URBANISM IN GRAECO-ROMAN EGYPT

Wolfgang Müller

The Graeco-Roman period as such is rarely in the focus of Egyptological discussion.¹ With respect to urbanism and demographic matters in general anyhow, retrospective input from post Pharaonic Egypt is indispensable. In spite of the overall situation of settlement-archaeology in Egypt, which is, as will surely have become clear from the other papers of this conference, a rather dire one (especially for the Graeco-Roman period),² the abundance of written material and the fact that Egypt had been more and more within the scope of Greek historiography from Dynasty 26 onwards³ and had finally been made part of the Greek speaking koiné "by spear", when Alexander the Great conquered it, present us with an amount of information unknown from any other part of the Greek and Roman worlds.⁴ We will trace the development of cities from the beginnings of Greek settlement in Egypt to fully established urbanism in the Roman Period.

It is not possible to deal with the phenomenon of settlements in Egypt from the 6th century BC until the advent of Islam in a single paper, neither in regard to bibliography nor the archaeological and historical evidence. Due to the few properly excavated towns it will be necessary to base significant parts of the argument on the non-archaeological sources and their interpretation by papyrologists and historians, thus enlarging the material even further. The papyrological evidence is distributed unevenly over Egypt as the preservation of the media depends on the level of the water-table. There are nearly no papyri from the Delta, most of them have been found in the Fayum in salvage excavations triggered by Sebakhin or in the course of papyrus-hunting expeditions all over Upper-Egypt.

The purely archaeological part of the paper is limited to selected test-cases and a concluding account of the recent excavations in Syene, modern Aswan. As the archaeological contribution is still lamentably small it shall be shown where archaeology might help to illuminate parts of the picture as yet insufficiently covered by the written sources.

1. PRELIMINARIES

1.1. Sociological tools for a translation of the ancient city into modern terms

It has become very common to include at least some "theory" into archaeological or historical treatises, especially those dealing with settlements and towns. The problems lie clearly in how the influx from philosophical or sociological sources is processed in the work itself. Frequently some titles and outlines of theoretical models are mentioned in an introductory chapter, like an obligation fulfilled, never to be mentioned again in the following pages. Even if such theories find their way into the work as a whole, some authors fail to make a decision as to which of them is most applicable to the problem at hand. A cloud of opinions emerges that is deployed like a kind of camouflage thus enabling the author to avoid more fundamental statements. Finally, a strategy obviously not only applied by archaeologists, is "name-dropping" of eminent figures as sufficient verification of a hypothesis.⁵ A better, but still not overtly satisfying approach is the application of definitions and terms taken from a sociological model in a purely descriptive rather than an analytical way.⁶ If it is possible or even desirable to adapt or create a model or models for the phenomena of the settlements of Egypt in Hellenistic and Roman times it can best be answered in following R. S. Bagnall in a proposition he made concerning the economy of Roman Egypt. Even if an overall model is not possible, Egypt poses a unique opportunity for testing aspects of such models.⁷

- ¹ I am indebted to David Aston for correcting my English. All mistakes are my responsibility.
- ² RATHBONE 1994. BAGNALL 1988, 199–201. BAGNALL 2001, 227; 239–240.
- ³ Smoláriková 2002, 85–91. Dihle 2005.
- ⁴ BAGNALL 2005, 189–190.

- ⁵ *Cf.* PILTZ 2008, 82: Braudel is used as a "plausibilisierende Letztreferenz".
- ⁶ In favour of this approach it can be said that at least the readability for other cultural sciences is significantly enhanced this way.
- ⁷ BAGNALL 2005, 200–201.

Max Weber's notion of the city in general and the ancient city especially, has been, and still is, quite attractive for some archaeologists. The major shortcomings of his theory are due to the fact that he is mostly concerned with the feudal towns of medieval Europe while the ancient cities are treated as less developed precursors.8 His ideas of the "consumer city" and "producer city"9 have been highly influential, for example, with Moses I. Finley.¹⁰ Several criteria for urban settlements can be gained from city-models applied by archaeologists: A city is a densely populated nucleated settlement of considerable size with a central market place and a socially differentiated citizen body and cityscape. Other aspects, including such functions as religious centre or protection by a city wall are not present in all models.¹¹

The sociological model of Anthony Giddens has been most influential, especially with Post-Processual archaeologists.¹² The broader applications, concerning towns or settlements for instance, have been mostly neglected by them due to both their prehistoric or ethno-archaeological bias and modern small scale archaeology, dealing mainly with domestic micro-sociological structures.

Anthony Giddens' theory of Structuration is attempting to bridge the gap between holistic and individualistic schools of sociology¹³ by its dualism of structure: structures are a result of past or present decisions of acting individuals and only exist through their being enacted by knowledgeable individuals who are themselves depending on structural elements like rules etc.¹⁴

Giddens has elaborated on cities in what he calls "Class-Divided Societies".¹⁵ His, like any other sociological model, has not been created for ancient societies.¹⁶ Even if the pre-capitalist city is according to Giddens significantly different from modern forms of settlement,¹⁷ he uses it as a test arrangement for the application of his theory, mostly to stress features of the capitalist city yet absent in ancient towns. The complexity of ancient societies is neglected in favour of traits exemplary for capitalist change. In order to make use of the construct of the pre-capitalist city of Giddens, Weber's Producer or Consumer City model or Polanyi's "Port of Call" type of town the Weberian "Idealtyp" has been introduced.¹⁸ While this approach has brought considerable results, especially in the resent work of Astrid Möller on Naukratis,¹⁹ stressing congruencies between the model respectively the case-study in its sociological context, while neglecting incongruencies reduce the analytical quality significantly. Incongruencies are often rooted in the limited knowledge of the sociologist about recent archaeological or historical research. He is of course a layman with respect to antiquity just as the archaeologist is usually not systematically educated in sociology.²⁰ Moreover, frequently information deficits within the archaeological disciplines misleadingly imply the applicability of aspects of models.²¹ Besides these kinds of "scholar-based" incongruencies, especially evident with models created long ago, there are more inherent systematic differences. These differences are often much more significant than apparent congruencies. If sociological types of pre-capitalist cities are not very helpful by themselves, the more basic notions of society that are tested on these artificial constructions, may well be applied to our, admittedly - hopefully informed but

218

¹³ WERLEN 1999,
 ¹⁴ LAMLA 2003, 17.
 ¹⁵ GIDDENS 1981, 140–150.
 ¹⁶ ALSTON 2002, 9–12.

newer archaeological results. Greek pottery and Greek products were traded on a regular basis and had a market inside Egypt. *Cf.* YARDENI 1993 on a detailed list of products traded via an unknown Egyptian harbour from 475 B. C. E. (MÖLLER 2000, 38 states that the overall economical stiuation did not change during the persian period).

⁸ GIDDENS 1981, 142 states that Weber's model does not work with the city in a Class divided society.

⁹ WEBER 1972, 729.

¹⁰ FINLEY 1993, 163–164 is strongly in favour of the *consumer* versus the *producer* city claiming that, unlike in Medieval European towns, the goods produced by the city were mostly consumed by the urban population and were not traded outside the town to a significant degree (*ibid.* 229–235).

¹ MÖLLER 2000, 12–13. MUELLER 2006, 85–89 and a table with criteria currently applied by archaeologists (*ibid.* table 3.1).

¹² HODDER 1986, 73–79. Hodder gives more weight to the *Habitus* of Bourdieu but contrasts both Bourdieu and Giddens to Marxist and Structuralist tendencies. *Cf.* more recently GARDNER 2004, 2–3.

¹⁷ Cf. GIDDENS 1981, 140: "...urbanisation associated with capitalism cannot be assumed to be a direct continuation or expansion of cities in non-capitalist societies".

¹⁸ Kolb 1984, 13. Möller 2003, 56–58, Möller 2000, 3–5.

¹⁹ Möller 2000.

²⁰ GIDDENS 1981, 151 claims that knowledge of writing was strictly elitist and therefore not used for daily routines. This notion is not confirmed by the papyrological and epigraphical evidence. *Cf.* BAGNALL 2005, 189. THOMPSON 1996. Even before the Makedon conquest writing was an important part of Egyptian administration and simple reading skills were widely spread (*ibid.* 69) and especially RAY 1996.

²¹ MÖLLER 2000, 213–214. The idea that the presence of Greek pottery is indicating Greek presence does not correspond to

largely speculative - notion of the city in Graeco-Roman Egypt.

As Egypt has been a territorial state on its own or part of a larger political unit throughout its history one of the most difficult aspects of Giddens' pre-capitalist city is the fact that, for him, the emergence of the territorial state coincides with early capitalism, thus treating the city in Class-Divided societies as isolated unit with some limited hinterland under its control. His model is alas still valid for the city per se as we will see below. Giddens starts his investigation with small pre urban societies. These are mostly face to face societies, meaning that participants in the social process are present. With the advent of cities, more and more members of society are absent. Spatial distance is inevitably connected to a chronological difference, a so called time/space distance. It is now crucial to bridge the time-gap, this is where writing becomes central, because by means of writing information can be stored and preserved during the time it takes to travel from sender to recipient. With writing and the birth of history not only spatial but also nearly unlimited chronological distances are mastered.

Cities are containers of power, they are where both allocative and authoritative resources are collected. The element of storage is central for the generation of power and enables control over time-specific processes. Power and authoritative resources, meaning military or police elements, are represented by city walls. Archives or libraries are equally storage relevant installations concerning knowledge just like granaries concerning food. Giddens states that cities come into existence around ceremonial centres. Temples are often situated in the social and physical centre of cities, together with buildings representing administrative power.²²

The storage of knowledge is directly related to tradition. The above described stage of society is called traditional by Max Weber to whom traditional is a pre rational non-utilitarian mindset.²³ Within the model of Giddens tradition has also to be enacted by informed and knowledgeable individuals. A tradition is the result of past acts and decisions of individuals and has to be accepted in order to be powerful. An interpretation of tradition as a non discursive link between past and present with the implication that traditional spheres are not subject to immediate contemporary scrutiny is to some extent a contradiction to Giddens' model but defines the special character of tradition without denoting it as being irrational.²⁴ Especially the reason for traditionally legitimized power becomes more comprehensible this way.²⁵ Aristotle states that the power of laws depends solely on habit and warns against changing them (Aristot. pol. 1269a). Tradition becomes thus another resource to be stored and controlled.

1.2. "Reading" the physical remains of Cities

Exponents of geography and architectural theory have incorporated social theories especially when dealing with human-spatial interaction.²⁶ The spatiality of cities is the most important aspect for the archaeologist. The surviving structures of excavated settlements are compiled and interpreted on plans and maps and constitute the context of the finds. With Egypt in the Graeco-Roman period the wealth in preserved written sources of all kinds, but especially those concerning people's daily live, provides us - unique for ancient civilizations - with access to the otherwise lost behavioural space, meaning the perceived space which may be very different from actual built space.²⁷ Architectural design and organization of space are mostly culture dependent.28 Following Giddens the term culture should be seen here as a structural element, part of the social rule set either inhibiting or enabling human action. The rule set consists of normative ("social") elements and signification codes ("cultural").²⁹ Rapoport's built environment, while not determining its inhabitants, has a mnemonic quality³⁰ and therefore constitutes a storage facility in the sense of Giddens.

"Reading" the physical remains becomes, at least to some extent, possible.³¹ As will become evident, "writing" space has become quite common among

- KENT 1993, 5. WERLEN 1999, 31-101. LÖW/STURM 2005, 36. GIDDENS 1997, 425-427 recognises this new development but warns against trends to personalize space in a holistic way (loc. cit, 427).
- Pharaonic Egypt were carefully planned with orthogonal purely "artificial" street grids. Cf. infra.
- ²⁸ Kent 1993, 1.
- ²⁹ MIEBACH 2006, 377 Abb. 99.
- ³⁰ RAPOPORT 1993, 12–13.
- ³¹ Döring/Thielemann 2008, 15–16.

²² *Ibid.*, 146.

²³ WEBER 1972, 19.

²⁴ WERLEN 1999, 92.

Ibid. 94

²⁷ RAPOPORT 1970, 83. GIDDENS 1987, 150 argues that only capitalist cities are real "built environments" while older towns are mostly defined by their natural environment. At least some of the cities of Greek and Roman, possibly even

scholars dealing with Graeco-Roman Egypt. Virtual maps of towns are created from the author's interpretation of non-material sources. At least with Alexandria maps of the ancient town are known to be mostly artificial,³² while in other places, like Hermopolis the published plan has been enriched by adding the originally only mentioned Tetrastylon and retracing the courses of the main streets thus mixing the original document with additions showing features "as they should be" and thus creating a pseudo reality.³³ The assembling of plans by using a wide range of sources from excavated evidence to satellite images or magnetograms to material from old publications or maps (some not to scale and representing mere impressions like the maps of the Description l'Egypte), sometimes even oral history, stands at the beginning when dealing with urban phenomena. Both the degree of interpretation applied by the actual compiler and of all contributions should remain traceable.

1.3. The polis

The Greek city, the *polis*, was at the very core of Greek *political* thinking, the only way for humans to live together in an orderly manner.³⁴ The degree of urbanisation was the main indicator for cultural compatibility.³⁵ The negative assessment by Greek historiographers with respect to Egyptian cities has influenced the view on Egypt until today.³⁶ Both Greek historiography and the majority of Papyrological and epigraphical material at our disposal are formulated in the Greek language. In order to comprehend the Greek perspective it is necessary to get a grip on the Greek categorization of settlements.

The ambiguity of the Greek term polis, of its usage both ancient and modern, lies at the core of the problem. The densely settled urban nucleus is only part of the polis. Polis and chora, town and hinterland, represent the topographical elements while the most important part for the Greeks was the citizen body and the constitution.³⁷ The Greek polis constitutes a container of values and perceptions generally agreed upon by the majority of Greeks. Isonomia, autarkia and autonomia are the central ideas, meaning equality before public law of all free citizens,³⁸ economical independency and autonomy.³⁹ The ideal polis is an independent (self-governed) city state with sufficient arable land for food production. As all citizens had to take part in all aspects of public life and decision-making and the concept of representation was never really accepted, size is crucial. A population of 5000 was deemed perfect for a working polis. Less was difficult for public life while more than 5000 people could not assemble and communicate anymore in one place.⁴⁰ The institutional term for this assembly is ekklesia (boule). The administrative and public centre, the agora, is both the central market and the place of assembly for voting or court-meetings, the heart of the democratic workings of the town. These two functions were seen as a problem by contemporaries, presumably due to the Greek aversion against trade. Aristotle suggests therefore two markets, one market for trade, next to the harbour and easily accessible; the second market, called "free market", should be free of trade and only be permitted for citizens and be reserved for the dealings of state. Ideally this market is situated next to the most important temples of the town and to the places of training like the Gymnasion. The presence of civil servants among the young and old citizens is the central interest behind these rules (Arist. pol. 1331a–b).⁴¹

Physical traces unambiguously signifying a polis are difficult to find. In the early polis no real cityplanning was underway and the city was represented more by its citizens than by ostentatious buildings.⁴²

- declares that the *polis* is the only natural way for human beings to live together (Arist. Pol. 1253a. 1–8).
- ³⁵ Cf. Aristotle's collection of constitutions (Pol. 1269a. 29– 1274b).
- ³⁶ KOLB 1984, 36–40. (Pharaonic) Egypt was "..keine Zivilisation von Städten.." (*ibid.* 40). JÖRDENS 1999 puts the word
- *polis* were parts nof larger units. In Hellenism the terms *democratia* and *autonomia* became ideologically charged and changed their meaning. *Cf. infra.*
- ⁴⁰ Kitto 2003 [1951], 45.
- ⁴¹ Möller 2006, 73. Burkert 1995, 206.
- ⁴² Mumford 1979 [1961], 195.

³² MCKENZIE 2007, 19–29 stresses that there is archaeological evidence for the street grid and other crucial elements of the town, like the course of the city walls, the shape of the harbours and the locations of the necropoleis (*ibid*. 19).

 ³³ ALSTON 2002, fig. 5.6 (with incorrect reference!); BAG-NALL/RATHBONE 2004, fig. 6.3.1 after BAILEY 1991, pl. 1.
 While the plan is cited correctly ("after Bailey..") no further details on the added features are given.

⁴ Le Gates/Stout 2003b, 22. Kitto 2003[1951], 47. Aristotle

city in quotation marks, therefore terming it inappropriate even for the towns of Roman Egypt.

³⁷ HANSEN/NIELSEN 2004, 20; 39–43.

 ³⁸ HOEPFNER/SCHWANDNER 1994, XIII–XIV; 312–313.
 ³⁹ HANSEN 1995, 40–43. HANSEN/NIELSEN 2004, 19–20; 87.

⁶ HANSEN 1995, 40–43. HANSEN/NIELSEN 2004, 19–20; 87. Autonomia does not mean autonomy in the modern English sense. If it would be translated with political independence in its full sense, the polis would vave been a very shortlived and local phenomenon as many political entities labelled

Typical political buildings of a *polis* are a *prytaneion* and a *bouleuterion* (rarely *ekklesiasterion*).⁴³ City planning was a direct consequence of colonization and therefore connected to the creation of a new town and the necessity to find a just distribution key for the available land, both concerning building and agriculture.⁴⁴ The ensuing surveying work generated the "Hippodamic"⁴⁵ system evident in the city's orthogonal street grid and its arable hinterland.⁴⁶ The result of all this is a highly distinctive physical appearance of such a settlement and of cities until today.

Taking into account the above mentioned interaction between humans and their built environment, with buildings as mnemonic structures, as storage facilities for human behaviour in the sense of Giddens, designing a new settlement in the described way is a powerful means of ensuring the continuation of behavioural patterns and traditions that were rooted in the mother-city, a strategy to bridge the time/space difference between colony and the homepolis. The proper shape of a polis became now specialized knowledge, carried out by famous theoreticians of society.⁴⁷ From a traditional point of view the position of these new professionals was problematic as becomes clear from Aristotle's short outline on Hippodamos.⁴⁸

Another central figure for the modern understanding of Greek and Roman urban design is Vitruvius who gave an account of his understanding of architecture in ten books, addressed to Augustus himself.⁴⁹ Most important is a healthy location of the new city (I, 4, 1).⁵⁰ The orthogonal street-grid should be oriented in such a way that harmful draft is broken by the corners of houses (I, 6, 1).⁵¹ The whole layout is dependant on the main wind directions (I, 6, 12–13), making the city a representation of the celestial spheres. The cosmological approach is also evident when Vitruvius is elaborating on Astronomy and the measuring of time (IX). Pythagorean principles are evident, especially when the city is organized according to relations defined by the philosopher.⁵² Symmetry and proportionality in the layout of the town are both the embodiment of the abstract laws of society and of cosmic principles. The prospect of harmony becomes an eminent ideological category.⁵³

Contrary to Giddens' postulate concerning precapitalist towns,⁵⁴ Greek cities, especially those planned in a "Hippodamean" way, were "built environments" in the full sense. The fact that the real meaning behind this peculiar way of planning cities was already absent at the lifetime of Aristotle who, just like his follower Vitruvius, finds rather perfunctory reasons for the orthogonal street grid and the planned city, indicates that the ideal cityscape had become part of a certain "..routinisation of daily life.."⁵⁵, in other words, of the culturally embedded traditions of the Greek world as a whole.⁵⁶

1.4. Demography

Size is central for the categorization of settlements.⁵⁷ Counting of people and households had a long history in Egypt even before the Macedonian conquest.⁵⁸ Historical tradition doesn't give any population numbers for single settlements, except Alexandria. Diodorus Siculus gives a population of 300,000 free citizens for the year 58 BC (Diod. XVII 52, 6).

