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Mapping Political Diversity: Some Thoughts on Devising a Historiographical Map of Seventh-Century BC Egypt

Summary

The social and cultural developments in the Eastern Mediterranean Area of Connectivity in the 8th to 6th c. BC are strongly rooted in the cross-regional mobility and subsequent cultural diversity that resulted from the various local strategies in the southern Levant and the Nile delta of challenging and outmaneuvering the super-powers. Yet, historiographical maps of 7th c. Egypt predominantly depict the political landscape – if at all – as the dominion of politically homogeneous entities: as part either of the Assyrian empire, or of the Kushite empire, or of a local power. By contrast, this paper discusses an alternative visualization, which indicates historical complexity with the aim of triggering further research.

Keywords: cartography; historiographical mapping; thematic maps; Egypt; 1st millennium BC; political diversity; historical complexity

Im 7. Jh. v. Chr. ist Ägypten Ziel der Expansions- und Konsolidierungspolitik einerseits der assyrischen und kuschitischen Könige, andererseits von lokalen Machthabern. Gerade der politische Spielraum, sich mit einer der Großmächte, untereinander oder mit anderen Entitäten insbesondere jenseits des östlichen Mittelmeeres zu verbünden, wird auf den derzeit kursierenden politisch-thematischen historiographischen Karten nicht deutlich, obwohl darin einer der Schlüsselfaktoren für die sozio-historische Entwicklung im Großraum ,weiterer östlicher Mittelmeerraum' zu sehen ist. Dieser Beitrag gewährt Einsicht in ein alternatives Kartenkonzept, das sich die Visualisierung von historischer Komplexität zum Ziel gesetzt hat, um weitere Forschungsfragen anzuregen.

Keywords: Kartographie; historigraphische Kartierung; thematische Karten; Ägypten; 1. Jahrtausend v. Chr.; politische Diversität; historische Komplexität

1 Introduction

"A picture says more than a thousand words!" This is an observation, which is also highly apt for maps, and especially for those visualizing social and historio-political issues. Its consequences are key issues of modern cartography, where the visualization of spatial social structure had long been ostracized.[1] In ancient civilization studies, and even more so in times and areas with extensive written data, the impact of cartographic display on academic interpretation of antiquity is only marginally discussed. Mapping is primarily used to illustrate topographical issues and only to a minor extent also for visualizing 'history'. Now, why should this not be enough, why should we also care for historiographical mapping? A fundamental answer to this is that maps open up research questions.[2] This exceedingly constructive approach to (historiographical) mapping unfortunately needs relativization. Maps can be exceptionally powerful tools to open up or trigger research questions, but only if the effort is made to allow them to do so. Yet, the opposite is true as well. Maps can efficiently obliterate the need for further research and different research questions as will be illustrated for the case of Egypt in the 7th century BC.[3]

The condensation of history to a two-dimensional static snapshot and the subsequent substantial reduction of historical complexity constitutes a major challenge, but also the chance to visualize historical issues to be analyzed and discussed. This paper therefore draws on the power of historiographical thematic maps to promote further research issues and discusses means to control their degree of manipulativeness instead of ostracizing their usage.

But let us start at the beginning. What is a *historiographical map* and which kinds of historiographical maps is this paper concerned with? An issue immediately arising in the realm of historical geography and cartography is the distinction between a *historical* map, i.e. an ancient map or atlas that visualizes (ancient) contemporary geography, vs. a *historiographical* map, which illustrates historical events, processes and constellations from a later perspective.[4] For a historian this rather simple distinction remains unsatisfactory. With the act of creation and publication, any usable thematic map illustrating history immediately becomes a 'historical' one;[5] and every map on the past is a historiographical one, regardless of its thematic focus. From a historian's perspective at least four map categories need to be differentiated which take into account the time frame depicted (a *status quo* at a specific date or changes during a time interval) and the point of view (internal/historical[6] or external/historiographical), see Tab. 1. Compare for instance a physical satellite map of today (= *historical status-quo map*) vs. a reconstructed physical map visualizing the coastal lines of, e.g., 10 000 BC (= *historiographical status-quo map*), or plotted changes in frontlines during military actions (= *historical condensation map*) vs. their reconstruction at a later date (= *historiographical condensation map*).

