'foundations' by the Seleucids in the north. It should however also be acknowledged that for instance in the Jewish kingdom, Jerusalem, at its apex, certainly was an urban centre that could rival the Hellenistic cities in the north. However, with Roman control focused in Herod's new city of Caesarea Maritima, and certainly with the destruction of Jerusalem, the old subordinate toparchy centres slowly but surely increasingly took on urban aspects, and many attained urban status under Roman control.

In general, we find that most cities of the Roman Near East remained small to middling settlements, unless particular circumstances elevated them beyond their peers. For instance, we see such specific conditions among the old Phoenician cities, all potential commercial hubs in their own right, and with urban trajectories going back further than most Levantine cities. Along their historical trajectories, changing political and economic situations affected their success. So where at one point Arados may have been a rich and (semi-) independent polity, settlements like Tyre and Berytus benefited far more from their integration into the Roman Empire. Receiving grants of colonial status and land helped them grow beyond most of the other coastal cities – even if still remaining moderately-sized towns, both likely under 70 hectares. However, developments could also go the other way. Arados itself had backed the wrong sides during the Roman civil wars and lost territory as a result. And on the other side of the mountains, in the territory of Berytus, we see a rare development in the Roman Levant, or at least the northern provinces: the genesis of a new city, Heliopolis. Having become a major cult site during the Roman period, under the Severans Heliopolis was granted urban status, and part of the territory of Berytus with it. This was a result of Berytus backing the wrong candidate for the imperial purples – but also a recognition of the demographic growth that followed the opportunities that could be found at a major religious centre. Indeed, by then Heliopolis was larger than Berytus itself.

The impact of particular events and crises sometimes was sudden and extreme, as in the case of Jerusalem, or a city like Dura Europos, which never recovered from the sack by Shapur in the mid-third century. But mostly, settlements were resilient, change was slow and longer-term paths were more relevant, also after the Roman conquest. For instance, relatively recently annexed Mesopotamian cities like Edessa and Nisibis – the dominant centres of their own

respective (client) kingdoms – remained large, important, and locally uncontested cities within a Roman context.

On the whole, as far as the evidence allows, we can conclude that in most regions the first to third centuries show a general increase in settlement size and number compared to the Hellenistic period. This was certainly the case in the Tetrapolis, where the archaeological evidence from Antioch and its territory is particularly impressive. While Antioch was of course already an important capital of the Seleucid kingdom, it is clear that under Rome it witnessed a period of unprecedented growth. Beyond the cities, in most regions there are examples of an increased density of rural settlements and an expansion of settlement into marginal areas.

The size distributions described in chapters 1, 2 and 3 take a wider regional perspective. To begin with, the rank-size graphs for the study regions do not adhere to Zipf's law, but broken down into their constituent provinces or proximity clusters, we find three areas where they do, to a limited degree. As argued in chapter 1.3.3, the occurrence of distributions that follow Zipf's law has been explained in various ways, one of which suggests the economic integration of the system under study. A major difference in all regions from a 'perfect' Zipf distribution is a strong underrepresentation of smaller settlements, causing a strong tapering off of the lower tail of the distributions. While this is to be expected, it is an important reminder that when dealing with ancient settlements, it is mostly the larger cities for which locations and sizes are known, while smaller towns have far less chances of being found or studied.

Although a Zipfian distribution need not imply perfect economic integration, the existence of settlement hierarchies that do not conform to Zipf's law may be read as pointing to a low level of economic integration of the urban system. In particular, the presence of a strong convexity in all regional distributions seems to reflect the existence of many urban settlements of moderate size, that could survive on local food production. To investigate this further, Chapter 3 studied the potential levels of cereal cultivation in market zones drawn around cities and secondary settlements. On the one hand, while market zones around official cities only cover a limited part of the provinces, taking secondary settlements into account gave a significant increase in coverage. However, as became clear from the size distributions, this exercise also highlights the remaining gaps where we lack knowledge about places performing central functions. Despite these uncertainties it is clear that the market zones of most settlements of the Roman Levant were capable of generating enough food for local consumption. From a functional point of view most of these places were little more than central places strongly embedded in their agricultural territories. At least on this front, incorporation into the Roman Empire did not bring major modifications to settlement dynamics.

Interestingly, there are reasons to think that a relatively low level of economic integration within the urban system as a whole went hand in hand with a considerable level of market involvement within urban territories. Thus the spread of non-urban central places strongly suggests the importance of the availability of market centres for rural communities. And we can even see the expansion of rural settlement and the forming of non-urban central places into remoter areas such as the Limestone Massifs or Upper Galilee.