- ⁴⁶ Kolb 1984, 99–104. Hoepfner/Schwandner 1994, 1–2 Abb. 2; 299–301.
- ⁴⁷ TOMLINSON 1992, 15. Whereas the older poleis had grown more or less in an organic way, the new cities were planned by professionals. *Cf.* HOEPFNER/SCHWANDNER 1994, 302: "Hippodamos war ein fortschrittlicher Gesellschaftstheo-

- retiker...".
- ⁴⁸ Hippodamos was obviously rather pretentious in his appearance. His way to organize society shows too little respect for hierarchy. Only his suggestion for the state to provide for the children of victims of war finds Aristotle's approval (Aristot. Pol. 1267b–1268b).
- ⁵⁶ Loc. cit.
- ⁵⁷ Alston/Alston 1997, 200.
- ⁵⁸ KRAUS 2004, 41–42 and CLARYSSE/THOMPSON 2006, 13–14 rely mostly on Herodotus' account of the census of Amasis in 570 BC (II 177, 2).

⁴³ HANSEN/NIELSEN 2004, 139–140. The typical polis was protected by a city wall (*ibid.* 135; 138).

⁴⁴ Phaleas of Chalcedon states that his ideal of all citizens owning exactly the same amount of land is best achieved when a city is newly founded (Arist. Pol. 1266a, 40 – 1266b, 1).

⁴⁵ HOEPFNER/SCHWANDNER 1994, 301–302 elaborating on the meagre biographical details of Hippodamos of Miletus who designed the new city-plan of Peiraeus.

⁴⁹ He identifies himself with Deinokrates who designed Alexandria and by doing so flatteringly puts Augustus on the same level with Alexander (Vitruv. II, 1–4).

⁵⁰ Vitruvius is following Greek conceptions. Cf. Arist. Pol. 1330a, 34–1330b, 18.

⁵¹ Aristotle calls the orthogonal street grid *Hippodamic* (pol. 1330b, 24) and finds it beautiful but warns against it because it is difficult to defend in case of war. He suggests designing only parts of the city in a Hippodamic way (pol. 1330b, 24–31).

⁵² Fritz 1995, 41.

⁵³ *Ibid.*, 35–36.

⁵⁴ GIDDENS 1987, 150.

This number is extrapolated differently in order to get the full population. Very high estimates range up to 1 million.⁵⁹ More conservative numbers reach from 250,000⁶⁰ to 500,000.⁶¹ A total city area (suburbs excluded) of 825 ha⁶² would mean a population density of 600/ha for the higher and around 300/ha for the lower estimate. Both numbers seem to be very high even if tower houses with several floors are taken into account. If the complete built up area is estimated at 1,250 ha, the density would still be considerably high (400 persons per ha)!⁶³ A significant proportion of any normal city consisted of open space and public buildings; in the case of Alexandria a large palatial district has to be added to the equation.⁶⁴ Very few houses have been excavated but both from the Hellenistic and Roman periods spacious private buildings with peristyles and two floors at the most were found.⁶⁵ Of the major temples the Serapeum alone covered an area of 12,380 sqm.66

A study on Greek poleis came to the result that in smaller towns the ratio between space used for private housing and streets, squares, cultic or other public areas is around 1:1, in larger cities even 1:2, only a third of the available space is available for houses. This densely built up area has a density of 150 persons/ha.⁶⁷

As above data for Alexandria seem far too high one may turn to another recent population estimate calculated by adapting a rank-size model based on Fayum-data. The result takes the Ptolemaic data for Krokodilon Polis and computes the population of all ranks of cities depending on the rank given to the Antinoite nome capital. Given are: first rank for Alexandria, second rank for Memphis and third rank for Ptolemais Hermiou. The result differs significantly from the data gained from historical sources or calculations per ha of settled area: the population range for the first rank city Alexandria is from 25,000 to 75,000 for the Early Ptolemaic Period.⁶⁸ The most attractive aspect of this method is that it is based on the relations between different types of settlements and that the dimensions of all included towns are given. The extremely low figures are anyhow problematic and possibly a result of the very special situation of Alexandria that no contemporary saw as just the first rank city of Egypt.

A recent re-evaluation of the demographic data of Early Ptolemaic Fayum based on the salt-tax lists draws a revealing picture with respect to the development of the Antinoite nome. The overall population of the Fayum in the middle of the 3rd century BC is given with a maximum of 10,0000.⁶⁹ The capital Krokodilon Polis had a population of approximately 3,500 ($3,436^{70}$). Even if the *kleruchic* settlers who did not pay taxes are included a number of 4,000 is the reasonable maximum.⁷¹ At the beginning of Nero's rule a delegation from Ptolemais Euergetis (the old Krokodilon Polis) names 6,475 members of the city-elite. The population of the town must have counted significantly higher.⁷² Third century BC Fayum was therefore at the beginning of its development and probably less populated than a "normal" nome.⁷³

Assuming an arable area of 1,500 km² for the Fayum and therefore a density of 60 people per km², the 20,000 km² of arable land in the whole of Egypt would have carried a total population for the Egyptian *Chora* of 1.2 million. With Alexandria not yet as large as in the time of Diodorus, a population of 1.5 million people for the 3rd century BC is evidence of the fact that the whole of Egypt showed a very similar development to the Fayum. Diodorus gives a population of three million for Egypt in the middle of the first century BC (Diod. 1.31.6–9)⁷⁴ and 7 million in former times (Diod. 1.31.8). Obviously the number of Diodorus is at least possible while the 7.5 million of Josephus (bj. II.16.4 §384) without Alexandria are problematic.⁷⁵

⁶⁹ CLARYSSE/THOMPSON 2006, 92–95.

- ⁷¹ CLARYSSE/THOMPSON 2006, 99.
- ⁷² BOWMAN/RATHBONE 1992, 124–125.
- ⁷³ Clarysse/Thompson 2006, 100

- ⁶⁴ HOEPFNER/SCHWANDNER 1994, 242–245 Abb. 232.
- ⁶⁵ MCKENZIE 2007, 179–181 for the Roman houses in the Kom Ed-Dikka area and *ibid.*, 68–71 for high quality Hellenistic mosaic floors belonging to Mediterranean-style houses in the presumable palace district (with older literature).
- ⁶⁶ SABOTTKA 2008, 154.

- ⁷⁴ BAGNALL/FRIER 1992, 53. Cf. THOMPSON 1988, 33. The read-
- ing of the manuscript is problematic. Both 3 million and 7 million can be the case for the time of Diodorus. Traditionally the higher figure (7 million) is accepted.
- ⁷⁵ *Cf.* KRAUS 2004, 55–56 gives Josephus some credit.

⁵⁹ FRASER 1972, 90–91.

⁶⁰ ALSTON 2002, 161–162 table 4.8, fig. 4.6 computes 187,000 to 368,000 from the Notitia of Michael Bar Elias.

⁶¹ KRAUS 2004, 46–47. BAGNALL/FRIER 1994, 54. DELIA 1988, 283–291 suggests even 600,000 as a possibility.

⁶² DELIA 1988, 278.

⁶³ BAGNALL/FRIER 1994, 54.

⁶⁷ HANSEN 2006, 22.

⁶⁸ MUELLER 2006, 94–96 table 3.3.

⁷⁰ MUELLER 2006, 97 table 3.4.

Other attempts at an estimation of the population of ancient Egypt included population data from the 19th century before the first Aswan Dam led to a higher agricultural output in their calculations.⁷⁶ Dorothy Thompson has used these data and applied the proportions of the second largest city of Egypt in 1897 which was 3.3% of the whole population. Taking into account a lower urbanity in Ptolemaic times she assumes 2-3 % to be more probable. The population of Memphis would then be 140,000-210,000 for Diodorus' higher figure or 60,000-90,000 if the Egyptian population was only 3 million.⁷⁷ As the proportion of the capital Cairo was 5.9 %, a proportion from 4–5% for Alexandria would produce a population of 120,000–150,000/280,000–350,000. The lower number of Diodorus is more probable and a population of 120,000-150,000 fits perfectly to the population figures extrapolated from the Fayum data by CLARYSSE/THOMPSON 2006 whereas the rank-size result of MUELLER 2006 is definitely too low.⁷⁸

Bagnall and Frier have attempted an estimation of the population of Roman Egypt based on census lists. The population consists, as in the Hellenistic period, of three components: Alexandria, the *nome* capitals (*Metropoleis*) and the countryside.

Due to the better Papyrological database in the Roman Period a larger number of *nome* capitals, among them some of the old major cities of Egypt, can be taken into account. There are basically two ways to compute the population: from census or tax lists, usually listing male adults, or from house-lists. In both cases the "hard" data have to be multiplied with the estimated number of persons per household. As usually only parts of a given town are represented in these lists; the whole number of households or male adults has to be extrapolated. There is a huge variation in estimates of household sizes (usually from 5.3 to 7.7 persons per household)⁷⁹. These different approaches lead to peculiar results based on the same source, for instance in Hermopolis Magna, where both Alston/Alston and Bagnall/Frier extrapolate the number of houses given for two of the four town quarters in a papyrus from the third century AD (SPP. V 101) and come to population numbers of 58,429⁸⁰ and 37,000⁸¹. The sizes of *Metropoleis* vary significantly.

For Alexandria they accept the high numbers of Delia (500,000), 50 *nome* capitals with 25,000 inhabitants each make 1.25 million,⁸² 2,000–3,000 villages with 1,000–1,500 inhabitants⁸³ make 3 million, all together a population of 4.75 million.⁸⁴ The proportion of the urban population is with 37% very high. Even if taking into account that the population for Alexandria and for the average *Metropolis* may be too high and therefore this proportion may change to some extent, a very distinct development since the Early Ptolemaic period, from rural to urban, is evident.⁸⁵

Even the most basic quality of towns, their size, poses considerable problems for demographic interpretation; the range of possible sizes for different kinds of settlements is considerable. There are very large villages (Narmouthis 6106) and small towns (Heptakomias 8784) but in general towns are larger. Size is not the most essential attribute for a categorization of towns. The quantitative basis is very feeble

- ⁷⁸ LLOYD 1983, 299–300 calculates from Herodotus' data for the number of troups in the Saite dynasty (Hdt. II, 177. 1) and estimates a population of 3 million. Lloyd assumes a decrease in population until the Macedon conquest. The figure from the time of Amasis was reached again at the beginning of Roman rule.
- lage population of only 600.
- ⁸⁴ BAGNALL/FRIER 1994, 54–56.
- ⁸⁵ CLARYSSE/THOMPSON 2006, 100: only 5% of the population of the Fayum lived in cities.

⁷⁶ *Ibid.*, 214–217. Jomard used a very limited database for his population estimate (a quarter of Cairo and the Minya district) and applied proportions from contemporary Paris. His overall figure: 2 488 950 (*ibid.* 216). The count from 1846: 4.5 million. Only the more modern census of 1897 is really useful. This first census in modern Egypt produced an Egyptian population of nearly 10 million. Taking into account the development of Egyptian productivity during the 19th century a figure of 5 million seems reasonable for the time of the Napoleonic expedition (*ibid.* 217).

⁷⁷ THOMPSON 1988, 34. A calculation based on the area of the city and assuming 50 people per ha (which seems very low and is taken from the data of Kerkeosiris) results in a population of 50,000–200,000 for Memphis.

⁷⁹ ALSTON 2002, 70–75 differentiates, based on household lists, between households and housefuls. He comes to different numbers for villages and cities: village-households 5.58–5.7 and urban households 4.02–4.11. Housefuls in villages: 7.86–8.04 and towns 5.66–5.78 (*ibid.* table 3.3).

⁸⁰ ALSTON/ALSTON 1997, 203.

⁸¹ BAGNALL/FRIER 1994, 54. As the area of the town amounts to 120 ha, even this lower number would mean a population density of 300 people per ha, the same as in 18th century Aleppo (*ibid.* 55).

⁸² ALSTON/ALSTON 1997, 201–203 table 1.

⁸³ Cf. ALSTON/ALSTON 1997, 203–204 on the size of villages and CLARYSSE/TOMPSON 2006, 106 on the significantly lower numbers for the Early Ptolemaic period with an average vil-

and does not bear up to modern statistical standards. But even if the Fayum in the third century BC is not typical of an Egyptian nome and the population of Egypt as extrapolated from this data therefore too low, and if the population estimates for the towns of Roman Egypt are generally too high, the overall trend will persist and show a historical development of continuous urbanization well into the Late Roman period.

The *census* is not only a counting of people; it is an important means of rulership. By means of the census the population becomes a quantifiable entity that may be organized, surveyed and taxed. The effects of the census on people are numerous: people have to declare themselves, often, especially in Roman times; people are defined as to their topographical and social position in life.⁸⁶ The Roman census in Egypt took place in regular 14 year intervals (14 was the age when male citizens became liable to taxation) starting at the latest in 33/34 AD.⁸⁷ Both the importance of the census for the measuring of time and the heavy impact on citizens who had to travel to their "hometowns" become evident in the New Testament (Luke 2:1–2).

The result and the physical remains of the censi are some declarations and lists. They were carefully assembled in *tomoi* and stored in archives, situated in the *Metropoleis*.⁸⁸

Giddens sees the assembling of lists as an important instrument of social control, even surveillance. The most important function of the list is as the ultimate container for organized information coding and storing.⁸⁹ The storage facility, the archive, is crucial because it contains the lists, dated snapshots of the citizen-body of city and nome, not only of historical interest but also defining individual social mobility and future prospects of the population. Lists of houses and the work of the cadastral office, founded already by Ptolemy II, complement these population accounts and make city and country as a whole transparent and exploitable for an efficient administration.⁹⁰

³⁶ *Ibid.* 10–11.

2. The historical development of the towns in Graeco Roman Egypt

2.1. Pre Hellenistic Greek-Egyptian contacts and their implications on cities

According to historiography the first regular contacts between the Greek world and Egypt were via mercenaries, mainly coming from Ionia and Caria. Psammetichus I used them for his usurpation of the Egyptian throne. Possibly the soldiers were sent by his Assyrian masters (Hdt. II. 152–154, Diod. I. 66.12 –67.2).⁹¹ These troops were then settled in camps in the Eastern Nile Delta called *stratopeda*.⁹² Petrie identified Tell Defenneh with the fortress Daphnai and one of the *stratopeda*. He found a large rectangular precinct protected by a massive mud-brick wall.⁹³ A recent analysis of satellite-images came to the conclusion that the large rectangular precinct resembles the temenos area of a major Egyptian temple more than anything else.⁹⁴

The mercenaries became settlers when they were allotted land by the king and brought them more intensively in contact with the Egyptian population.⁹⁵ The other fortress, garrisoned with mercenaries, Syene, will be treated below (Hdt. II. 30). Mercenaries with a Greek background were used throughout Dynasty 26.

2.1.1. Naukratis polis

The second and, in our context, more important Greek influx was the foundation of Naukratis, allegedly by Amasis (Hdt. II. 178–179), partly settled with mercenaries after they had been forced to leave the *stratopeda*. The archaeological facts contradict the late foundation date under Amasis. The town was most probably founded under Psammetichus I.⁹⁶ Herodotus chooses the later date because he wants to link the foundation to the displacement of the mercenaries.

Twelve poleis, probably under the leadership of Miletus, were among the "colonists". The city was excavated by Petrie and very little additional details regarding its physical shape have been gathered since then.⁹⁷

- order to help with enquiries mostly concerning inheritance or land-disputes.
- ⁸⁹ GIDDENS 1981, 95.
- ⁹⁰ CLARYSSE/THOMPSON 2006, 16. Ptolemy II founds the Egyptian land-survey in 258 BC.
- ⁹¹ Smoláriková 2006, 246–247.

- with Tell Deffenneh and argues that Daphne was flourishing at the time of Herodotus and most of the finds date in the reign of Amasis.
- ⁹⁵ Möller 2006, 33–35.
- ⁹⁶ *Ibid.*, 192–193. Smoláriková 2002, 94–95.
- ⁹⁷ Petrie 1992[1886]. Petrie 1992[1888].

⁸⁷ BAGNALL/FRIER 1994, 2–12.

Ibid. 28. These archives were open to private persons in

⁹² NIEMEYER 2001, 17.

⁹³ Petrie 1888, 47–49.

⁹⁴ LECLÈRE 2007 questions the identification of the stratopeda

Some buildings, like the *Hellenion*, probably the most important sanctuary of Naukratis,⁹⁸ a temenos of Apollo, of the Dioskouroi, of Hera, of Zeus are mentioned by Herodotus.⁹⁹ The "Great Temenos", Petrie's *Hellenion*, probably does not predate the Ptolemaic Period.¹⁰⁰ The most recent topographical plan of the site shows the incredibly poor archaeological evidence.¹⁰¹ Petrie has recorded a part of the ruins in enough detail to establish a non-orthogonal highly irregular street grid even in the centre of town.¹⁰² Together with the huge *temenoi* dominating the cityscape the impression of a non-Greek, typically Egyptian town is further emphasised.

Even though Herodotus' account of Egypt is notoriously incorrect and deals rather with picturesque marvels than with facts, it is the oldest surviving record of a Greek individual about the country. It is of special interest how he is applying Greek terms concerning cities on the settlements of Egypt.

He characterizes Naukratis as a *polis* and *emporion* in the same context (II. 178–79). This has led to some discussion whether Naukratis was a proper *polis* or not. Astrid Möller has claimed that Naukratis was an *emporion* and did not become a polis before the Makedonian conquest and builds her "Port of Trade" model on this fact.¹⁰³ The proponents of *polis* status for Naukratis claim that Herodotus uses the term *polis* consistently when dealing with Greek settlements.¹⁰⁴ Barbaric settlements on the other hand could be called polis if they were nucleated settlements of a certain size.¹⁰⁵ *Emporion* could be used for a specialized polis.¹⁰⁶ If autonomy is not any longer a prereq-

⁹⁸ HÖCKMANN/MÖLLER 2006, 11–22. The term Pan-Hellenism is not appropriate for the institution of the Hellenion, unifying 9 of the 12 poleis represented in Naukratis. To a certain degree the situation of the Greek population of Naukratis, surrounded by a rather alien country with different language and culture may have been the setting for the creation of a new identity. uisite for *polis*-status the stela from Naukratis with tax regulations, dating to Dynasty 30,¹⁰⁷ is not an argument for denying Naukratis this status.

The recent discovery of the submerged site of Thonis/Herakleia off the coast of Alexandria changed the picture significantly.¹⁰⁸ The inventory of Greek material has been enriched with pottery and, most importantly, weapons.¹⁰⁹ The most important find concerning our topic was a stela, an exact twin of one from Naukratis also dated to the reign of Nektanebo I.¹¹⁰ The stela connects Naukratis and Thonis and makes them part of an inner-Egyptian distribution-network.¹¹¹ Thonis may well have been the *emporion* of Naukratis.¹¹²

2.1.2. Greeks in established urban centres: Memphis

Other Greek settlers, mercenaries and traders, lived in Memphis at least since Dynasty 26. Most prominent among them were Carians, later to become Caromemphites and Ionians, later called Hellenomemphites. Both groups inhabited quarters in the town with their own sancturaries. Jews and Phoenicians also formed a significant proportion of the immigrants in pre-Hellenistic times. The cityscape, especially of the Late Period town, is more or less lost; the overall picture being dominated by the huge precinct of the Temple of Ptah. Most prominent Late-Period structure is the still only partly understood so called palace of Apries.

There are anyhow archaeological finds and monuments, firstly signifying Greek presence at the time¹¹³ and then – more importantly – showing the development of the acculturation processes triggered by Egyptian-Greek (in this case mostly Carian) contact. A

- ¹¹² Goddio 2007, 130.
- ¹¹³ Cf. SCHÄFER 1908, 140–142 Abb. 32 and SMOLÁRIKOVÁ 2000, 70 no. 16 on a Greek crest found in Abusir. SMOLÁRIKOVÁ 2002 on the Greek pottery found in Abusir and all over

225

¹⁰³ Möller 2006, 184–194.

¹⁰⁴ Austin 2004, 1239.

¹⁰⁵ HANSEN/NIELSEN 2004, 36–37. Herodotus' figure, whereby there were 20000 poleis in Egypt should be understood in this way (II. 177.1). 2002 on the Greek pottery found in Abusir and all over Egypt. Only small scale non-containers are significant of Greek presence (*ibid.* 69). WILSON/GILBERT 2007, 261 oppose the notion that Greek products were mostly imported to Egypt for the Greek minority. VITTMANN 2003, 158–164 on Carian evidence from Egypt and Nubia and on Greek evidence (*ibid.* 194–235).

⁹⁹ Möller 2006, 94–108.