Historiographical maps – i.e. thematic maps visualizing aspects of history – can be deconstructed into several layers. Most commonly, the background layer consists of a physical map which may range from a very detailed physical map to the rough delineation of coastal lines and major rivers.[7] Thematic overlays are then superimposed on that basis, usually at least a topographical one, i.e. an overlay presenting the names/labels of geomorphological features and of human-built structures like towns, roads or monuments.[8] A closely related thematic overlay, which is popular in ancient civilizations studies, is the plotting of findspots of both immobile and mobile archaeological features. Further thematic overlays much in use in cartography on modern times are maps with political (e.g. boundaries of political entities), economic (e.g. natural resources), or social (e.g. demography) overlays.

Within the academic debate in ancient civilizations studies, a detailed differentiation as shown in Table 2 is often extraneous as the discussions of how maps have been devised in the past and how past socio-historical issues (or those with a certain historical

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1 See Dorling 2012, xxiii, xlii–xliii.
2 See also Leimgruber 2009, 17, 26; Dorling 2012, xxxv–xlii.
3 See also Wasmuth 2018.
4 See, e.g., Moser 2009, 96–109.
5 Similarly already Leimgruber 2009, 26.
6 A historical map is (supposedly) up-to-date at the time of its creation,

whether this process has taken place in a more distant or the very recent past.
7 See, e.g., Berg 1973 vs. McEvedy 2002 [1967] or Dorling 2012.
8 Similarly, cartographic introductions like Hennermann and Woltering 2014 [2006] separate topographical from other thematic maps.

Time frame	Historical	Historiographical
Status quo at a specific date	Current snapshot	Snapshot at a given time in the past
Condensation of time interval	Changes up to current date	Changes in the past

Tab. 1   The contents of historical and historiographical maps in relation to the depicted time frame.

	Historical		Historiographical	
Layers	Status quo at a specific date	Condensation of time interval	Status quo at a specific date	Condensation of time interval
Physical map	Snapshot of current geomorphological surface structures	Changes in geomorphological surface structures up to current date	Snapshot of geomorphological surface structures at a past date	Changes in the past regarding geomorphological surface structures
Topographical overlay	Snapshot of current human-built and/or human-labelled surface structures	Changes in human-built/-labelled surface structures up to current date	Snapshot of human-built/-labelled surface structures at a past date	Changes in the past regarding human-built/-labelled surface structures
Further thematic overlays	Snapshot of various current	Changes regarding various issues up to current date	Snapshot of various issues at a past date	Changes in the past regarding various issues

Tab. 2   The structure of historical and historiographical maps.

depth) can be mapped rarely converge. What is usually meant by labelling a map *historical* is a 'historical physical *cum* topographical *status-quo* map', while *Geschichtskarte/historiographical map* tends to denote a 'historiographical thematic condensation map' visualizing issues in the past. In order to allow a broader discussion, the development of a more differentiated terminology is very much needed. In the context of this contribution it has to suffice to highlight which kinds of maps out of the potential corpus will be discussed and why.

Another intriguing issue, though beyond the scope of this contribution, pertains to the predominant phenomenon that the underlying sources and their data content are scarcely and strikingly rudimentarily mentioned.[9] This is the case in ancient civilizations studies as well as in modern cartography, where the question of how to deal with the sources is intensely discussed,

although not in the respective atlases. One of these discussions concerns the issue of visualizing spatial social structures, which provides stimulating case studies also for historiographical thematic mapping of ancient history, e.g. with regard to the discrepancy of rather abstract official borders and fuzzy border realities, the explanatory powers of displaying the winning vs. the second-placed parties in an election, or the impact of the moment in time chosen for a (supposedly) representative snapshot.[10] However, the challenges faced in cartography of modern and ancient social spatial structures are different in many respects: 'Modern cartography' tends to struggle with the issue of too much data and the question of how to reduce that mass to legible and consequently inherently manipulative visualizations,[11] while a major challenge in ancient civilizations studies concerns the fragmentedness of data sets.