In Chapter 3 an attempt was made to test these general findings by extrapolating settlement sizes based on local agricultural possibilities. The resultant distributions mostly reinforce the picture already emerging from the distributions based on actual sizes. Where we found a closer match to the Zipf distributions for the upper tail – in Coele Syria, and in the north and south of Arabia – the filling in of the lower tails brings the whole distribution more in line with these theoretical models. In those regions whose largest cities and towns were distributed according to a 'concave' pattern, the difference with a Zipfian distribution becomes even more pronounced. In theory it would be possible to argue that Coele Syria had a well-integrated economy, since it was focused around Antioch as the political, military and economic heart of the Roman East. However, if this was the case, it becomes difficult to explain why the rank-size graph for the cities of coastal Palestine is completely out of line with a Zipfian distribution. If we also take into account the degree to which the figures in 3.2.2.4 reflect potential food production, it becomes probable that the Rank Size distributions for the Roman Levant primarily reflect the differences in the quality and size of urban territories.

That leaves us with a limited number of cities that very clearly did break through their theoretical ceiling of local food production within their direct market zones. We have taken detailed looks at Petra and Palmyra, both well-known for their wealth from trade activities, but we found that agricultural techniques adapted to their environment and larger catchment areas allowed for more local food production than initially expected. Only in a few cases can we be certain that a city was structurally dependent on food imports: hemmed in between the mountains and the territory of Antioch, there was no way that Seleucia Pieria could have produced enough food in its own territory compared to the size of the city. But this was clearly an exceptional settlement, not just as a port city but also as the headquarters of the Syrian fleet.

In terms of size the city of Antioch towered above all other cities of the Roman Levant. In Chapter 4, a detailed investigation into the archaeological evidence showed that this city may well have counted between 110,000 and 135,000 inhabitants. Interestingly, even this unusually large city seems to have been sustained largely by local production. Antioch's administrative territory enclosed 653,500 hectares, 605,300 of which were cultivable, clearly a far larger area than just its theoretical market zone. In Chapter 4 it has been argued that in all likelihood, this

area was quite sufficient to support a regional population of well over 450,000 people, up to perhaps 600,000, even if the latter figure was hardly sustainable over longer periods of time. Unsustainable practices certainly took place, leading to soil erosion in the highlands over the following centuries. However, as the various settlement surveys in the Antiochene indicate, during the second and third centuries we should not yet expect the territory to have been populated to its fullest extent. Essentially, this means that even the continued existence of the largest city of the Levant was not by necessity predicated on the existence of structural food imports, paid for by the proceeds of manufacture and trade.

Many of the results of this study would benefit from being finetuned with the help of better paleoclimatic data for the Roman period. Combined with in-depth studies into actual land use and more surveys of non-urban settlements, we could gain better insight into the population size and agricultural productive capacity of the Roman Near East. More importantly, while increases in settlement numbers and evidence of agricultural expansion have been touched upon several times in this thesis, we need to look at the long-term sustainability of Roman land use. We have looked at a relatively static situation, but a broader temporal perspective will probably add valuable insights. Can we get a more detailed look at the settlements of the Hellenistic period? How did the settlement system develop into the Later Roman and Early Islamic periods? What was the role of climatic change? Did agricultural practices adapt to changing circumstances in a sustainable way?[848]

In this thesis, we have seen that both geographical factors and path dependencies played a large role in the evolution of cities. Among those factors which set the long-term histories of individual cities as well as the development of regional settlement hierarchies on particular trajectories political and administrative decisions made by various monarchs of the early Hellenistic period appear to have been particularly important, but there are also instances of cities being pushed into long-term decline as a result of much later political upheavals.

If we look at the long-term development of the settlement systems of the Roman Levant as a whole, the Roman-imperial period stands out clearly as a period of demographic expansion and settlement growth. Still, even the expanding cities of the Roman Near East were still not particularly large compared to later historical periods, and with the exception of a handful of cities, most of them could very well sustain themselves from the food produced within their hinterlands. It may well be the case that the Roman period witnessed an increase in local, regional and inter-regional trade throughout the geographical area targeted in this monograph,

[848] The ERC funded project 'Climate, Landscape, Settlement and Society: Exploring Human Environment Interaction in the Ancient Near East' directed by Dan Lawrence aims to answer at least some of these questions.

but if such an increase took place, it was clearly not sufficiently strong to overcome the limits set by an economic system in which almost all of the basic food crops consumed by urban populations were grown within the agricultural and administrative territories of the cities concerned.