¹⁰⁰ *Ibid.* 113.

¹⁰¹ COULSON/LEONARD 1981, fig. 4.

¹⁰² PETRIE 1992[1886], 35 pls. 40 and 41. Petrie claims that the interpretation of the ruins was very difficult. As no stratigraphical interpretation of the documented elements took place or was not recorded, the plan mixes several building phases. A more regular street grid would manifest itself in spite of these factors.

¹⁰⁶ HANSEN/NIELSEN 2004, 41. Cf. AUSTIN 2004, 1239 who sees Naukratis as a mixed polis with a regular polis and an *emporion* attached to it.

¹⁰⁷ MÖLLER 2000, 207–208 no. 170 with older literature on the stela of Nektanebo I found in the Great Temenos at Naukratis (Cairo 34002).

¹⁰⁸ Goddio/Clauss 2006, 289–323. Goddio 2007.

¹⁰⁹ GODDIO/CLAUSS 2006, 291: helmets (cat. nos. 311, 313), *pila* (cat. nos. 314–316), spearheads (cat. no. 317) among other objects.

¹¹⁰ *Ibid.* 316–323.

¹¹¹ WILSON/GILBERT 2007, 264.

group of stelae from Sakkara shows a peculiar mixture of Greek and Egyptian elements.¹¹⁴ The oldest examples are more or less completely Egyptian, only bilingual. Egyptian writing is used; the names are given in Greek and Egyptian writing. Some stelae show evidence of mixed marriages over one to two generations.¹¹⁵ The second phase shows predominantly Greek stelae with scarcely any Egyptian influence. Only the winged sun disc remains of the traditional Egyptian formula. Kammerzell explains the new development with a large number of Carians coming to the Memphite region from their motherland after the defeat of Gyges by the Assyrians and from the stratopeda. He tentatively dates the beginning of the production of these stelae, probably by Greek artists, to 570 BC.¹¹⁶ The final step in the development is the total fusion of Egyptian and Caro-Greek elements with 2 registers of typical Egyptian inscriptions and a Greek style depiction in the lowest register.¹¹⁷ One stela shows similar attributes but a Greek inscription.¹¹⁸

There may be insufficient traces of the dwellings of Memphis but the stelae are evidence of the processes that took place inside the town, of the strong Egyptian influence, especially with the "death industry"¹¹⁹ and of the preservation of traditions and culture of immigrants. As Carians and Ionians lived in clearly defined separate quarters of the town and were still recognisable by Herodotus and even in Ptolemaic times,¹²⁰ it is possible that the described phenomenon marks an isolated development, restricted to funerary practices. Suffice it to say that Caro-Egyptian contacts were adequately intense for mixed marriages and the development of a local highly peculiar style of funerary stelae.¹²¹

2.1.3. Conclusion

The number of Greeks and Greek-influenced immigrants from the Eastern Mediterranean was still too

 $^{114}\,$ Kammerzell 1993. A catalogue of the stelae (ibid. 119–172).

small for any strong influence on Egyptian cities. They could still be incorporated in a strongly compartmentalized way into the system of the old traditional towns, grown over thousands of years around the temples. In spite of the fact that Amasis needed to concentrate his authoritative resources in Memphis is more due to inner-Egyptian struggles than to any real change in state or city. The foreigners were exploited by the ruler in the traditional way.¹²²

Herodotus calls Amasis *philhellenos* (Hdt. II. 178) in spite of the fact that he had beaten Apries and his mercenaries. He made considerable donations in Kyrene, Lindos and Samos. He had a guest-friendship with Polykrates of Samos and with the Cyreneians (Hdt. II. 180). Previously Psammetichus I had sent Egyptian boys to the Greeks in order to teach them the Greek language (Hdt. II. 154). All these actions were within traditional Pharaonic diplomacy, but helped in laying the foundations for Graeco-Roman Egypt.

The oases are not in the focus of this paper, but for early Greek contacts the route from Cyrene via Siwa to the Nile valley seems of special importance. Traces of prolonged Greek presence, especially connected to the construction of the temple of Ammon (Greek mason-marks), Greek pottery and Greek graffiti, may indicate the importance of the oasis for the trade routes, especially if one wanted to bypass Persian control during Dynasty 27.¹²³

The Persian conquest changed the exterior relations of Egypt but only to little extent the internal structure of the country. In some interpretations of Herodotus it has been suggested that the privileged position of Naukratis as the sole harbour for Greek imports had changed by the middle of the 5th century.¹²⁴ There is little archaeological evidence in support of such a theory.¹²⁵

tions within the Egyptian hierarchy were well within the reach of Greeks and Carians and were sought after.

- ¹¹⁹ Thompson 1988, 78.
- ¹²⁰ Ibid. 93–97. VITTMANN 2003, 156–157 on Carians and Carian deities mentioned in Ptolemaic and Roman times when they were, at least with regard to language completely Hellenized.
- ¹²¹ HÖCKMANN/VITTMANN 2005, 99 suggest that at least some of the Carians were members of the Royal Guard. High posi-
- ¹²⁴ PFEIFFER 2005, 165–166.
- ¹²⁵ TIETZE 2003. The assumption that a Greek style temple had stood in the precinct of the Temple of Bastet (PFEIFFER 2005, 164) is not supported by the context. The presence as such of such a building in Bubastis in the 4th century would be remarkable.

¹¹⁵ *Ibid.* 180–189.

¹¹⁶ *Ibid.* 190–193.

¹¹⁷ Ibid. 194–197.

¹¹⁸ VITTMANN 2003, 228 Abb. 114. The stela is either evidence of a certain Hellenization of Carians or of a similar fusion of cultural elements, at least regarding funerary customs, within the Hellenomemphite population as was shown for the Carians.

¹²² Cf. The garrison of Hittite charioteers next to the palace of Ramses II in Quantir.

²³ KUHLMANN 1988, 33–34 gives a date for the construction of the temple in the reign of Amasis. Evidence of Greek traders in Siwa and the oases (*ibid.* 82–83). *Cf.* W. BRASHEAR, in: KUHLMANN 1988, 85–87 on the graffiti. They are dated in the later 4th century. KUHLMANN 2007, 82–84.

The Persian Empire may have been a catalyst for an intensification and expansion of contacts between Egypt and the Greek speaking world. On the one hand there were a number of different peoples involved in the constant wars on all frontiers of the Empire thus providing a contact-zone, whilst on the other hand, the Persian Empire became the common enemy of all not yet conquered countries. There were no obstacles for trade between Egypt and the "free" Greek world.¹²⁶ Especially during the last period of Egyptian independence in the 4th century BC Egypt's support for the anti-Persian alliance, especially by means of grain deliveries, was a constant pain for the Persian Empire.¹²⁷

The tomb of Petosiris in Hermopolis is conclusive evidence that a fusion of Greek and Egyptian elements were well under way at the time of Alexander the Great. With the High priest of Toth the impact of Greek elements had reached the innermost ranks of Egyptian society.¹²⁸

2.2. Ptolemaic Egypt

2.2.1. The advent of Hellenism and the foundation of Alexandria

The Macedonian conquest brought the second huge immigration of Greek speaking people into Egypt. Due to the large numbers of newcomers and the fact that the country was now ruled by a Hellenistic king, the effects were considerable.

The Hellenistic age brought massive changes to all newly conquered territories. The old polis system was adapted or adapted itself to the new situation. The predominantly Macedonian conquerors did not have a proper polis-concept of their own as Macedonia herself was traditionally a territorial monarchy. When Alexander destroyed the Persian Empire he had to find a new political order for the unprecedented size of his kingdom. He adapted the Persian model to some degree, surprisingly enough considering his teacher's opinion on Barbarians (Aristot. Pol. 1283b.42–1284a.3).¹²⁹ With respect to Egypt, Alexander's most important action was the foundation of Alexandria, his biggest success regarding urbanism. The city's original layout was designed by Deinokrates with significant contributions by Alexander himself, who named the five major districts of the town (A, B, G, D and E). The street grid was, as mentioned above, designed in the "Hippodamic" way with two main streets, running east-west (Canopic Road) and northsouth (Palace Road) with a central junction marked by a square. These streets were up to 30m wide. Smaller subsidiary streets subdivided the quarters of the town (Strab. 17.1.6–11; Diod. 17.52).¹³⁰ The big rectangular blocks $(277 \times 310m)$ were again subdivided by additional streets into rectangular insulae of 44×88 m.¹³¹ Due to the new more luxurious style of spacious peristyle-houses the *insulae* had to be significantly larger than in Classical times.¹³² The original grid survived until the medieval period.¹³³ The most important elements for the prosperity of the city were the three harbours, two maritime ones and a huge inner harbour at the Mareotic Lake to the south.¹³⁴

The fact that the new city was founded next to old Thonis, using the perfect topographical position at the estuary mouth of the Canopic branch of the Nile, is due to the new situation within Egypt. While during the Pharaonic, and even the Persian periods the country was very secluded, with small settlements at the shore and the most important centres of trade far inland, it was now part of an Empire, a powerful marine base, created with the hegemony over the Eastern Mediterranean in mind, while at the same time facilitating trade, especially in agricultural products, thus controlling the most important food resource for the major urban centres of the Mediterranean and the important inner market of Nilotic Egypt.¹³⁵ Alexandria was not the first real city of Egypt¹³⁶ but it may well be called Egypt's first real harbour. The fact that the city was ostentatiously Greek in layout was a powerful sign of opening the country to the Greek koine.137

¹³³ MCKENZIE 2007, 24.

227

- ¹²⁹ HANSEN/NIELSEN 2004, 13.
- ¹³⁰ HOEPFNER/SCHWANDNER 1994, 238–240.
- ¹³¹ Ibid. 238–239. MAJCHEREK 1996, 15. Rectangular *insulae* with side-ration of 1:2 are often encountered in later Ptolemaic foundations. *Cf. infra.*
- ¹³² HOEPFNER 1996, 6.

offered sacrifices at them shows that the town had also decidedly Egyptian features. Macedonian sentiments were respected when the foundations of the city walls were laid out with barley meal, the traditional founding ceremony from his homeland.

¹²⁶ Cf. SMOLÁRIKOVÁ 2002, 20 for pottery finds. In the 5th and 4th centuries imports from Attica are constantly increasing. This phenomenon has been observed for the whole Eastern Mediterranean (cf. FANTALKIN 2006, 204).

¹²⁷ Pfeiffer 2005.
¹²⁸ VITTMANN 2003, 235.

 ¹³⁴ Cf. Strab. 17.1.7.
 ¹³⁵ HEINEN 1981, 4.

¹³⁶ Kolb 1981, 124.

¹³⁷ MCKENZIE 2007, 39. Especially the fact that Alexander inaugurated not only Greek but also Egyptian temples and

2.2.2. The Lagide Dynasty in Egypt

With Ptolemy I Soter Egypt became the core of one of the Hellenistic kingdoms. The first Lagide ruler over Egypt was able to build considerably on the already present Greek speaking population for the initialisation of administration.¹³⁸ Kleomenes of Naukratis is the most prominent example. After an intermezzo in Memphis he finally made Alexandria his residency. Consequently several modifications of the old Alexandrian layout took place: a huge palatial area, the basileia replaced the presumably rather moderate palace planned by Alexander (Diod. 17.53) on the peninsula of Lochias. The basileia covered a quarter (Strab. 17.1.9) or a fifth (Plin. nat. 5.2.62) of the town area. The basileia were not one built up area but a huge landscape, littered with all kinds of buildings like temples or theatres.139 This Alexandrian setting has been related to Pharaonic palatial landscapes such as those of Tell el Dab'a or Amarna.¹⁴⁰ According to Strabon (17.1.8) the museion, the sema, the tomb of Alexander the Great and the tombs of the Ptolemaic dynasty were also part of the basileia.¹⁴¹ Alexander became the founder-heros of the city and lent his considerable posthumous legitimatising power to the new Dynasty in Egypt.¹⁴² Archaeological data from the palatial area in the Bracchias district are rather sketchy but show high quality luxurious peristyle houses.143

With the theological institution of Sarapis and the consequent foundation of the Serapeion Ptolemy I Soter¹⁴⁴ acted in the traditional Pharaonic way of rooting legitimacy and grandness of a new residency firmly in the cultic topography of the country.¹⁴⁵ Syncretism was a perfect method to fuse aspects of the Greek Zeus and several Egyptian aspects.¹⁴⁶ The layout of the first Serapeion is mostly obscured by the new monumental temple built under Ptolemy III. A most peculiar feature of the building is the fact that it does not follow the street grid like the younger temple in its place. This different orientation is difficult to interpret as the general knowledge of this early stage of the town is limited. Either a very early date for the building at a time when the south-western part of the town was not yet part of the plan or that only the preserved temenos wall of this early temple was adapted to the street grid, are conceivable.¹⁴⁷

2.2.3. The Ptolemies as Hellenistic kings

One trait of Hellenistic kingdoms, due to become much more prominent with the following generations of kings, had already become evident with Ptolemy I: royal competition. Especially at the beginning of Hellenistic kingdoms wars on an unprecedented scale were the most direct form of this contest. Another important aspect was the founding of cities. The king as *ktistes* was one of the most prestigious roles at the disposal of rulers.

Especially during the reign of the early Ptolemies, Egypt became part of an Empire with Alexandria at its centre. The stage of Ptolemaic representation was the whole Eastern Mediterranean with a very diverse audience.148 While the concept of monarchy was not alien to the Macedonians,149 Egyptians and the larger part of the former Persian Empire, it was problemat-

- ¹⁴⁴ FRASER 1972, 246–256. Sarapis was strongly influenced by the Memphite cult of the Apis bull. He formed a pair with Isis. The most probable date for his installation in Alexandria is in the reign of Ptolemy Soter.
- 145 Cf. the creation of the Theban triad when Thebes became capital in the Middle Kingdom.
- most city-foundations (ibid. fig. 2.2).
- ¹⁴⁹ Errington 1986, 196–199. The king was subject to public opinion and depended on the *philoi*, aristocratic courtiers (ibid. 198). There was no ruler cult in Macedonia.

¹³⁸ THOMPSON 1996, 74–75. These Greek residents of Egypt were anyhow too few for manning an efficient bureaucracy. The administration was therefore until the 2nd century BC mostly carried out in Demotic by Egyptian scribes.

¹³⁹ MCKENZIE 2007, 45 states that the location of these tombs is not known.

¹⁴⁰ Sonne 1996, 137–140.

¹⁴¹ HOEPFNER/SCHWANDNER 1994, 242–245 Abb. 232. Nielsen 1996, 211 compares the setting of the tomb of Alexander and the dynastic burial place inside the palace area to the tomb of Cyrus the Great in Pasargade. Royal heroa within the palaces of Hellenistic kings like in Pergamon have their predecessor in Alexandria.

¹⁴² Huss 2001, 237–238. Pfeiffer 2008, 64–66.

¹⁴³ Cf. supra op. cit. n. 65.

¹⁴⁶ FRASER 1972, 254–258. His attributes are mainly Osirian (ibid. 254-255). Dyonisus, Hades or Pluton constitute therefore the main Greek elements (ibid. 256). Finally he became an important healing-god, also incorporating aspects of Asclepios (ibid. 256-258). Huss 2001, 247-248 states that the cult of Sarapis was not part of a clear cut political plot by the Ptolemies.

¹⁴⁷ SABOTTKA 2008, 33. The distance from the temple to the city-centre was considerable. The reason for both the location and the orientation may be an older landmark or sanctuary in the village of Rhakotis (Tac. Hist. 4. 84).

MUELLER 2006, 45 fig. 2.1 on territories controlled by the Ptolemies. Cf. ibid. 50-55 on the impact of Ptolemaic rule and especially city founding on specific parts of their realm. Egypt was the part of the empire with by far the

ic for the Greek poleis. In spite of the fact that only a small portion of the Eastern Mediterranean was organized in poleis the relationship between ruler and Greek city is very much in the focus of modern and ancient scrutiny. The cities were centres of administration¹⁵⁰ and firmly rooted in the Greek cultural sphere.¹⁵¹ Even for Greek historiographers writing in the Roman Period like Strabon, it was common to perceive the history of a country as an urban history. In barbarian, less urbanised regions, like Egypt, history became a compilation of consecutive royal biographies.¹⁵² As the Greek language was more and more implemented as the language of government, the kings, most prominent among them the Seleucids, started programs of city-founding, thus reorganising large parts of their realms.

Besides the pragmatic/administrative the ideological and dynastic consequences of the foundation of a city are considerable. Following Alexander and his father, cities were often named after the founder or members of the royal family. In the old Greek colonies, the (often mythical) founder of a new city, the *ktistes*, became the city-*heros* after his death and was thus an important part of the city's identity. Not only were the names of the founder-king and his family immortalized, the living *ktistes* reached near-divine status without the drawbacks of being a (dead) *heros*.¹⁵³ Consequently the inauguration of the Dynastic cult was one of the first acts taken when a new town came into existence.¹⁵⁴

One of the problems most difficult to apprehend concerning the Hellenistic and to some extent the later Roman Empire is the worship of the king or emperor.¹⁵⁵ For Egypt and the ancient Near East kings had always been way beyond the human sphere, but for the *polis* system the concept of a king was different to integrate into the political reality. Aristotle's

verdict concerning those that are not citizens of the city may be of some interest: They are either sub- or super human (Pol. 1253a.1-6). While the king could of course be honorary citizen of a polis he could never be reduced to the weight of a single vote.¹⁵⁶ At another place he states that those who are by far more virtuous and politically gifted than the remainder of the citizen-body would be like gods compared to the other inhabitants of the state (Pol. 1284a.4-11). Aristotle compares the asymmetrical relation between two friends, if one person gives another a gift he cannot return because of his lower income or station in life, to the relation between child and parent or worshipper and god, because in this case the favour has to be returned in the shape of honours (NE 1163b.1–20).¹⁵⁷ Friendship is the basis of a kingdom while mistrust is the basis of a tyrannis (Pol. 1313b.30-33).

Summing up, outsiders could either be members of another polis or of lower or higher rank than the *polites.* The relation between king and polis was defined by benevolent acts of the ruler and (divine) honours as a reward by the city. The foundation of a new city was the ultimate accomplishment, but gifts like special rights according taxation etc. could also lead to special honours. The city applied a ranking of honours with full scale divinisation as the highest possible reward.¹⁵⁸ Evidently this system fits perfectly into the model of royal competition.¹⁵⁹

The Ptolemies acted in the non-Egyptian part of their kingdom, which had grown substantially under the first Lagides, like their competitors.¹⁶⁰ In Egypt itself, the Ptolemies founded only one real *polis*: Ptolemais Hermiou.¹⁶¹ This unexcavated town,¹⁶² modern El-Manshah, was the centre of Upper Egypt in Ptolemaic times. Its population was said to be equal to Memphis (Strab. 17.1.42). It was a purely

- ¹⁵⁴ MUELLER 2003, 181.
- ¹⁵⁵ HABICHT 1970. *Cf.* now PFEIFFER 2008 with a thorough study of the phenomenon.
- ¹⁵⁶ *Cf.* FUNCK 1996, 45 on the necessary distinction between ruler and citizens. Spatial separation is best achieved by creating a special royal space the palace area.
- mais in the Cyrenaica, obviously foundet by *synoikismos* of several smaller settlements with the main purpose of weakening the old Milesian colony Cyrene. Due to substantial royal benefits Ptolemais became the major urban centre of the region finally outshining its older competitor.
- ¹⁶¹ BAGNALL/RATHBONE 2004, 173.

¹⁵⁰ *Cf.* THOMAS 1996, 49 on the basically non existent bureaucratic institutions of the Greek polis *per se.*

¹⁵¹ GEHRKE 2003, 63–64. SCHMITT 2005, 1023–1026. HANSEN/ NIELSEN 2004, 16–20 claim that the *polis* did not die with Chaironeia (338) but survived until the time of Diocletian when centralised bureaucracy made the old *polis* system redundant (*ibid*. 20).

¹⁵² Clarke 2001, 276–280.

¹⁵³ *Ibid.* 272–273.

¹⁵⁷ BRINGMANN 1995, 151.
¹⁵⁸ *Ibid.* 143–144.

¹⁵⁹ Cf. GEHRKE 2003, 85 who states that the worship of Hellenistic kings by Greeks was a purely political act without real religious emotions behind it. Only Egypt was more extreme with this respect (*ibid.* 84). PFEIFFER 2008, 37–38 states that a recipient of a cult is a god.

¹⁶⁰ MUELLER 2006, 114–116. An example of the use of city founding for immediate political aims is the new city Ptole-

Greek town, settled with Greeks from all over the Mediterranean.¹⁶³ The town was organised in *phyles* and *demes*,¹⁶⁴ had a *boule* and *prytanes*.¹⁶⁵ A theatre is indicated by the presence of an actors' guild.¹⁶⁶ An eponymous founder cult of Ptolemy I Soter was installed for the whole Thebais.¹⁶⁷

Autonomy was an important part of the constitution of Ptolemais. As discussed in the chapter on the *polis* this autonomy was a very limited one.¹⁶⁸ The attempt of Ptolemy I to create a monument for himself, his dynasty and for Greek culture in Upper Egypt, was very successful.¹⁶⁹

2.2.4. Ptolemies II and III

With Ptolemy II and III the Ptolemaic Empire reached its apex. Alexandria was further embellished in a great scale. The *Pharos*, the *Museion* were now built, the Serapeion reached its final monumental shape under Ptolemy III and was finally integrated into the overall plan of the city (*cf. supra*). Probably the city was not completed prior to Ptolemy III.

The most important impact on the urban history of Egypt since the foundation of Alexandria was the "colonization" of the Fayum started by Ptolemy II.¹⁷⁰ The fertile area had been cultivated by an elaborate irrigation system in the Middle Kingdom and was abandoned thereafter.¹⁷¹ The already discussed demographic development proves the success of the Ptolemaic effort.¹⁷²

The development of the Fayum was planned in great detail; a whole settlement pattern was designed with the capital of the nome, Krokodilon Polis (Medinet el-Fayyum) at the centre at the same spot as a Pharaonic settlement.¹⁷³ The other settlements were mostly arranged along the periphery of the fertile oasis.¹⁷⁴

2.2.4.1. "Colonizing" the Fayum

Philadelphia (Kom el-Kharaba el-Kebir/Darb Gerza),¹⁷⁵ named after Arsinoe II, the "brother-loving" wife of Ptolemy II is, due to the fact that the Zenon-Archive has been found there by Sebakh-diggers, among our primary sources for information on Ptolemaic city founding procedure.

The town shows the most rigid "Hippodamean" plan of all Fayum-settlements. The city is built to the east of the old great canal already in use in Pharaonic times. Four north-south streets are crossed orthogonally by at least eight streets (the whole city area was never verified by excavation). The east-west streets are significantly wider. The street grid was respected throughout the history of the city. The *insulae* measured 50×100 m. The houses had more or less similar ground plans and measured 12×12 m. Temples and other public buildings respected the street-grid.¹⁷⁶

Apollonios, the *dioiketes* of Ptolemy II, founded the settlement, which was strictly speaking a *kome*, a village in spite of its size of 50 ha. Zenon was the official on-site who organized the implementation of his master's or even the king's plans. The great canal was the main traffic route for the settlement. The bank of the canal was therefore the place for the most representative buildings, like a Serapeion, an Iseion and

230

(I. Philae II 166) from the 2nd century AD where a certain Celsus is proud of being a citizen of Ptolemais Hermiou, founded by Soter. He stresses the Greekness of the town as opposed to its Egyptian surroundings. At the same time the inscription bears evidence of how threatened Greek culture was by Egyptian culture, at least in the perception of

- ¹⁷⁴ BAGNALL/RATHBONE 2005,127–129 fig. 5.1.1. DAVOLI 1997
- fig. 1. ¹⁷⁵ VIERECK 1928. DAVOLI 1997, 139–148. BAGNALL/RATHBONE
- VIERECK 1928. DAVOLI 1997, 139–148. BAGNALL/ RATHBONE 2005, 135–136 with an excellent aerial photograph (*ibid*. fig. 5. 2. 4)
- ¹⁷⁶ MUELLER 2006, 116–119.

¹⁶² EL-MASRI 2007 on excavations of the SCA at the site. Remains of a harbour and a temple are mentioned.

¹⁶³ MUELLER 2006, 166.

¹⁶⁴ Plaumann 1910, 20–23.

¹⁶⁵ *Ibid.* 17–20.

¹⁶⁶ *Ibid.* 60–64.

¹⁶⁷ MUELLER 2003, 190–192. MUELLER 2006, 167 is in favour a cult of Soter already during his lifetime. Against such an early date: PLAUMANN 1910, 51 still dates the cult to the time of Ptolemy IV Philopator. *Cf.* HUSS 2001, 241 and PFEIFFER 2008, 68 for a beginning of the cult in the reign of Ptolemy II.

¹⁶⁸ PLAUMANN 1910, 30–35. The city had no right to mint coins. The eponymous priests were inaugurated by the king.

⁵⁹ Cf. MUELLER 2006, 167–168 on an inscription from Philae

Celsus. *Cf.* BOWMAN/RATHBONE 1992, 120 and JÖRDENS 1999, 158 on a document from 160 AD concerning a cult for Ptolemy I Soter in Coptos (SB VI 9016). The *neokoroi* of this cult were instituted by the *boule* of Ptolemais. The right was important enough for the citizens of Ptolemais to oppose the *strategos*. The town finally prevailed over the imperial official.

¹⁷⁰ MUELLER 2006, 149–151 against the *communis opinio* (later reign of Ptolemy II to Ptolemy III) considers a date as early as Ptolemy I for the start of the reorganisation of the Fayum (*ibid*. 150).

¹⁷¹ *Ibid.* 63. The Fayum was reclaimed and resettled by the Ptolemies in order to increase agricultural output.

 ¹⁷² Cf. supra.
 ¹⁷³ DAVOLI 1997, 149–159.

a temple of the Dioskouroi. The road along the embankment was called dromos. These buildings were the first to be erected in the new town.¹⁷⁷ Of special interest is a sketch on papyrus showing a segment of the dromos with a temple of Hermes and a temple of "Poremanres", the Pharaoh Amenemhet III.¹⁷⁸ This may, or may not, indicate an older settlement, but it is clear evidence of how closely the Pharaonic and Ptolemaic effort were linked and that Pharaonic monuments were respected and became major landmarks of the new settlement. The "village" Philadelphia comprised a gymnasion and a bath with two *tholoi*.¹⁷⁹

Not only were the layout of the town and its major monuments predefined by the *dioiketes* but also the exact shape of his agricultural land.¹⁸⁰ A plan on papyrus gives the layout of the large lot to be organised by Zenon.¹⁸¹ The plan shows an orthogonal organization, just like the town itself indicating that the whole land, for building and agriculture was surveyed and distributed, just as was the case with the Greek colonies. Isonomia is alas absent because the lot of Apollonios measures 10,000 aruras, probably constituting only part of the land belonging to his manor.¹⁸² Special focus was on the distribution of water in canals.

Other towns of the Fayum show a different layout as they are organised along a dromos, a central processional way leading to the main temple of the town. Such a layout has been interpreted as being typically Egyptian.¹⁸³ There are two groups of settlements with such a layout: Towns with a typical Pharaonic agglutinating cityscape with houses and streets grouping in an unorganised way around a temple precinct and settlements organised in a regular manner with secondary streets either being parallel to or crossing the dromos at right angles. Tebtynis (Kom Umm el-Bor-

The whole project of recultivating the Fayum is characterized by pragmatism, motivated by the need for additional space for settling and a significant boosting of the agricultural produce. It was anyhow part of royal representation, of the competition between Hellenistic kings. Official, even royal, visitors to the court in Alexandria are sent to the Fayum by the king in order to show his achievements to them. The mastering of nature, the creation of new, fertile worlds with exotic animals or plants was part of the Hellenistic royal ideal.¹⁸⁷ The Ptolemies had done so in the Fayum on a scale unparalleled by any of their royal competitors. The settlements, canals and fields of the Arsinoite nome became a sign of royal power just as the Pharos or the Museion in Alexandria.

2.2.4.2. The Read Sea coast

The second major Ptolemaic land-reclamation project was a massive founding of cities along the Red Sea coast. There was a tradition of sporadic settlement, mostly connected to the Punt-trade and copper-mining, but the Ptolemies had a completely new aim: Elephants.¹⁸⁸ Here the element of royal prestige and competition is more evident than in the Fayum because the elephant had become a powerful weapon since Alexander. Their military use anyhow had soon been exceeded by their representative value. The number of elephants used by both sides is among the most prominent data in the battle-reports of ancient historiographers. As the few animals captured by Ptolemy I in his victorious wars against Perdikkas and Demetrius were no match against the

- ¹⁸⁴ DAVOLI 1997, 180–211. HADJI-MINAGLOU 2007, fig. 1. The evolution of the city quarter to the east of the temple of Soknebtynis clearly shows the agglutinating growth in density with a clear tendency to create courtyards and thus block secondary streets (*ibid.* figs. 78–79). While the houses of the oldest phase (3rd cent. BC.) are more or less iso-
- ¹⁸⁶ RATHBONE 1994, 142. MUELLER 2006, 121.
- ¹⁸⁷ SONNE 1996 on "Herrschaftsgärten". LAPP 1980, 146–148 on the agricultural land around the palace of Araq el-Emir in Iordan.
- ¹⁸⁸ MUELLER 2006, 151–157.

eigat) belongs to the first group,¹⁸⁴ Dionysias (Qasr Qarun) to the second group.¹⁸⁵ Settlements showing an "Egyptian" layout were clearly outnumbering those with a Hippodamic street grid.¹⁸⁶

¹⁷⁷ Ibid. 128–129.

¹⁷⁸ *Ibid.* fig. 3.2.

¹⁷⁹ McKenzie 2007, 152. The baths were even equipped with pebble mosaics. For this type of bath and its implications cf. infra chapter Later Ptolemaic Urbanism.

¹⁸⁰ VIERECK 1928, 37–39.

¹⁸¹ P. Lille 1. Rostovtzeff 1979[1922], 57–58. Viereck 1928, Abb. 4.

¹⁸² Rostovtzeff 1979[1922], 71.

¹⁸³ Mueller 2006, 119–120.

lated units with ample space around them and orientated in exactly the same way as the dromos (ibid. 168), the further development shows growing irregularity (ibid. 170-174 for the 1st and 2nd cent. AD).

 $^{^{185}}$ Davoli 1997, 301–323. At least the city centre seems to be organized in a Hippodamic way. A group of houses further south of the dromos, among them a bath-house of the tholostype shows a distinctively different orientation. MUELLER 2006, 119. The size of the insulae was half that of Philadelphia $(50 \times 50m)$.

Seleucid army with its considerable Elephant force, Ptolemy II had to find a new source.¹⁸⁹ He did so by exploiting the old Pharaonic routes to Inner Africa. The network needed, both with regards to infrastructure¹⁹⁰ and personnel,¹⁹¹ was substantial. Bases were created until Cape Guarafui at the coast of Somalia.¹⁹² One of the main bases for Elephants was Memphis.¹⁹³ More important concerning our topic is the Egyptian Red Sea coast.

Berenike is probably the most thoroughly excavated settlement on the Red Sea Coast. Regrettably very little dating to the Ptolemaic period has been found.¹⁹⁴ In Roman times the Red Sea coast became an important trading zone.¹⁹⁵ It is not without symbolic value that the Romans used the Hellenistic network for their more pragmatic ends, the trade with India.

Besides these newly founded towns in virgin, or at least not densely settled, areas, the old urban centres of Egypt continued to exist. Memphis was the most prominent among those towns, but little to nothing from the Ptolemaic Period has survived. Especially due to the already present Greek population it was an important vantage point for the remodelling of Egypt while the traditional temples and priesthoods were, just like in the Persian period, bequeathed generously by the king.¹⁹⁶ Alexander visited Memphis and sacrificed to Apis. Probably in order to appease the Egyptian population and contrast himself with Kambyses who was said to have killed an Apis Bull. Even if this probably wasn't true, it had become a tradition and part of the Egyptian anti-Persian sentiment at the time of Herodotus (3.29).¹⁹⁷

The new cult of Sarapis originated in Memphite perceptions of the god Apis that came into existence in the special atmosphere of the multicultural city.¹⁹⁸

2.2.5. Later Ptolemaic urbanism

Most cities were founded under Ptolemies I and II; the reigns of Ptolemy III to Ptolemy V constituted a time of consolidation regarding urbanism. The Upper Egyptian secession from 206/7 BC brought an end of Ptolemaic rule and control of the *Thebaid* until 287 BC, probably with considerable consequences for the settlement pattern. This may well be the reason for a second urban boost in Egypt in the reign of Ptolemy VI and especially Ptolemy VI/VIII.

Herodes, Son of Demophon from Pergamon, among other functions *phrourarch* of Syene, dedicated an inscription in 151–145 BC to Ptolemy VI, Kleopatra II and Boethos, *strategos* and *ktistes* of the poleis Philometoris and Kleopatra in the *Triakontaschoinos* and Euergetis in the *Thebaid*.¹⁹⁹ The stela was found in the Cataract region, probably on Elephantine.²⁰⁰

The foundation of a town in the *Thebaid* may be related to the difficult situation in Upper Egypt after the insurgency. The two cities in Lower Nubia are possibly a means of establishing firm control over land recently recaptured from Meroë.²⁰¹ As none of these towns has ever been localized with any degree of certainty, their physical shape is absolutely unknown. Certain aspects anyhow are of special interest in our context. There is firstly the connection of a Greek Ptolemaic official with the major temples of the cataract region (Temple of Khnum in Elephantine, Temple of Isis in Philae and the *Abaton*).²⁰² He

- ¹⁹⁴ SIDEBOTHAM/WENDRICH 1996, 448. The lack of Ptolemaic material from the town itself is probably due to the silting in of the harbour. SIDEBOTHAM/WENDRICH 2007, 369 detect carefully from the mostly Late Roman remains of the town that its street grid was not orthogonal even at the time of foundation.
- cult of the Apis Bull (*cf. ibid.* Abb. 3).
- ¹⁹⁹ I. Louvre 14,1–28 = OGIS I 111.10 = SB V 8878. MUELLER 2006, 161–162 n. 65.
- ²⁰⁰ Pfeiffer 2008, 117 n. 5.
- ²⁰¹ MUELLER 2006, 164.
- ²⁰² PFEIFFER 2008, 118.

¹⁸⁹ Casson 1993, 247–248.

¹⁹⁰ Ibid. 249. Berenice Troglodytica was founded at the Red Sea Coast and connected via a road to the Nile Valley and the town Koptos. MUELLER 2006, 152. Ptolemy founded Arsinoe near modern Suez and, by finishing the old Dareios channel connected the Nile valley to the Red Sea.

¹⁹¹ CASSON 1993, 249–252. Indian drivers and Greek specialists were needed. The *elephantegos*, an especially sturdy ship was constructed for the transport of the captured animals (*ibid.* 253).

¹⁹² Ibid. 255–256. Ptolemy IV Philopator was most active in the hunting of Elephants.

³ Ibid. 259.

¹⁹⁵ SIDEBOTHAM/WENDRICH 1999, 451–452. The population size fluctuated, but was significantly smaller in Ptolemaic times than in the Roman period. The population was rather Egyptian with a Hellenised Elite in the Ptolemaic period and very diverse in Roman times. Meagre as the Archaeological data from the earlier periods of occupation may be, the difference between a specialised hunting station in Ptolemaic times and an important Roman harbour seems to be evident.

¹⁹⁶ Thompson 1988, 192–193

¹⁹⁷ Ibid. 106.

¹⁹⁸ Cf. HÖCKMANN/VITTMANN 2005, 100–101 on the participation of Greeks and Carians in Egyptian cults, especially the

had the highest priestly ranks in one of the crucial areas of Egyptian religious topography. Secondly, and even more striking, Boethos is called ktistes and named in a very prominent position, immediately behind the ruling couple. Obviously the "loaded" title ktistes had lost some of his meaning and exclusivity. The former royal prerogative is now just a function among others of the strategos. His prominent position on the inscription and the ensuing closeness to the king and queen are on the other hand signs of a very special position of Boethos. The possibility has therefore to be taken into account that the case of Boethos was a very special one, probably due to the increasingly precarious situation of royal power, before interpreting this singular phenomenon as an important general trait in Late-Ptolemaic Egypt.²⁰³

There is little conclusive archaeological evidence concerning the development of traditional Pharaonic urban centres during the second half of Ptolemaic rule. Decidedly Greek features, omnipresent among the remains of Ptolemaic towns, are bathhouses in a decidedly Greek tradition.²⁰⁴ These bathhouses come in two types: with hip-baths arranged along the walls of *tholos*-shaped bath rooms and hipbaths and bathing-tubs in rectangular rooms. The *tholos*-type is the older one. A bath house often comprises two *tholoi*, probably one for each sex.²⁰⁵ These *tholoi* are found all over Egypt²⁰⁶ and seem to constitute the main type of larger public bath, probably well into the Roman Period.²⁰⁷ These baths were by no means unique to major urban centres but had become an amenity not to be missed even by inhabitants of remote villages or fortresses in the border region like Tell el-Herr (with only one *tholos*).²⁰⁸ The impact of these baths on the daily life of Egyptian settlements was considerable, especially considering the scarce evidence for sanitary installations from Pharaonic Egypt.

While the *tholoi* constitute a typical Egyptian conservatism as they are a type developed in Late Classical Greece, the second type of baths with rectangular ground plan appears around the middle of the 2nd cent. BC, at the same time as in Greece.²⁰⁹ The bathing areas of these bath houses were significantly smaller with one or two hip baths and one, rarely two lying tubs. Most tholoi comprised 16 hip baths and adjoining rooms with several basins and/or lying tubs. Due to the white wall plaster and terrazzo floors these baths often were the only structures recognized during excavation and remained like elevated islands with all their architectural contexts destroyed.²¹⁰ During the more recent rescue excavations in Athribis a larger portion of a city quarter with bathing installations was excavated. Besides one, regrettably isolated, tholos211 with at least two phases, the oldest one dated to Early Roman times, several rectangular bath-rooms of rectangular type were found with at least traces of their architectural context.²¹² The interpretation of the hip-baths as being parts of cultic installations led, together with

- ²⁰⁹ Cf. KUNZE/SCHLEIFF 1944, 47 pl. 16 with an example from Olympia.
- ²¹⁰ ROEDER 1959, 128–129. The number of excavated so called private baths in Hermopolis Magna exceeded 20. Most of these baths seem to have been of the smaller rectangular type (very few plans are given).
- tub also has a *praefurnium* and traces of a boiler. The whole arrangement of the bath resembles the already mentioned installation in Olympia (*cf. supra* n. 209). The bath is dated to the Roman period. This date, mostly gained from material in the debris and infill of the ruins of the building, is only indicative of the end of use of the bath.

²⁰³ Cf. MUELLER 2003, 191–192 who sees a separation between the eponymous and the functional city founder. Dynastic cult and name of the city are the most important aspects, still firmly within royal control while the functional founder gains considerable local importance and prestige.
²⁰⁴ MCKENZIE 2007, 152.

²⁰⁵ EL-KHASHAB 1949, 8–9 n. 3 citing two papyri were a "male" and "female" tholos are mentioned for one bathhouse.

²⁰⁶ Cf. FOURNET/REDON 2007, fig. 79 with a map of public tholosbaths in Egypt and BORAIK/LAROZE 2008, 77–83 with a well preserved bath in Luxor, recently excavated by the SCA and dated to the Early Ptolemaic period.

FOURNET/REDON 2007, 124–126. Only with the advent of *hypocaust*-heating in the 2nd cent. AD were the *tholoi* abandoned. *Cf. ibid.* fig. 81 with a phase-plan of the baths in Bouto. The final phase, dated to the 2nd half of the 2nd cent. AD comprises a room with *hypokausti* and still a *tholos*.

³ Abd el-Maksoud 2007 and Fournet/Redon 2007.

²¹¹ MICHALOWSKI 1962b, 67–76.

²¹² Myslyviec/Sztetyllo 2000, 33–34 subsumes several bathing areas to one bath-house. The architectural context as given in *ibid. plan 3* seems to hint to two separate baths, each of them with tubs in groups of three: one tub for full immersion and two hip-baths. Coins found under the floor of the baths give a terminus post quem in the reign of Ptolemy V. Another bath (ibid. 37-38) shows a significantly different layout. The room was heated by means of a small furnace (probably the remains of a boiler). A single hip-bath is situated between two small basins (too small for immersion tubs). In another room a significantly larger basin (app. 2.5×0.6 m) was probably used as a *piscina*. In spite of the fact that the floors have a pebble mosaic the Early Ptolemaic date given by the excavator seems way too early. It would be the oldest rectangular type bath with a heating installation. Cf. MICHALOWSKI 1937, 65-75 figs. 29-31 pl. VII for a similar bath in Edfu, again with two hip-baths and one

the finds of numerous terracotta figurines and other material to the assumption that the area of the baths was situated in the vicinity of a Ptolemaic military camp mentioned on a statue from Athribis.²¹³ The central question concerning the baths of rectangular type is, whether they were public or more private in nature. In the Greek tradition a single hip-bath was deemed sufficient even for high-class private houses.²¹⁴ The baths are therefore of a public nature. The gradual replacement of the old tholoi sometimes with room for more than thirty bathers with the smaller bathing units of a more or less standardized size with two hip-baths and one tub may well indicate not only a new bathing habit but some change of how the population perceived the densely built up towns of Middle and Late Ptolemaic Egypt. The baths necessitated elaborate systems for waste water disposal. Other installations like latrinae are often connected to these bathing facilities. As to the overall structure of Athribis, the excavations give no clear evidence of an orthogonal street grid that was still visible at the end of the 18th century.²¹⁵ The excavated city quarter was a mixed neighbourhood consisting of houses with bathing installations and workshops to the south (probably due to the predominant direction of the wind). Pottery and terracotta figurines were the main product of these small workshops that were working throughout the whole Ptolemaic Period.216

Besides the evidence of newly founded towns in Upper Egypt an increase in population density has been noted in several settlements all over the country.²¹⁷ This is a definitive contradiction to the picture of the second half of Ptolemaic rule generally drawn. The "Day of Eleusis" heralded a new dependency from Rome.²¹⁸ The overseas possessions had been lost and Egypt was once again reduced to itself.²¹⁹ After a period of considerable civil unrest the Ptolemaic Dynasty was more and more adapting itself to the Egyptian sphere, probably, because the Egyptian element in the population of the reduced kingdom was by far outweighing the Hellenised groups. The audience for royal conduct had changed with Egypt alone as a stage. Nothing could be gained by exposing the Egyptian majority to the Hellenistic ruler boasting his *truphe*.²²⁰ The building programme produced unambiguous evidence for this new attitude with an unprecedented number of temples newly built or restored and generous gifts bestowed on established temples.²²¹

2.2.6. Conclusion

With the conquest of Egypt by Alexander the Great and the ensuing new political situation changes within the traditional structures of the Egyptian society became necessary. Soldiers and kleruchs enlarged the Greek speaking portion of the population. New land and revenue were won by the recultivation of the Fayum. The function of the city was slowly changed from a mostly religious to an administrative centre while Egyptian sentiment was respected and a large portion of the (Egyptian!) population was still working in the religious sector.²²² Newly founded cities rarely showed a "Hippodamic" layout, Alexandria being the most prominent example, but were more often created around a central temple area. A new invention is the temple town with a dromos and an orthogonal street grid parallel to it.²²³ It is not possible to distinguish between Egyptian cities and Greek cities. Settlements in the Fayum and elsewhere had a mixed population. The different layouts for new towns and settlements are probably due to a very per-

- ²¹⁷ Cf. supra.
- ²¹⁸ MITTAG 2006, 214–223. The result for the prestige of Antiochos IV was not as negative as has been generally assumed, especially due to the preposterous conduct of C. Popilius Laenas (*ibid.* 223).
- ²²² CLARYSSE/THOMPSON, 345. 7% of the population had reli-
- gious functions and enjoyed tax privileges.
 ²²³ MUELLER 2006, 120. Philadelphia with its rigid orthogonal street grid was founded earlier than Dionysias with its central *dromos*. A slow process of appropriation led to a fusion of Egyptian and Greek perceptions.

²¹³ MYSLYVIEC/SZTETYLLO 2000, 38–39. MYSLYVIEC 1996, 36. The large number of hip baths and of terracotta figurines of the same type as in Athribis found all over Egypt seem to indicate that a quite formidable living quarters has been excavated in Athribis.

²¹⁴ FARRINGTON 1995, 42. BRUNEAU 1970, 99–100 pl. 16.

²¹⁵ Description de l'Egypte V 27.3. BAGNALL/RATHBONE 2004, 82 mention an orthogonal street grid without further reference.

 $^{^{216}\,}$ Myslyviec/Sztetyllo 2000, 30–33. Szymanska 2005, 22–37

²¹⁹ Cf. Huss 2001 who labels chapter VII (Ptolemy VI to Ptolemy XI) "Der Niedergang des Reichs" and chapter VIII "Der Untergang des Reichs".

²²⁰ Cf. Ibid. 535. The new position of the queen from Ptolemy V onwards is seen as a, still tentative, fusion of Egyptian and Hellenistic royal perceptions.

²²¹ Hölbl 1994, 228–244. Cooperation between the Egyptian priestly elite and the king became more and more common from the time of Ptolemy VI onwards, especially with Ptolemy VIII (*ibid.* 228).

sonalized way of running the country in the 3rd cent. BC. The layout of the town was up to the official who was in charge of the founding process.²²⁴

The Hellenistic era brought some changes to the daily routines of people living in the settlements. Baths, banks and gymnasia were present even in the more populous villages.²²⁵ The basic but significant function of baths has been mentioned above. Banks were the main institutions of the royal financial sovereignty. Gymnasia were, just as all over the newly conquered regions of the Persian Empire and beyond, places of Hellenisation.²²⁶ Only in Egypt were Gymnasia, originally an institution linked to the Hellenistic *polis*, founded in villages. The phenomenon may be due to the low level of urbanisation and the custom to settle kleruchs in villages.²²⁷ Due to their probably not very spectacular appearance these gymnasia are hard to make out in the archaeological context.²²⁸ In the Ptolemaic period gymnasia were founded by private persons of moderate to high standing. The members of the gymnasium comprised the elite of the settlement but were not yet a stately controlled class.²²⁹ The gymnasia were places of Greek education, both regarding culture and body. Simple education did not take place here due to the fact that a person had to have a basic Greek education before he was allowed to enter the gymnasion.²³⁰ Aristotle has remarked with regard to the location of gymnasia in *poleis* that they should be situated in the vicinity of the centres of urban political life (Pol. 1331a-b). It was political education that took place in gymnasia.²³¹ They could comprise small libraries with treasured works of literature.²³² The gymnasion was therefore the node of Hellenised political and cultural life within settlements all over Egypt. It was a kind of gateway to the privileged world of the Hellenes, part of the same effort as the Great Library in Alexandria. The gymnasion was a threshold separating the world already within the Greek-Alexandrine cultural sphere from the rest of society. The threshold was not crossed by right of birth or ethnicity but by education.

The only polis except Alexandria and Naukratis was Ptolemais with a mostly unknown layout. The difference to other Hellenistic kingdoms, where poleis were the predominant form of new settlement, is striking.²³³ Even the existing *poleis* showed significant differences to cities in other regions of the Eastern Mediterranean. Egyptian cities had no own territory and no right to mint their own coins.²³⁴ Ptolemais Hermiou and Naukratis had a boule, Alexandria, at least in Middle and Late Ptolemaic times, not. By calling all of Egypt except Alexandria chora, the huge hinterland of the city, right to the borders of the known world, becomes the territory of the new capital. This allusion to the traditional Greek polis system aptly defines the relationship between Egypt and its capital until the advent of Islam.

Alexandria, the epitome of Ptolemaic, even Hellenistic urbanism was an exception among the cities of Egypt. In the Ptolemaic, and even more the Roman Period it was not only the - slightly foreign - administrative centre, it was also a conductor for the Hellenization of the country as a whole. Besides its role as the seat of the highly centralized administration of the country, the main function of Alexandria was a cultural one. While the Great Library and the Museion were part of the image of the Ptolemaic kings in the Greek world, their interior function was even more important: they constituted powerful storage institutions in Giddens' terms. The conserving aspect by far outweighed the progressive scientific output of this "University".²³⁵ The most important aspect of Hellenising Egypt was the gradual development of an efficient Greek administration. While under Ptolemy I most of the administrative texts like tax receipts etc. were still written in Demotic, from the 2nd century onwards Greek became predominant both in administrative and legal correspondence. This was accom-

- ed gymnasia of this type in Egypt.
- ²²⁹ Ibid. 339.
- ²³⁰ GROSS-ALBERNHAUSEN 2007, 316. The fact that not all settlements with teachers had a gymnasion (*cf.* HABERMANN 2007, 344) is therefore of little relevance.
- ²³¹ Bringmann 2007, 323.

- ²³⁴ Cf. MITTAG 2006, 184 concerning the Seleucid foundations in the Decapolis. There seems to be no causal connection between the autonomy of a city and its right to mint its own coins.
- ²³⁵ Thompson 1996, 67.

²²⁴ Ibid. 121.

²²⁵ *Ibid.* 103–104 table 3.6.

²²⁶ Bringmann 2007. Gross-Albernhausen 2007.

²²⁷ HABERMANN 2007, 336–337. The result of this development was the dispersion of gymnasia all over Egypt.

²²⁸ *Cf. Ibid.* 342 for examples of gymnasia being parts of simple private houses. There are no verified examples of excavat-

²³² HABERMANN 2007, 347.

²³³ As most of our data concerning villages and smaller settlements in Egypt come from papyri, a material rarely preserved in other parts of the Hellenistic world, one should be cautious. We would know scarcely anything about the Egyptian countryside if we were depending on epigraphic sources like everywhere else.

plished with a new class of well trained Egyptian civil servants. For the creation of this class a standardized curriculum was used. Around 0.2-0.3% of the population were teachers who trained the pupils mostly in the traditional Greek literary canon, especially Homeric writings.²³⁶ The place where the texts were compiled and stored and the ways to teach them were prepared was the Library of Alexandria, being therefore one of the major institutions behind the development of Hellenistic Egypt. The administrative status reached at the end of the Ptolemaic era was the basis for the flourishing Roman province Aegyptus.

2.3. Roman Egypt

236

The cities of Roman Egypt have recently been the subject of a thorough study by Richard Alston.²³⁷ Most aspects of this vast topic have been covered and need therefore not be repeated here. Only the major changes that took place with the Roman era shall be elucidated against the background of what has been remarked with regard to the Ptolemaic city. The developments in the Late Roman and Byzantine periods are not included in this paper.

The most crucial changes are of an administrative nature. The rather loose Ptolemaic system of governing is replaced by a rigid hierarchy with the Roman governor, a Roman of equestrian rank, at the top.²³⁸ The old nome-capitals were upgraded to Metropoleis and more clearly distinguished from minor settlements of the nome.²³⁹ Within the cities themselves amphoda were established instead of the loosely defined Ptolemaic city quarters. Amphoda are important points of reference for the identification of a person, both regarding tax revenue lists and other compilations like the list of members of the gymnasium. Whether these city quarters had any equivalent in the physical reality of the town or were just administrative labels is still unclear.²⁴⁰ They were anyhow not standardized. Both names and numbers were used. The numbers of quarters for single towns are differing significantly as does the population per amphodon where it is documented.²⁴¹ Most probably old Ptolemaic units were put in a more rigid system.

The most important citizen-body within these urban centres was the gymnasial class. Here the Romans were building on Ptolemaic foundations. The village-gymnasia were closed; the gymnasia became again a purely urban institution with a membership rigidly controlled by the strategos of the nome.²⁴² As the aim of the Ptolemies to create a substantial group of Egyptians with a thorough Greek education had been achieved, the Roman administration was able to structure this group and create urban elites. The Ptolemaic kings had owned all the available land in Egypt. *Kleruchic* land became again royal land after the death of the lessee. During the later Ptolemaic era it had become possible to bequeath kleruchic land, alas most of the arable area of Egypt was still under central control.²⁴³ In the Roman period land could be sold and bought in a regular way. Consequently the urban elites were able to acquire large estates and build their civic status on substantial land-holding.244 The Roman administration was thus enabling developments that had already taken place in the Seleucid kingdom in the Late Hellenistic period. There the Hellenistic rulers and the Roman Emperors after them had instigated an oligarchic system in the poleis within their realm.²⁴⁵ According to Giddens' model of the city in classdivided societies, the commodification of land is the first step from the pre-capitalist to the capitalist city because the relations between city and countryside are significantly changed and the traditional status of landownership as feudal or royal prerogative is eliminated, thus creating land owning urban elites.²⁴⁶ Giddens quite ambiguously mixes up the territorial state, the national state and capitalism and presents them as one historical development.²⁴⁷ Most changes of city status are not results of capitalism but due to the fact that the city is now part of a larger political unit. This is exactly what happened with the Egyptian towns and settlements after the Roman conquest.

trian praefectus, only the distant Emperor acted as Pharaoh. From 4 BC a second equestrian post, the *epistrategos* of the Thebaid was created. City administration was standardized. Exegetes, kosmetes, gymnasiarch and agoranomos were the officials in the Metropoleis that were assigned by the strategos (cf. ibid. 121).

- ²⁴⁴ *Ibid.* 112.
- ²⁴⁵ Gehrke 2003, 70.
- ²⁴⁶ GIDDENS 1981, 153.
- ²⁴⁷ Ibid. 147–148.

²³⁶ *Ibid.* 70–78.

 $^{^{\}rm 237}$ Alston 2002. The shortcomings of the book have been listed by BAGNALL 2003. Most of them do not matter in the context of this paper.

BOWMAN/RATHBONE 1992, 109. The governor was an eques-

²³⁹ Alston 2002, 186–187.

²⁴⁰ Alston 2002, 138–165.

²⁴¹ Ibid. 130–138.

²⁴² BOWMAN/RATHBONE 1992, 121–123. ²⁴³ Ibid. 108–109.

The oligarchic class, the *Metropolites*, constituted the members of the gymnasia in the *Metropoleis* and were entitled to tax privileges.²⁴⁸ The new regular census was conducted in 14-year intervals because from that age the poll tax had to be paid and the new *ephebes* were admitted to the gymnasium.²⁴⁹ The old more personalized administrative system with direct involvement of the king, even in minor matters, was not applicable anymore with Egypt now being just a province of the Roman Empire. Time/space relations in the terms of Giddens had completely changed and generated new limitations of communication and contact.

The development of Egyptian Metropoleis has been interpreted as a strategy of Romanisation over two hundred years until the Severan period when all Metropoleis got full city status with their own institutions (*boule, prytaneion* etc.). The term *municipialisation* was applied to the development thereby comparing the Egyptian situation to the Roman urban program in the West of the Empire.²⁵⁰ While the cities of Egypt were no *municipia* in the full sense of the term and the genesis of Roman Egyptian towns in the Severan era may not be the result of a conscious effort of the Roman administration,²⁵¹ the transformation that had taken place since the Ptolemaic Period is remarkable.

2.3.1. Roman Alexandria

With the defeat of the Ptolemies by the Romans the city lost its status as a residency. While political unrest, some of it quite extreme, had already been a frequent phenomenon during the Ptolemaic period, it became a nearly constant quality of the Roman town. The Romans needed most of their military power deployed in Egypt for the control of the city.²⁵² A new quarter, Nikopolis, was founded outside the city proper and memorized the victory of Octavian/Augustus. The new part of the town was equipped with theatres and other sights that overshadowed the neglected monuments of Alexandria that had obviously fallen into disrepair.²⁵³

The animosity between the Jewish and Greek populations was a central source of conflict in the city.²⁵⁴ After an especially bloody uprising in 38 BC the Jews of Alexandria were only allowed to settle in the D District and outside the city walls in the necropoleis around the city.²⁵⁵ The first ghetto was born. Again the archaeological situation in Alexandria does not allow any statement as to how the Jewish quarter was different from the rest of the city. The conflict was most probably a result of the nearly ungovernable size of the city. A fact the Roman officials were well aware of and consequently didn't grant the citizens of the second largest town in the Empire their *boule*. Public meeting places like the gymnasion had repeatedly been the origin of bloody unrest.²⁵⁶ The Romans deemed it more prudent to control the town by means of military force than to create new assemblies with non estimable consequences.

We do not have conclusive evidence from the palace quarters as to what happened there with the now abandoned palatial area. Major institutions like the Serapeum or the Museion continued to exist and were repeatedly refurbished until the Christian era.²⁵⁷ The Caesareum was constructed soon after the Roman conquest and became a landmark of the city.²⁵⁸

²⁵⁰ BOWMAN/RATHBONE 1992, 126.

²⁵⁸ McKenzie 2007, 177–178 fig. 304. According to the plan, the *Caesareum*, probably a rectangular temenos, lined with stoai and two obelisks, one of them Cleopatra's Needle, in front of it, was not oriented according to the street grid, either as McKenzie suggests, to improve its visibility from ships mooring in the harbour (*cf. ibid.* 177) or because the obelisks were some part of a gnomon and the whole installation had to be

237

onwards only one legion remained in Egypt. At the time covered in this paper Alexandria was the only garrison of legions. Numerous *auxilia* were posted all over the country.

²⁵³ McKenzie 2007, 176. *Cf.* HOEPFNER/SCHWANDNER 1994, 243–244. The construction site of an unfinished temple

constructed according to solar principles. Setting up the main symbol of Imperial power in Alexandria in such a way, is, just like the foundation of Nikopolis a sign of disregard for the old order symbolised by the famous street grid inaugurated by Alexander himself. The new sanctuary had a library attached to it, another clear sign of Roman self esteem.

²⁴⁸ BOWMAN/RATHBONE 1992, 120–121.

²⁴⁹ BAGNALL/FRIER 1994, 2.

²⁵¹ JÖRDENS 1999, 176–177. The *boulai* were after their installation not important institutions and had no political weight (*cf. ibid.* 179). The Romans did not follow any long term strategy but where solely interested in maintaining their power and control over the province (*cf. ibid.* 180).

²⁵² ALSTON 1995, 23–24. At the beginning of Roman rule three legions were stationed in Egypt. From 23 AD only two, the *legio* XXII Deiotariana and the *legio* III Cyrenaica remained, both of them garrisoned in Nikopolis. The *legio* II Traiana arrived and the legio III was sent to Arabia in Traianic times. The *legio* XXII was probably annihilated in the Bar-Kochba revolt so that from then

had been left within the area of the *basileia* from 200 BC until the Roman period.

²⁵⁴ Alston 2002, 222–235.

²⁵⁵ *Ibid.* 223.

²⁵⁶ *Ibid.* 233.

²⁵⁷ MCKENZIE 2007, 187, 195–203. The Serapeum was completely rebuilt in the end of the 2nd or beginning of the 3rd century AD.

A list of houses from the Middle to Later Roman period is not very reliable concerning numbers but may well give the ratio of different types of buildings in each of the districts of Alexandria. The ratio of temples to houses was 1:10–20, the ratio of baths 1:40–50 depending on the quarter.²⁵⁹

The Polish excavations in Kom ed-Dikka have provided an impression of a part of the Roman town of Alexandria. A city quarters with peristyle houses was completely remodelled in the later Roman periods.²⁶⁰ In the 4th and 5th centuries it became a public area with a huge bath and a small theatre/odeion.²⁶¹ The old street grid was still respected. As in the Ptolemaic period the overall quality of housing, the used materials (nearly no unfired mud-bricks) and the high quality mosaic floors are in sharp contrast to the *chora* where houses of a more traditional Egyptian layout were still the rule.²⁶²

In the new Roman administrative system nearly all important positions in the towns of the *chora* were occupied by citizens of Alexandria. In spite of the fact that the city still had no *boule*²⁶³ citizens of Alexandria were privileged as they were exempt from the poll tax. The citizenship was only granted if both parents were citizens of Alexandria.²⁶⁴ There were, of course, ways to become an honorary citizen and thereby join the pool for higher administrative functions in Egypt and beyond.

2.3.2. Metropoleis

The Metropoleis did not change their physical appearance with their new status, at least not immediately. Very few of these cities have been excavated properly. With the new urban elites the private funds at the disposal for prestigious building projects had grown significantly. One example of this development was theatres.²⁶⁵ The theatre at Oxyrhynchus could accommodate an audience of 13,920 and was by far the largest theatre of Roman Northern Africa,²⁶⁶ quite remarkable for a "marginal Egyptian village".²⁶⁷

Compared to Ptolemaic circumstances the ruler, the Roman Emperor was a very distant figure. Imperial visits were major events triggering all kinds of response by the subjects, sometimes in a permanent architectural way. Besides the advent of Roman power as such, the visits with the most significant consequences took place in the Antonine period. The visit of Hadrian, the subsequent death of Antinoous and the visits of Antoninus Pius and Marcus Aurelius were commemorated with major urban projects.

The foundation of Antinoopolis commemorating the death of Antinous led to immediate reactions in many other Metropoleis.²⁶⁸ The construction of the theatre at Oxyrhynchus was probably related to the visit as was a major remodelling of Hermopolis Magna the old nome capital of Toth on the opposite bank of the Nile. Antinoopolis was founded as real polis by Hadrian with Antinoous as its founding heros. The constitution of the town was modelled after the old constitution of Naukratis. The city wall, a rare example from Egypt and a hippodrome to the east outside the city wall are still visible. Nearly all other landmarks have vanished. The Napoleonic Expedition documented an orthogonal street grid with several junctions adorned with tetrastyla. The main avenue ran east west through the city, connecting a city gate to the theatre at its other end. The city was a perfect example of a prosperous 2nd century city with colonnaded avenues and all the other essential features. As was the case in Hellenistic Philadelphia, Pharaonic temples were incorporated in the city plan.²⁶⁹ The first nucleus of settlers was taken from Ptolemais Hermiou in order to get a properly Hellenised citizen-body from the beginning.270

Hermopolis Magna,²⁷¹ an established urban centre in the Pharaonic Period with the main cult of Toth in Egypt, had already been a *nome* capital in the Ptolemaic era. Very few Hellenistic structures except tem-

- and pls. 32–33 with a depiction of Berenike II from Thmuis. Probably the picture drawn above is due to a lack of properly excepted sites
- of properly excavated sites.
- ²⁶³ BOWMAN/RATHBONE 1992
- ²⁶⁴ *Ibid.* 114–118.
- ²⁶⁵ Cf. BAILEY 2007, 70 for a list of attested theatres in Egypt.
- GRANI FANFONI, in: DONADONI 1974, 33–36 on the Ramesside temple.
- ²⁷⁰ KÜHN 1913, 86–89.
- ²⁷¹ ALSTON 2002, 238–242 with a confusing map after Bailey (*cf. ibid.* fig. 5.6). LEMBKE 2004, 29–31. SCHMITZ 1921.

²⁵⁹ Alston 2002, 160–162.

²⁶⁰ Rodziewicz 1984. Majcherek 1996. Majcherek 1999. Kolataj/Majcherek/Parandowska 2007. McKenzie 2007, 179–181.

²⁶¹ McKenzie 2007, 209–217.

²⁶² Cf. DASZEWSKI 1985, cat. nos. 38-43, especially 38 plate A

²⁶⁶ *Ibid.* 89.

²⁶⁷ Finley 1977, 246.

²⁶⁸ DONADONI 1974. Very little of the early Roman town has been excavated. MCKENZIE 2007, 154–158.

²⁶⁹ KÜHN 1913. ROEDER 1959. ALSTON 2002, 242–244 fig. 5.7 (the plan is taken from the *Description l' Egypte*). L. BON-

ples were found in the town.²⁷² The original layout was that of a typical Pharaonic town, agglutinating around huge temenoi that dominated the cityscape.²⁷³ The city was organized in four amphoda²⁷⁴ and counted at least 7000 houses in the 2nd century.²⁷⁵ A major change in the overall layout of the city may be due to heavy destructions after the Jewish revolt of 130 AD. More likely the remodelling of the town is a long term result of the Hadrianic foundation of Antinoopolis. The plans of the Emperor were implemented by his successor Antoninus Pius.²⁷⁶ The dromos of the old temple of Toth became the main north-south street. A newly constructed plateia ran east west and crossed the *dromos* at a right angle.²⁷⁷ This crossing was marked by a tetrastylon that had been constructed in the reign of Marcus Aurelius and Commodus in 176 AD.²⁷⁸ The east-west plateia was called Antinoe Street, a very pronounced indication of the connection between the two urban centres only separated by the river Nile. The street ran between two city-gates, the Moon-Gate in the west and the Sun-Gate in the east, a reference to Alexandria, where Antoninus Pius had initialised the construction of a dromos and Gates of the Sun and of the Moon.²⁷⁹ The cosmological dimension of urban space is obvious.²⁸⁰

The city centre got a new representative appearance. The most prominent public buildings were constructed here, the *Komasterion* immediately to the north-east of the crossing and a podium-temple in classical style to the north-west of it.²⁸¹ Older Ptolemaic structures, most of them in mud-brick, were destroyed.²⁸² The *Komasterion* was the central staging point for processions moving on afterwards on the *dromos*. The building was resting on mud-brick sub-structures and built in a "Classical" Greek style. The columns have close parallels in Oxyrhynchus and Antinoopolis, an additional indication that the changes that took place in Hermopolis were part of a programme of local reorganisation in Middle Egypt. The building is of a type only known from Egypt but was designed in a way that befitted its location at the centre of a Roman town of the Antonine era.²⁸³ From a traditional Greek point of view it is surprising that no installations of a more political nature were found in the city-centre.²⁸⁴

The status of the Metropoleis had been boosted in the new Roman system by distinguishing the cities from their surroundings and making them the only sources of social prestige. Cities were now defined by their citizen body. It was not anymore Oxyrhynchos but "the city of the Oxyrhynchites" just like in the old days of the Greek polis.²⁸⁵

2.3.3. Conclusion

Both in the discussion of the Ptolemaic and the Roman town in Egypt the type of street grid, whether it was a planned "Hippodamic" or a grown irregular one, was a central issue. Both layouts for settlements had been present in Egypt long before the formation of the Greek *polis*.²⁸⁶ In all cases, most of them from the Middle Kingdom, they are newly founded and to

239

had to leave his headquarters in Carnuntum in order to squelch the insurrection of Avidius Cassius in the East. The victory in Rome was celebrated in 175 (*cf.* GRIMAL 1994).

²⁷⁹ McKenzie 2007, 190. *Dromos* most probably means eastwest street. Already in the 3rd century BC the main street of Philadelphia on the bank of the canal had been called acter, like the *prytaneion* a *bouleuterion* and a gymnasion, are mentioned in papyri but cannot be localized in the archaeological context. Nymphaea, and a Marcellum were situated along the Antinoe Street (*cf.* SCHMITZ 1921, 15).

- ²⁸⁵ BOWMAN/RATHBONE 1992, 122–123.
- ²⁸⁶ Kemp 1989, 157–178.

²⁷² MCKENZIE 2007, 151–152 for a building in Classical style, a sanctuary of Ptolemy III and Berenike II, in front of the Thot temple (*cf. ibid.* 57–58 fig. 75). The Thot temple itself was finished under Ptolemy I.

²⁷³ SCHMITZ 1921, 3; 20. BAILEY 1991, 7.

²⁷⁴ ALSTON/ALSTON 1997, 203. BAILEY 1991, 57–59 assumes that the *amphoda* followed originally Ptolemaic divisions of the town.

 ²⁷⁵ BAGNALL/FRIER 1994, 54–55. *Cf. supra*, chapter Demography.
 ²⁷⁶ Alston 2002, 240–241.

²⁷⁷ *Cf.* for a topographical map BAILEY 1991, pl. 1 and adapted in: BAGNALL/RATHBONE 2004, 163 fig. 6.3.1.

²⁷⁸ BAILEY 1991, 29–31. The date and mention of the victory over the Germans probably links the construction of the monument to a visit of Marcus Aurelius in Alexandria between the first and second Markomannic war when he

dromos. The old Kanopic street was now adorned with columns, tetrastyla etc. following the style of the time. By doing so Antoninus Pius repaired destructions after the Jewish revolt.

⁸⁰ Cosmological aspects seem to be an important trait of the later Antonine period and are detectable in other works of art of the time. *Cf.* ALFÖLDI 1979, 1–13. The mosaic from Mérida shows a cosmological scene with the harbour of Alexandria.

²⁸¹ BAILEY 1991, 13–24. MCKENZIE 2007, 159–160 figs. 270–274.

²⁸² *Ibid.* 23. Even a Ptolemaic temenos-wall was destroyed.

²⁸³ BAILEY 1991, 24. Probably the bastion, a massive mud-brick building, immediately to the north-east and partly affected by the new building, was the Ptolemaic predecessor *Komasterion*. MCKENZIE 2007, 160.

⁴ MCKENZIE 2007, 158. Buildings of a decidedly official char-

some extent connected to the king. Most of these settlements were not inhabited over a long period of time and were to some degree specialized, were created with a chronologically limited purpose in mind. Colonisation, representation of military power, a building project or the residency for the reign of a king are among these purposes. The fact that, just as in Graeco-Roman Egypt, the planned settlements are by far outnumbered by the "organic" ones also indicates such a special function.

A planned settlement had benefits for such an utilitarian approach. The planned settlement is recordable and therefore easily duplicable. It has been shown especially regarding Roman colonisation that replicability was an important reason for the decision to found cities with a regular street grid.²⁸⁷ Theoretically a city with an orthogonal grid is also more easily expandable but examples from Graeco Roman Egypt like Dionysias in the Fayum show that the initial system was lost when the settled area grew over its old limits.²⁸⁸ Pharaonic planned settlements were usually protected by walls, their size therefore predefined.

Besides these pragmatic aspects ideological reasons are also a factor. In Middle Kingdom Egypt the ideal bureaucratic state with its strict hierarchies and well defined social compartmentalisation may have been the model for these newly founded settlements.²⁸⁹ In Hellenistic and Roman Egypt a background in the Greek *polis* idea is conceivable.²⁹⁰ Another, probably simpler reason may be that the planned settlements had become metaphors of foundation, of a new beginning. To impose such a plan on an existing settlement is a powerful act. In the Roman tradition the strategy is brought to its extremes when a city has been conquered, is totally flattened and rebuilt with a completely new regular street grid and a new or changed name.²⁹¹ In the case of Hermopolis the style is significantly different and the project was probably aided by a prior destruction of parts of the city, but the message is similar. That the main cult of the town was at the core even of the new plan is specific to Egypt and the sentiments of the Egyptian majority.²⁹²

3. SYENE

As an example of the development of a city in Ptolemaic and Roman Egypt I append the following brief account on the recent excavations in Aswan. The town of Syene (modern Aswan) has been investigated by a Joint Swiss-Egyptian mission since 2000.²⁹³ Among the chief aims of the mission is the installation of an urban archaeological unit in order to monitor all modern building activities. The often lamented reason for the deplorable state of Egyptian settlement archaeology that most of the towns of Ancient Egypt are covered by modern cities and therefore lost for archaeological research,²⁹⁴ could be overcome and an ever growing amount of information accumulated over the last eight years.

The map of the town area as given in the Description (Fig. 1) shows a small settlement to the north of the ruins of ancient Syene. A city wall is clearly depicted and defines the eastern and southern limits of the town on the eastern bank of the river Nile opposite the Kôm of Elephantine.²⁹⁵ The northern limit is not given in detail but the so-called Church of Psôti and a structure named "construction Romaine" running straight to the east from it may have been the northern end of the town. The function of these buildings of Late Roman date is unclear. Probably they were connected to the water supply system of the town or part of the city fortification. Remains of a stone wall and towers could be seen near the bank of the Nile before the area was filled in and finally covered by the modern Corniche.²⁹⁶ The map from the end of the 18th century poses several problems. It is not to scale and several mistakes indicate that it was edited and compiled by artists who were not familiar with the situation in

- Hadrian on the ruins of old Jerusalem. Jews were even forbidden to enter the new city.
- ²⁹² The third kind of Ptolemaic city planning (*cf. supra*, n. 223), the orthogonal street grid with a central *dromos* is a very similar concept as it also brings together Egyptian and Graeco Roman elements.
- ²⁹⁵ VON PILGRIM/BRUHN/KELANY 2004, 120–121.
- ⁹⁶ JARITZ 1985 interprets the building as church but sees the "constructione romaine" as part of the Late Roman city wall of Aswan (*cf. ibid.* 14–15; Abb. 3). The u-shaped towers are still visible on old photographs (*ibid.* Taf. 3).

²⁸⁷ MACMULLEN 2000, 125–128.

²⁸⁸ Cf. supra, chapter Colonizing the Fayum.

²⁸⁹ Kemp 1989, 157–178..

²⁹⁰ Cf. supra, chapter The polis.

²⁹¹ Cf. BUTCHER 2003, 118. Aelia Capitolina was founded by

²⁹³ The project is carried out by the Swiss Institute of Architectural and Archaeological Research on Ancient Egypt in Cairo and the SCA Aswan under the joint directorship of Cornelius von Pilgrim and Mohamed el-Bealy.

²⁹⁴ BAGNALL 1988, 200.



Fig. 1 Description I, pl. 31

Aswan at the time. What it represents is the impression the Aswan region made on the members of the expedition. Nevertheless the map is among our most precious sources for the situation of pre modern Aswan before the increase in population and the regulation of the Nile obscured it for ever. The map constitutes a snapshot reproducing numerous objects from different times with little differentiation. Due to the fact that no archaeological investigations were undertaken, the dating given on the map is often of limited value. The city wall is said to be made of granite and dating to the Islamic period. The only ancient ruins given and labelled as such are ruins of houses (no details are given of them) and the Temple of Khnum built in the reign of Domitian. This temple is drawn with a wrong orientation with the pronaos facing the Nile (as was the rule for Pharaonic temples).²⁹⁷

Of special importance are the details of the natural topography like rocky outcrops or the details of the river bank. The riverbank within the area of the ancient town shows a bay with a semicircular depression to the east of it. These are important details concerning the position of the ancient harbour of the town. The ancient river bank was probably further to the east than in the time of the Napoleonic expedition and later silted up thus creating the situation depicted on the map.²⁹⁸

Even before the actual excavation started precious information was gathered from the map and similar sources. In the first tentative reconstructions of the city area the Napoleonic map was superimposed on the modern map of the city (Fig. 2), along with a satellite image and several older cadastral maps. Still visible landmarks like the massive granite outcrop in today's Feryal Garden, the temple of Domitian, a large bastion depicted on the map of the description and still observed in the 1980s to the west of the Feryal Garden, the largest still visible and documented portion of the city wall to the east of the Temple of Isis and in Area 2, and probably a Late Roman portion of the wall encountered by chance when an illegally dug shaft was investigated (Area 7),²⁹⁹ were used as fixed points. The result was far from satisfying as the old map was not to scale. The rescue excavations started to fill the still existing gaps and helped to

241

²⁹⁷ JARITZ 1975. K. BRUHN, in: VON PILGRIM *et alii* 2006, 251–253.
 ²⁹⁹ K. BRUHN, *op. cit.* n. 297, 140–143.
 ²⁹⁸ LOCHER 1999, 66.



Fig. 2 Map of central Aswan with excavated areas

complete the picture. As excavations in Area 46 are just under way as this paper is written, the knowledge of the town has grown substantially in the meantime.

The city limits could be more and more localised or at least approximated. As tombs were only allowed outside the city in Graeco Roman Egypt they are indicators of non-urban areas. Especially in the northern part the necropolis of the Roman and Ptolemaic periods was encountered in numerous excavations³⁰⁰ and the conclusion concerning the northern city limits derived from the map of the Napoleonic Expedition is now more or less verified. Another important result was a negative one. When the old court building of Aswan was demolished and the Corniche (Area 27) the earliest human activity detected on the site was dated to the later 19th century, everything else was river sediment, proving that the ancient river bank was situated further to the east, just as given on the map.

Excavations to the south of the modern Coptic Cathedral (Area 32) helped indirectly to date the city wall depicted on the Napoleonic map. The southern part of a massive early Islamic building (the northern part had already been destroyed by the Cathedral which was consecrated in 1995) was the only isolated structure of that time, probably connected to older city-fortifications further to the north. Islamic houses to the south of this building were significantly

242

rescue excavations started in the large area next to younger. The wall seen by the Expedition was most

³⁰⁰ Cf. F. MAHMUD EL-AMIN in: VONPILGRIM et alii 2008 on Area 25 with Roman tombs from the 2nd century AD.



Fig. 3 Area 15 and neighbouring areas

probably of Mamluk date while the Early Islamic city limit lay further to the north. Two Late Roman fosseditches of different date just to the south of the cathedral and numerous burials dating to the Early and Middle Roman Imperial period were ample proof that the city limits of Graeco-Roman Syene were further to the north of the area. As a rich sequence of Roman and Ptolemaic houses was found in Area 13 to the north of the Cathedral, the city limit can be localised safely under the Cathedral or the street immediately to the north of it. With the extensions of the town now more or less defined the city area can be estimated. It was with 11 to 12 ha surprisingly small, far smaller even than Fayum villages (even the smaller ones cover an area of around 20 ha). The population can be calculated following the different models discussed in the chapter on demography. A reasonable figure would be 1000 to 2000 inhabitants in the Roman and Ptolemaic periods.

243

An extensive project of auger drillings is conducted in cooperation with Morgan De Dapper of Ghent University. It is contributing considerably to our



Fig. 4 Area 15: Plan of the Persian structures



244



Fig. 5 Area 15: Overview of the Persian remains

knowledge of former river areas and the granite relief covered by the modern town. An investigation with GPR equipment is scheduled in the near future in order to trace massive architectural and geological structures. Geophysical methods have been applied with some success in Alexandria.³⁰¹

The raw data concerning the topography and the potential of the now defined settled area are just a framework. The most important information concerning the chronology, function and character of the settlement can only be gained from excavations within the urban area. Among these the most detailed investigations up to now were conducted in Area 1,³⁰² part of a Roman city quarter occupying a part of the former temenos of the Ptolemaic temple, in Area 13³⁰³ and in Area 15.

Area 15 is situated in the centre of the Graeco Roman town in the immediate vicinity of the prospective ancient harbour. In Areas 6 and 9 to the north and west excavations had been conducted by the mission but within a very limited time frame (Fig. 3). A relatively large area, Area 15 (650sqm), was excavated over several years. As a preliminary report is currently in press³⁰⁴ only results with urban relevance are considered here.

When the excavation stopped due to the high water table and the vicinity of derelict modern ruins made any continuation impossible, layers dating to Dynasty 26 (stratum K) had been reached. The structures of this early period were obscured by later building activity and by the muddy condition of the site.

From the Persian Period (stratum J), a part of the garrison town was found (Figs. 4–5), consisting of a compound, protected towards the Nile by a massive 4m wide wall that was at least in the lower courses constructed completely in stone, with an east-west street to the north. The perimeter wall to the west showed a corner at the northern end of Building 9. A possible gate situated in the north-western corner of the area is covered by modern houses. The width of the street (6m measured in the eastern part of the area) is considerable making it one of the major

lines of communication within the settlement. The compound consisted of two blocks, both of them reaching to the east-west road. A narrow northsouth passage between the two blocks could be closed with a door towards the east-west road. All buildings were entered from this passage. The eastern structures were mostly obscured by later buildings. The only clear feature was a subdivision by another narrow passage running east-west. This passage was blocked permanently with a wall at its western end from the north-south passage. The overall impression of the buildings of the eastern block was of casemate constructions with small filling-rooms. Only the substructures, parts of podia for the original buildings, were preserved. The wall to the east of the Temple of Isis was of the same date and shows a similar construction technique as the perimeter wall in Area 15 with the lower portion of the wall also built in stone.³⁰⁵ The western and eastern limits of the Persian garrison settlement are thus confirmed by excavation. The south-eastern corner of the wall is still preserved in Area 2.

The structures of the Persian period in Area 15 were frequently remodelled, in the eastern sector several house units were erected, all of them with a similar layout and still confined to the layout of the Persian blocks (stratum H). In the passage between the houses, courtyards are created and the passage is subdivided into several compartments with batteries of bread-ovens. Over time Building 9 was abandoned. The massive upper mud brick part of the perimeter wall to the west was removed and replaced with a narrow 1 2/2 bricks wide mud-brick wall. In the ruins of Building 9 a common kitchen and bakery with numerous ovens and vats for preparing dough or brewing beer came into existence. The street layers had accumulated to such a level that the former first floors of Buildings 4 and 5 had now become subterranean storage rooms.

In the Early Ptolemaic period (stratum G) a completely new architecture is constructed in Area 15 (Figs. 6–7). A huge building consisting of a casemate wall to the west, slightly more to the east than the old

245

- Idem, in: VON PILGRIM et alii 2006, 220–251. For the domestic structures cf. ibid. 238–251.
- ³⁰³ K. BRUHN, in: VON PILGRIM *et alii* 2006, 264–270. C. VON PIL-GRIM, in: VON PILGRIM *et alii* 2008, 267–270.
- ³⁰⁴ W. MÜLLER, in: VON PILGRIM *et alii* 2008.

situation: Under the construction horizon for the Temple of Isis a sequence of settlement layers with bread ovens etc. were found. Material from these layers belongs to the Persian period and resembles the Persian period finds in Area 15. Jaritz interprets the wall as a wall around the garrison of Syene (*Cf. ibid.* 235).

³⁰¹ Cf. HESSE 2002, 208–235.

³⁰² K. Bruhn, in: Von Pilgrim/Bruhn/Kelany 2004, 127–134.

³⁰⁵ JARITZ/RODZIEWICZ 1996, 237–238. Sondages between the Temple of Isis and the wall produced a clear stratigraphical





246

Fig. 7 Area 15: Overview of the Early Ptolemaic Architecture

perimeter wall, a narrower casemate like wall towards the still existing east-west road and a clear eastern limit came into existence. The building was only preserved in its foundations; especially its north-eastern part was completely obscured by later buildings. In the south eastern part of the area two pedestals carefully crafted from sandstone, probably for statues, came to light, a third pedestal was reconstructed from its retrieval pit. The casemate construction of the western wall ended at the southern end of the wall, where the wall was now constructed massively in stone without further filling rooms. A pylon like gate construction or a single tower are conceivable reconstructions. An older phase of the western wall also showed the foundation of a small square tower at its southern end, this may therefore be the especially adorned entrance area of a large representative building. The northern end of the building was also defined by the east west road and the casemate construction was fortified by larger granite blocks and reused grinding stones. Probably the building was the southern part of a representative gate towards the harbour of the town. The building respected the western and northern limits of the plan from the Persian Period but, while a new north-south road came into existence to its east, the old north-south passage and the two blocks of buildings ceased to exist. There are indicators that the building was never finished, an Elephant of rose granite, found in the immediate vicinity to the north of the site,³⁰⁶ may have stood on one of the pedestals. The construction of the building started in reign of Ptolemy III and was interrupted at the time of Ptolemy IV, just like the Temple of Isis that had never been decorated completely because all building activity stopped with the Upper Egyptian secession in 206/7 BC. It took until 186/87that Ptolemaic order in Upper Egypt was restored.³⁰⁷

The Early Ptolemaic structures were subject to squatter activity. Numerous postholes were probably traces of tents or small huts with open fireplaces among them (Fig. 7). The question whether Syene was conquered by the insurgents or not cannot be decided on the basis of the archaeological record but the abandonment and totally different reuse of the building fits well to the picture gained from graffiti inside the Temple of Isis where a migration of people from Nubia to Syene is mentioned.³⁰⁸

The reurbanisation of Upper Egypt in the Late Ptolemaic Period (stratum F) left its clear mark in Area 15.³⁰⁹ On top of the remains of the north-eastern part of the Early Ptolemaic building a new bath house was constructed (Figs. 8–9). The bath seems to have been part of a house with few rooms grouped around a central bathroom of rectangular type with the usual two hip-baths and the impression of a tub for full immersion. A small basin for water storage was connected to a pass-through through the eastern wall similar to baths in Edfu and Olympia.³¹⁰ This pass-through was served from a narrow passage (Room 8/Room 3 in the older phase) that could be entered from the north-south street to the east of the building. The north-eastern corner of the bathroom showed a pillar like construction made of fired bricks. The pillar was a static necessity due to the door between Rooms 3 and 8. Another door, into Room 5, had a big stepping stone, a reused sandstone block, to its south, probably to facilitate entering the deeper still not overbuilt courtyard of the Early Ptolemaic Period. There was no possibility to reach the bathing area via this door. The central bathroom was entered via the main entrance at its southern end and had, with the exception of the pass through, no connection to the domestic part reserved for servants tending to the bathers. Coins and pottery give a terminus post quem for the bath in the reign of Ptolemy VI. The bathing area, consisting of the tubs along the western wall and the pass-through was significantly more elevated compared to the entrance than is usual for this type of bath. The entrance area with the door and the impression of a (lead-) pipe for waste water disposal to the east of it was separated from the actual bathroom by a narrow wall with a, probably vaulted (the half of a fired brick to the east of the door is probably the remains of a pilaster-strip) passage.

During the later 2nd century the area formerly covered by the Early Ptolemaic building became now an *insula* of the Late Ptolemaic town (Fig. 10). Several living units were constructed, integrating the former bath house (strata E–C). The addition of houses to the south and west led to the creation of a courtyard with two ovens and a hydraulic installation made of fired bricks that was completely destroyed by later activities. Of special interest are Room 12 in Unit 2 and Room 7a in Unit 5. Room 7a had already been

247

³⁰⁶ JARITZ 1998a. W. MÜLLER, in: *Hellenistic Aswan. Proceedings of the 1st Cataract Workshop 2007 in Berlin,* forthcoming.

³⁰⁷ Locher 1999, 88.

³⁰⁸ BRESCIANI/PERNIGOTTI 1978, 141–142; cat. no. 43.
 ³⁰⁹ *Cf. supra* chapter Later Ptolemaic Urbanism.
 ³¹⁰ *Cf. supra* (212)

³¹⁰ *Čf. supra* n. 212.





248

Fig. 9 Area 15: Overview of the bath-house



Fig. 10 Area 15: Plan of Insulae I and II in Strata e-b

part of the original layout of the unit. It was the only room of the house with plastered walls and a terrazzo floor. The shape of the small room is peculiar but it resembles a small andron or triclinium for dining with room for two to three couches.³¹¹ The mud brick constructions of two mastabas were preserved in both rooms. The triclinium had to be added to the former bath house after it had become a private dwelling. The bath was still in use but one hip bath and probably the terracotta tub were removed, probably because, according to Greek custom, one hip bath was sufficient for private use. As the old entrance into the bath and the door into the western part of the buildthe vestibule and small corridor to the east of the bath became the main entrance into the house. As more and more living units were constructed and the houses subdivided, the bathroom was finally abandoned. The courtyard with the ovens had already been blocked for Unit 2 when Room 12 was constructed. A new open room with two ovens came into existence in the north-western corner of the house (Room 2).

The only building material used for these buildings is mud-brick, sometimes with foundations consisting of broken rose granite. Only the lower courses of the outer walls of the bathroom were made of fired bricks due to increased humidity in the

249

ing were now blocked by Unit 5, the old entrance into

bathing area.

³¹¹ Cf. Alston 2002, 81–85.



Fig. 11 Area 15: Overview of the east-west road in stratum B-C



Fig. 12 Area 15: Detail of the exedra

The other units had mostly been destroyed by modern construction work before the developers could be stopped. Insula 1 did not respect the western limits of the Persian to Early Ptolemaic phases. The western limits of Units 1 and 4 lay outside the excavated area.

In the 1st century AD a new *insula* came into existence to the east of Insula 1 as the area became more and more densely built up. Along the east-west street, in front of Insula 1 several tree pits indicate that trees were planted, probably in order to provide shadow for the pedestrians. The trees were a simple alternative to a regular *porticus*.

In the second half of the 4th century AD (stratum B–C) the east-west road was paved with sandstone slabs, a *porticus* was built to the north of Insula 1 and a small shrine or *exedra* was erected to the north of the road, opening exactly to the north-south street (Figs.

10-12) The T-junction of the north-south and eastwest roads was thus further accentuated. At the north eastern corner of Insula 1 and the north-western corner of Insula 2 massive platforms made of reused sandstone blocks with deep foundations were constructed. These platforms constituted bases for heavy architecture, either pilasters or, more probably an arch construction spanning the north-south street. Taking into account the results of the excavations in Area 9^{312} it is possible to get the east-west extension of Insula 1 (ca. 36m). A small semi-circular niche or exedra in the north eastern corner of the Area is facing to the northsouth street to the west of Insula 1 (Fig. 3). This conch has a different ground plan but concerning its position it is a pendant to the building in Area 15.³¹³ There was little conclusive result regarding architecture in Area 6 to the north of Area 15 but another east-west

250

street was clearly discernible and monumental archi-

³¹² K. BRUHN, in: VON PILGRIM/BRUHN/KELANY 2004, 143–148.

tecture of Late Roman date has been recorded.³¹⁴ It has been suggested that the centre of Roman Syene may have been situated in the region of the modern "Germania hospital" a little further to the north of Area 6.³¹⁵ The new representative elements in Areas 6, 9 and 15 may be a further indicator of the vicinity of an important part of town. The street grid seems quite irregular, probably due to the topographical situation with several rocky outcrops within the city area. Other important factors were older buildings like the Temple of Isis and the city wall.

The street immediately to the north of the Roman Shrine (Area 5), a small building of classical type with a Doric frieze, very similar to the architecture of the Temple of Augustus and Roma on Philae Island,³¹⁶ runs at nearly a right angle to the Late Period city wall to the east of the Temple of Isis while no other street further to the north or west is oriented in that way.³¹⁷ Probably the (hypothetical) northern temenos wall of the Isis temple defined the street grid in this region of the town. In Area 13 only dead-end streets have been identified. The street running to the east of the "Temple of Domitian" in Area 3 shows a similar orientation as the streets in Areas 6, 9 and 15. The temple in Area 3 is a typical small Roman urban sanctuary integrated into the street grid. The temple is opening to the street and has no temenos.³¹⁸

Summing up the archaeological evidence even a small and remote town like Syene was exposed to the same developments as the whole of Graeco-Roman Egypt. Fluctuations in the density of housing and therefore the population of the settlement are sometimes consistent with major historical or local changes. Especially remarkable is the fact that the Roman conquest of Egypt did not leave a clear mark in the development of the settlement. The change from the obviously not very densely populated Early Ptolemaic town to densely built up city quarters in the Late Ptolemaic Period occurred in Middle Ptolemaic times just at the time of Boethos' inscription.³¹⁹ The town was more tensely populated in the Persian than in the Early Ptolemaic period. With the Middle

and Late Ptolemaic period the increase in population becomes evident both in the larger settled area and the increased density of housing. This development continued into the Roman Period when, like in many other places all over Egypt, the temenos areas became part of the regular settlement. Densely built up tower houses, like for example in Karanis, cluster to the south of the temple of Isis, leaving only a minimum of space for the temple itself.³²⁰

With the refurbishment of the modest houses in Area 15 at the end of the 4th century Syene got its share of the monumentalization of civic space although significantly later than elsewhere.

Non-archaeological sources provide additional information on ancient Syene. While Elephantine is the metropolis of the nome, the status of Syene is ambiguous. It is called *phrourion* several times³²¹ but this term was also used for city districts according to their layout or military past but without any actual military implication.³²² The town houses a garrison in the Persian period with another fortress probably to its south³²³ and gives the impression of a normal densely settled small town in Late Ptolemaic and Roman times. Especially for the Roman period this situation is quite puzzling because then three auxiliary units were garrisoned in Syene (Strabo 17.1.12).³²⁴ Probably due to the topographical situation the camps simply have not been found yet; the town itself seems too small to house such a number of troops and a civil population.

Many important sites and aspects had to be neglected in this paper. One should mention, in this respect, especially the results of the Dachla project or the Roman towns of the Fayum but the examples given should have been sufficient to illustrate common traits in the development of settlements in Egypt until the Middle of the Roman period. Ancient Egypt was not so much an exception but rather an integral part of the Hellenistic World and the Roman Empire also with regard to Urbanism. The situation in Late Antiquity was significantly different and would go beyond the scope of this paper.

- *um* among them, dated to the Late Roman and Byzantine periods.
- ³¹⁵ JARITZ 1998b.
- ³¹⁶ McKenzie 2007, 166–168.
- ³¹⁷ A. KELANY/K.C. BRUHN, in: VON PILGRIM/BRUHN/KELANY 2004, 136–139.
- ³²¹ LOCHER 1999, 64.
- ³²² SCHMITZ 1921, 6–7 on Hermopolis.
- ³²³ *Cf.* the contribution of C. VON PILGRIM.
- ³²⁴ Alston 1995, 28.

³¹³ *Ibid. fig. 10.*

³¹⁴ BRUHN, in: VON PILGRIM *et alii* 2006, 253–264. The most instructive results, a well preserved baptism and a *martyri*-

³¹⁸ Cf. supra n. 297.

³¹⁹ *Čf. supra* chapter Later Ptolemaic Urbanism

³²⁰ *Čf. supra* n. 299.

Bibliography

ABD EL-MAKSUD, M.

2007 L'agglomératinon: les bains d'époche ptolémaique, 104–115, in: D. VALBELLE, M. ABD EL-MAKSOUD (eds.), *Tell el-Herr les niveaux hellénistique et du Haut-Empire*, Paris.

Alföldi , A.

1979 *Aion in Mérida und Aphrodisias,* Madrider Beiträge 6, Mainz.

ALSTON, R.

- 1995 Soldier and Society in Roman Egypt, London.
- 2002 The City in Roman and Byzantine Egypt, London, New York.
- ALSTON, R., ALSTON, R.D.
- 1997 Urbanism and the Urban Community in Roman Egypt, JEA 83, 199–216.

AUSTIN, M.

2004 From Syria to the Pillars of Heracles, 1233–1249, in: M.H. HANSEN, T.H. NIELSEN (eds.), An Inventory of Archaic and Classical Poleis, Oxford.

BAGNALL, R.S.

- 1988 Archaeology and Papyrology, JRA 1, 197–202.
- 2001 Archaeological Work on Hellenistic and Roman Egypt, AJA 105, 227–243.
- 2003 The City in Roman and Byzantine Egypt by R. Alston, *JEA 89*, 297–300.
- 2005 Evidence and Models for the Economy of Roman Egypt, 187–204, in: I. MORRIS, J. G. MANNING (eds.), *The Ancient Economy: Evidence and Models*, Stanford.

BAGNALL, R.S., FRIER, B.W.

1994 The Demography of Roman Egypt, Cambridge.

BAGNALL, R.S., RATHBONE, D.W.

2004 Egypt from Alexander to the Copts. An Archaeological and Historical Guide, London.

BAILEY, D.M.

- 1991 Excavations at El-Ashmunein IV. Hermopolis Magna: Buildings of the Roman Period, London.
- 2007 The Great Theatre, 70–90, in: A.K. BOWMAN, R.A. COLES, P.J. PARSONS, D. OBBINK, N. GONIS (eds.), *Oxyrhynchus. A City and its Texts.* EES Graeco-Roman Memoirs 93, London.
- BORAIK, M., LAROZE, E.
- 2008 Le Centre Franco-Égyptien d'Étude des Temples de Karnak, 54–83, in: G. ZAKI (ed.), Le Domaine d'Amon-Rê.
 40 ans de coopération franco-égyptienne à Karnak, Cairo.
- BOWMAN, A.K., RATHBONE, D.W.
- 1992 Cities and Administration in Roman Egypt, JRS 82, 107–127.

2007 Gymnasion und griechische Bildung im Nahen Osten, 323–334, in: W. AMELING, S. ANEZIRI, D. KAH, K. BRING-MANN, L. BURCKHARDT, D. DAMASKOS, B. DREYER(eds.), *Das hellenistische Gymnasium*, Berlin.

BRUNEAU, P.

1970 L'Îlot de la Comédiens. Delos XXVII, Paris.

BURKERT, W.

1995 Greek Poleis and Civic Cults: Some Further Thoughts, 201–210, in: M.H. HANSEN, K.A. RAAFLAUB (eds.), Studies in the Ancient Greek Polis. Historia Einzelschriften 95, Stuttgart.

BUTCHER, K.

2003 Roman Syria and the Near East, London.

CASSON, L.

1993 Ptolemy II and the Hunting of African Elephants, *TAPA* 123, 247–260.

CLARKE, K.

2001[1999] Between Geography and History, Oxford.

CLARYSSE, W., THOMPSON, D.J.

2006 Counting the People in Hellenistic Egypt. Vol. 2, Cambridge.

COULSON, W.D.E., LEONARD, A.

1981 Cities of the Delta. Part I/Naukratis, ARCER 4, Malibu.

DANGSCHAT, J.S., FREY, O.

Stadt und Regionalsoziologie, 143–164, in: F. KESSEL,
 C. REUTLINGER, S. MAURER, O. FREY (eds.), *Handbuch Sozialraum*, Wiesbaden.

DASZEWSKI, W.A.

1985 Corpus of Mosaics from Egypt I. Hellenistic and Early Roman Period. Aegyptiaca Treverensia 3, Mainz.

DAVOLI, P.

1997 L'Archeologia Urbana nel Fayyum di Età Ellenistica e Romana. Missione congiunta. Monografie 1, Naples.

Delia, D.

1988 The Population of Roman Alexandria, *TAPA* 118, 275–292.

DIHLE, A.

2005 Das Bild Ägyptens bei den Griechen archaisch-klassischer Zeit, 20–33, in: H. BECK, P.C. BOL, M. BÜCKLING (eds.), Ägypten, Griechenland und Rom. Abwehr und Berührung, Frankfurt/Main.

DONADONI, S.

1974 Antinoe (1965–1968). Rom 1974.

Döring, J., Thielemann, T.

2008 Einleitung. Was lesen wir im Raume?, 7–48, in:

252

BRESCIANI, E., PERNIGOTTI, S.

1978 Assuan. Il tempio tolemaico di Isi, Pisa.

BRINGMANN, K.

- 1995 Geben und Nehmen. Monarchische Wohltätigkeit und Selbstdarstellung im Zeitalter des Hellenismus, Berlin.
- J. DORING, 1. IHIELEMANN (eds.), Spatial Turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften, Bielefeld.

EL-KHASHAB, A.E.M.

1978 TA SARAPEIA A Sakha et au Fayum ou les Bains Therapeutiques, CASAE 25, Kairo 1978.

EL-MASRI, Y.

2007 The Ptolemaic Town (Ptolemais), 251-265, in: Z.A. HAWASS, J. RICHARDS (eds.), The Archaeology and Art of Ancient Egypt. Essays in Honor of David B. O'Connor, Vol. 1, CASAE 36, Cairo.

ERRINGTON, M.

- 1986 Geschichte Makedoniens. München.
- FANTALKIN, A.
- 2006 Identity in the Making: Greeks in the Eastern Mediterranean during the Iron Age, 199-208, in: A. VILLING, U. SCHLOTZAUER (eds.), Naukratis: Greek Diversity in Egypt, BMRP 162, London.
- FARRINGTON, A.
- The Roman Baths of Lycia. An Architectural Study, The 1995 British Institute of Archaeology at Ankara Monographs 20, Ankara.
- FINLEY, M.I.
- 1993³ Die antike Wirtschaft, Munich³.
- FOURNET, T., REDON, B.
- Tell el-Herr, Taposiris Magna et les bains de l'Égypte 2007 gréco-romaine, 116-127, in: D. VALBELLE, M. ABD EL-MAKSOUD (eds.), Tell el-Herr les niveaux hellénistique et du Haut-Empire. Paris.
- FRASER, P.M.
- 1972 Ptolemaic Alexandria, Oxford.
- FRITZ, H.J.
- 1995Vitruv: Architekturtheorie und Machtpolitik in der römischen Antike, Berlin/Hamburg/Münster.

FUNCK, B.

1996 Beobachtungen zum Begriff des Herrscherpalastes und seiner machtpolitischen Funktion im hellenistischen Raum. Prolegomena zur Typologie der Hellenistischen Herrschaftssprache, 44-55, in: W. HOEPFNER, G. BRANDS (eds.), Basileia. Die Paläste der Hellenistischen Könige. Internationales Symposion in Berlin vom 16.12.1992 bis 20.12.1992, Mainz.

GARDNER, A.

2004 Introduction: Social Agency, 1-18, in: A. GARDNER (ed.), Agency uncovered: Archaeological Perspectives on Social Agency, Power and Being Human, London.

GEHRKE, H.J.

2003 Geschichte des Hellenismus, Munich.

GIDDENS, A.

- A Contemporary Critique of Historical Materialism. Vol. 1: 1981Power, Property and the State, London.
- Social Theory and Modern Sociology, Stanford. 1987
- Die Konstitution der Gesellschaft, Frankfurt/New York. 1997GODDIO, F.

GRIMAL, P.

1994 Marc Aurèle, la Justice et la Vérit, 265-269é, in: C. BERGER, G. CLERC, N. GRIMAL (eds.), Hommages à Jean Leclant. Volume 3. Études Isiaques. BdE 106/3, Cairo.

GRÖNWALD, H., TIETZE, C.

2003 Fragmente eines Griechischen Bauwerks, ARCUS 6, 95-100.

GROSS-ALBERNHAUSEN, K.

- 2007 Bedeutung und Funktion der Gymnasien für die Hellenisierung des Ostens, 313-323, in: W. AMELING, S. ANEZIRI, D. KAH, K. BRINGMANN, L. BURCKHARDT, D. DAMASKOS, B. DREYER (eds.), Das hellenistische Gymnasium, Berlin.
- HABERMANN, W.
- Gymnasien im ptolemäischen Ägypten eine Skizze, 2007 335-349, in: W. Ameling, S. Aneziri, D. Kah, K. Bring-MANN, L. BURCKHARDT, D. DAMASKOS, B. DREYER (eds.), Das hellenistische Gymnasium, Berlin.

HABICHT, C.

1970 Gottmenschentum und griechische Städte, Zetemata 14, Munich.

HADJI-MINAGLOU, G.

2007 Tebtynis IV, FIFAO 56, Cairo.

HANSEN, M.H.

1995The "Autonomous City-State" Ancient Fact or Modern Fiction?, 21-44, in: M.H. HANSEN, K.A. RAAFLAUB (eds.), Studies in the Ancient Greek Polis, Historia Einzelschriften 95, Stuttgart.

HANSEN, M.H., NIELSEN, T.H.

2004 Introduction, 1-156, in: M. H. HANSEN, T. H. NIELSEN (eds.), An Inventory of Archaic and Classical Poleis, Oxford.

HEINEN, H.

1981 Alexandrien - Weltstadt und Residenz, Aegyptiaca Treverensia 1, Mainz.

HERBERT, D.T., THOMAS, C.J.

1997 Urban Geography. A First Approach, New York.

HESSE, A.

2002 L'Heptastade d'Alexandrie, 191-273, in: J.Y. EMPEREUR (ed.), Alexandrina 2, EtudAlex 6, Cairo.

N. HIMMELMANN

1992 Archäologische Forschungen im Akademischen Kunstmuseum der Universität Bonn. Die griechisch-ägyptischen Beziehungen, Rheinisch-Westfälische Akademie der Wissenschaften. Vorträge G 316, Opladen.

HÖCKMANN, U., MÖLLER, A.

2006 The Hellenion at Naukratis: Ouestions and Observa

253

The Topography and Excavation of Heracleion-Thonis and 2007 East Canopus (1996-2006). Oxford Centre for Maritime Archaeology Monograph 1, Oxford.

GODDIO, F., CLAUSS, M.

- 2006 Ägyptens versunkene Schätze, Berlin.
- tions, 11-22, in: A. VILLING, U. SCHLOTZAUER (eds.), Naukratis: Greek Diversity in Egypt, BMRP 162, London.

HÖCKMANN, U., VITTMANN, G.

2005 Griechische und karische Söldner in Ägypten in archaischer Zeit (7.-6. Jh. v. Chr.), 97-103, in: H. BECK,

P.C. BOL, M. BÜCKLING (eds.), Ägypten, Griechenland und Rom. Abwehr und Berührung, Frankfurt/Main.

HODDER, I.

1986 *Reading the Past. Current Approaches to Interpretation in Archaeology*, Cambridge.

HOEPFNER, W.

1996 Zum Typus der Basileia und der königlichen Andrones, 1–43, in: W. HOEPFNER, G. BRANDS (eds.), Basileia. Die Paläste der Hellenistischen Könige. Internationales Symposion in Berlin vom 16.12.1992 bis 20.12.1992, Mainz.

HOEPFNER, W., SCHWANDNER, E.L.

1994 Haus und Stadt im Klassischen Griechenland. Wohnen in der klassischen Polis I, München.

Hölbl, G.

1994 Geschichte des Ptolemäerreiches, Darmstadt.

HUSS, W.

2001 Ägypten in hellenistischer Zeit. 320–30 v. Chr., München. JAMESON, M.H.

- 1993 Domestic Space in the Greek City-State, 92–113, in: S. KENT (ed.), Domestic Architecture and the Use of Space: An Interdisciplinary Cross-Cultural Study, Cambridge.

JARITZ, H.

- 1975 Untersuchungen zum Tempel des Domitian in Assuan, *MDAIK* 31, 237–257.
- 1985 Die Kirche des Heiligen Psôti vor der Stadtmauer von Assuan, *BdE* 47/2, 1–19.
- 1998 a Eine Elefantenstatue aus Syene. Gott oder Gottgeweiht?, 459–468, in: H. GUKSCH, D. POLZ (eds.), Stationen. Beiträge zur Kulturgeschichte Ägyptens. Rainer Stadelmann gewidmet, Mainz.
- 1998 b Ein Bau der römischen Kaiserzeit in Syene, 155–165, in: M. KRAUSE, S. SCHATEN (eds.), *Themelia (FS Grossmann)*, Wiesbaden.
- JARITZ, H., RODZIEWICZ, M.
- 1994 Syene Review of the Urban Remains and its Pottery (I), *MDAIK* 50, 115–141.
- 1996 Syene Investigation of the Urban Remains in the Vicinity of the Temple of Isis (II), *MDAIK* 52, 214–249.

JÖRDENS, A.

1999 Das Verhältnis der römischen Amtsträger in Ägypten den "Städten" in der Provinz, 141–180, in: W. ECK, E. MÜLLER-LUCKNER (eds.), Lokale Autonomie und römische Ordnungsmacht in den kaiserzeitlichen Provinzen vom 1. bis 3. Jh., München.

KAMMERZELL, F.

1993 Studien zu Sprache und Geschichte der Karer in Ägypten, GOF 27, Wiesbaden. Domestic Built Environments, 1–8, in: S. KENT (ed.), Domestic Architecture and the Use of Space: An Interdisciplinary Cross-Cultural Study, Cambridge.

KITTO, H.D.F.

- 2003 The Polis, 43–49, in: R.T. LE GATES, F. STOUT (eds.), *The City Reader*, London.
- KOLATAJ, W., MAJCHEREK, G., PARANDOWSKA, E.
- 2007 Villa of the Birds. The Excavation and Preservation of the Kom al-Dikka Mosaics, ARCE Conservation Series 3, Cairo.

Kolb, F.

1984 Die Stadt im Altertum, München 1984

KRAUS, J.

2004 Die Demographie des Alten Ägypten (Diss.Göttingen) (http://webdoc.sub.gwdg.de/diss/2004/kraus/kraus. pdf).

KUHLMANN, K.P.

- 1988 Das Ammoneion. Archäologie, Geschichte und Kultpraxis des Orakels von Siwa, AV 75, Mainz.
- 2007 Das Ammoneion: Ein ägyptisches Orakel in der libyschen Wüste, 77–87, in: G. DREYER, D. POLZ (eds.), Begegnung mit der Vergangenheit. 100 Jahre in Ägypten. Deutsches Archäologisches Institut Kairo 1907–2007, Mainz.

KÜHN, E.

- 1913 Antinoopolis. Ein Beitrag zur Geschichte des Hellenismus im römischen Ägypten, Leipzig.
- KUNZE, E., SCHLEIFF, H.
- 1944 IV. Bericht über die Grabungen in Olympia, Berlin.

LAMLA, J.

- 2003 Anthony Giddens, Frankfurt/Main.
- LAPP, N.L.
- 1980 The Excavations at Araq el-Emir. Volume I. AASOR 47, Winona Lake.
- LE GATES, R.T.
- 2003 How to Study Cities, 9–19, in: R.T. LE GATES, F. STOUT (eds.), *The City Reader*, London.

LE GATES, R.T., STOUT, F.

2003 The Evolution of Cities. Introduction, 21–24, in: R.T. LE GATES, F. STOUT (eds.), *The City Reader*, London.

LECLÈRE, F.

2007 An Egyptian Temple at Tell Dafana?, EA 30, 14–17.

Lembke, K.

2004 Ägyptens späte Blüte. Die Römer am Nil, Mainz.

LLOYD, A.B.

1983 The Late Period 664–323 BC, 279–364, in: B.G. TRIG-CEP, A.B. LLOWD, B.L. KENB (eds.). Ancient Explicit A Social

254

Kemp, B.J.

1989 Ancient Egypt. Anatomy of a Civilization, London.

Kent, S.

1993 Activity Areas and Architecture: an Interdisciplinary View of the Relationship Between Use of Space and GER, A.B. LLOYD, B.J. KEMP (eds.), *Ancient Egypt. A Social History*, Cambridge.

Locher, J.

1999 Topographie und Geschichte der Region am Ersten Nilkatarakt in Griechisch-Römischer Zeit. APF Beih 5, Stuttgart und Leipzig.

LÖW, M., STURM, G.

Raumsoziologie, 31–48, in: F. KESSEL, C. REUTLINGER,
 S. MAURER, O. FREY (eds.), *Handbuch Sozialraum*, Wiesbaden.

MACMULLEN, R.

2000 *Romanization in the Time of Augustus*, New Haven, London.

MAJCHEREK, G.

- 1996 Excavations at Kom El-Dikka 1995, PAM 7, 13–22.
- 1999 Kom El-Dikka. Excavations, 1997/98, PAM 10, 29–39.

MCKENZIE, J.

2007 The Architecture of Alexandria and Egypt c. 300 BC to AD 700, Yale.

MICHALOWSKI, K.

- 1937 Tell Edfou 1937, FFP I, Cairo.
- 1962 Fouilles polonaises à Tell Atrib en 1960, ASAE 57, 67–77.

MIEBACH, B.

2006 Soziologische Handlungstheorie; Wiesbaden.

MITTAG, P.F.

2006 Antiochos IV Epiphanes. Eine politische Biographie. Klio Beiheft Neue Folge 11, Berlin.

MÖLLER, A.

2005 Naukratis. Trade in Archaic Greece; Oxford.

MUELLER, K.

- 2003 "Oh King Ptolemy Founder of Cities, Nomes and the Two Lands!" On Founder Cults and Concepts in Ptolemaic Egypt, 181–197, in: S. BICKEL, A. LOPRIENO (eds.), Basel Egyptology Prize 1. Junior Research in Egyptian History, Archaeology, and Philology, AegHel 17, Basel.
- 2006 Settlements of the Ptolemies. City Foundations and New Settlement in the Hellenistic World, Studia Hellenistica 43, Leuven.

Mumford, L.

- 1979 [1961] Die Stadt. Geschichte und Ausblick. München.
- 2003[1937] What is a City?, 99–102, in: R.T. LE GATES, F. STOUT (eds.), *The City Reader*, London.

Mysliwiec, K.

- 1996 Athribis entre Memphis et Alexandrie, *DossArch* 213, 34–43.
- 2000 Rescue Excavations at Tell-Atrib in 1985–1995, 9–49, in: K. MYSLIWIEC, Z. SZTETYLLO (eds.), *Tell Atrib* 1985–1995 I, Warsaw.

NIELSEN,I.

 1996 Oriental Models for Hellenistic Palaces, 209–212, in:
 W. HOEPFNER, G. BRANDS (eds.), Basileia. Die Paläste der Hellenistischen Könige. Internationales Symposion in Berlin vom 16.12.1992 bis 20.12.1992, Mainz.

Padró, J.

2007 Recent Archaeological Work, 129–138, in: A.K. BOW-MAN, R.A. COLES, P.J. PARSONS, D. OBBINK, N. GONIS (eds.), *Oxyrhynchus. A City and its Texts*, EES Graeco-Roman Memoirs 93, London.

Petrie, W.M.F.

- 1888 Tanis. Part II. Nebesheh (AM) and Defenneh (Tähpanhes), EES 5, London 1888.
- 1992[1886] Naukratis I, Chicago.

PFEIFFER, S.

- 2005 Begegnung Ägyptens und Griechenlands in der Klassik, 163–170, in: H. BECK, P.C. BOL, M. BÜCKLING (eds.), Ägypten, Griechenland und Rom. Abwehr und Berührung, Frankfurt/Main.
- 2008 Herrscher- und Dynastiekulte im Ptolemäerreich: Systematik und Einordnung der Kultformen, MBPF 98, München.

Piltz, E.

2008 "Trägheit des Raums". Fernand Braudel und die Spatial Stories der Geschichtswissenschaft, 75–102, in:
J. DÖRING, T. THIELEMANN (eds.), Spatial Turn. Das Raumparadigma in den Kultur- und Sozialwissenschaften, Bielefeld.

PLAUMANN, G.

1910 Ptolemais in Oberägypten. Ein Beitrag zur Geschichte des Hellenismus in Ägypten, Leipziger Historische Abhandlungen 18, Leipzig.

RAPOPORT, A.

- 1970 The Study of Spatial Quality, *Journal of Aesthetic Education* 4 No. 4, Champaign.
- Systems of Activities and Systems of Settings, 9–20, in:
 S. KENT (ed.), Domestic Architecture and the Use of Space: An Interdisciplinary Cross-Cultural Study, Cambridge.

RATHBONE, D.W.

1994 Settlement and Society in Greek and Roman Egypt, 136–145, in: A. BÜLOW-JACOBSEN (ed.), Proceedings of the 20th International Congress of Papyrologists (Copenhagen, 23–29. August, 1992), Copenhagen.

Ray, J.

1996[1994] Literacy in Egypt in the Late and Persian Periods, 51–66, in: A.K. BOWMAN, G. WOOLF (eds.), *Literacy & Power in the Ancient World*, Cambridge.

RODZIEWICZ, M.

1984 Les habitations Romaines tardives d'Alexandrie. Alexandrie III, Warsaw.

ROEDER, G.

1959 Hermopolis 1929–1939. Ausgrabungen der Deutschen Hermopolis-Expedition in Hermopolis, Ober-Ägypten, WVPM 4, Hildesheim.

255

NIEMEIER, W.D.

2001 Archaic Greeks in the Orient: Textual and Archaeological Evidence, *BASOR* 322, 11–32.

Rostovtzeff, M.

1979 [1922] A Large Estate in Egypt in the Third Century B.C. New York.

SABOTTKA, M.

2008 Das Serapeum in Alexandria, EtudAlex 15, Cairo.

Schäfer, H.

1908 Priestergräber und andere Grabfunde vom Ende des Alten Reiches bis zur griechischen Zeit vom Totentempel des Ne-User-Rê, WVDOG 8, Leipzig.

SCHMITT, H.H.

2005 Stadt, Polis (A–D), 1023–1034, in: H.H. SCHMITT, E. VOGT (eds.), *Lexikon des Hellenismus*, Wiesbaden.

SCHMITZ, H.

1921 Topographie von Hermopolis Magna, Freiburg.

SIDEBOTHAM, S., WENDRICH, W.Z.

- 1998 Berenike '96. Report on the Excavations at Berenike (Egyptian Red Sea Coast) and the Survey of the Eastern Desert, Leiden.
- 1999 Berenike '97. Report on the 1997 Excavations at Berenike and the Survey of the Egyptian Eastern Desert, including Excavations at Shenshef, Leiden.
- 2007 Berenike 1999/2000. Report on the Excavations at Berenike, Including Excavations in Wadi Kalalat and Siket, and the Survey of the Mons Smaragdus Region, Los Angeles.

SMOLÁRIKOVÁ K.

- 2000 The Greek cemetery in Abusir, 67–72, in: M. BÁRTA, J. KREJCÍ (eds.), *Abusir and Saqqara in the Year 2000*, Prag.
- 2002 Abusir VII. Greek Imports in Egypt. Graeco-Egyptian Relations during the First Millenium BC, Prague.
- 2006 The Mercenary Troops An Essential Element of the Late Period's Military Power, 245–248, in: K. DAOUD, S. ABD EL-FATAH (eds.), *The World of Ancient Egypt. Essays in Honor of Ahmed El-Qader El-Sawi*, CASAE 35, Cairo.

SONNE, W.

1996 Hellenistische Herrschaftsgärten, 136–143, in: W. HOEPFNER, G. BRANDS (eds.), Basileia. Die Paläste der Hellenistischen Könige. Internationales Symposion in Berlin vom 16.12.1992 bis 20.12.1992, Mainz.

SZYMANSKA, H.

2005 Terres cuites d'Athribis, MRE 12, Turnhout.

THOMAS, R.

1996[1994] Literacy in the city-state in archaic and classical Greece, 33–50, in: A.K. BOWMAN, G. WOOLF (eds.), *Literacy & Power in the Ancient World*, Cambridge.

THOMPSON, D.J.

1988 Memphis under the Ptolemies, Princeton.

1996[1994] Literacy and Power in Ptolemaic Egypt, 67–83, in: A.K. BOWMAN, G. WOOLF (eds.), *Literacy & Power in the Ancient World*, Cambridge.

TOMLINSON, R.A.

1992 From Mycenae to Constantinople. The Evolution of the Ancient City, London.

VIERECK, P.

1928 Philadelpheia. Die Gründung einer hellenistischen Militärkolonie in Ägypten, Morgenland 16, Leipzig.

VILLING, A., SCHLOTZAUER, U.

2006 Naukratis and the Eastern Mediterranean: Past, Present and Future, 1–10, in: A. VILLING, U. SCHLOTZAUER (eds.), *Naukratis: Greek Diversity in Egypt*, BMRP 162, London.

VITTMANN, G.

- 2003 Ägypten und die Fremden im ersten vorchristlichen Jahrtausend. Kulturgeschichte der Antiken Welt 97, Mainz/ Rhein.
- VON PILGRIM, C. et alii
- 2008 The Town of Syene. Report on the 5th and 6th Season in Aswan, *MDAIK* 64, forthcoming.
- VON PILGRIM, C., BRUHN, K.C., DIJKSTRA, J.H.F.
- 2006 The Town of Syene. Report on the 3rd and 4th Season in Aswan, *MDAIK* 62, 215–278.
- VON PILGRIM, C., BRUHN, K.C., KELANY, A.
- 2004 The Town of Syene. Preliminary Report on the 1st and 2nd Season in Aswan, *MDAIK* 60, 119–148.

WATZINGER, C.

1905 Griechische Holzsarkophage aus der Zeit Alexanders des Grossen, WVDOG 6, Leipzig.

WEBER, M.

1972 Wirtschaft und Gesellschaft, Tübingen.

WERLEN, B.

1999 Zur Ontologie von Gesellschaft und Raum. Sozialgeographie alltäglicher Regionalisierungen, Band 1, Stuttgart.

WILSON, P., GILBERT, G.

2007 Sais and its Trading Relations with the Eastern Mediterranean, 251–265, in: P. KOUSOULIS, K. MAGLI-VERAS (eds.), Moving Across Borders. Foreign Relations, Religion and Cultural Interactions in the Ancient Mediterranean, OLA 159, Leuven.

YARDENI, A.

1994 Maritime Trade and Royal Accountancy in an Erased Customs Account from 475 B.C.E. on the Ahiqar Scroll from Elephantine, *BASOR* 293, 67–78.