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9   See, e.g., most maps referred to in note 32.

10   See, e.g., Dorling 2012, 82–83; 126–127; 188–189. For a science philosophical introduction to the process and impact of choosing 'representa-

tive' samples (or snapshots) see Daston and Galison 2007, e.g. 11–13.

11   See, e.g., Dorling 2012, passim.

2 Historiographical mapping of seventh century BC Egypt: setting the scene

Before entering into the discussion of a specific proposition for mapping the political history of 7th century BC Egypt, a rough sketch of the historio-political setting and a brief survey of the current state of its historiographical visualization in maps prove helpful.

2.1 Seventh century BC Egypt: historio-political outline

As will be discussed in the context of presenting the design of Figure 1, many aspects and especially the calibration of the different kinds of sources and political perspectives on 7th century BC Egypt still await closer examination.[12] As this is beyond the scope of this contribution, which explicitly aims at visualizing the need and potential for further study of the historical complexity, only some benchmarks will be highlighted here.[13]

By the mid-8th century BC, the Kushite kingdom (with its core at Gebel Barkal/4th Nile cataract region) had expanded to the Egyptian Thebais.[14] Already Kashta adopted Egyptian royal titles, but the Kushite kings did not take residence in Egypt until Shebitko/Shabat(a)ka, who was crowned at Napata but resided in Thebes.[15] Under Pi(ankh)y the kingdom was extended to the Mediterranean coast (Victory Stela from 728 BC) though the local rulers in the delta remained in power after (nominally) submitting to Pi(ankh)y as their overlord.[16] The relations between the delta rulers, especially Tefnakhte,

and Piye's successors and especially the state of actual control of the Memphis remain fuzzy due to the available evidence, which tends to present one-sided views without enough additional data to evaluate the viewpoints. However, evidence for strengthening the Egypto-Kushite influence in the southern Levant only derives from the time of turmoil after the death of the Assyrian king Sargon II in 705 BC.[17]

While the Assyrian and Kushite conflict concentrated on policies of support or abandonment of Levantine rulers in their strategies of personal and political survival during the 8th century BC,[18] this changed to direct military actions from 701 BC onwards, either on the borders of Egypt or within the Nile valley.[19] Concerning the visualization of the complexity of political dominion as proposed in Figure 1, a milestone in Egypto-Assyrio-Kushite affairs is the campaign by Ashurbanipal in 667 BC against a coalition of the delta rulers and Taharqa, in which the Assyrian army took many of the delta rulers captive and deported and executed most of them in Nineveh.[20] It remains unknown, however, why Necho (I) and his son Psamtik (I) were pardoned and re-instated in Sais, Memphis and Athribis, thus becoming Assyrian vassals.[21] It seems likely that they were perceived as the most functional buffer against potential further Egypto-Kushite attempts to regain control over Lower Egypt and the southern Levant. Taharqa's army has been followed south to the Thebais. There is evidence though that both the escape of Taharqa from Thebes in 667 BC and Assyrian actual control over Psamtik I is not much more than Assyrian propaganda.[22]

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12 The Assyrian sources are quite well known and published: see especially Onasch 1994. For a profound source criticism of the Assyrian royal inscriptions and their academic usage, see Spalinger 1974. Over the last decade and more, attempts to correlate the different sources from Egypt, Assyria, Greece and the Levant for several issues of the Kushite rule over Egypt have been undertaken especially by Dan'el Kahn, e.g. Kahn 2003; Kahn 2004; Kahn 2006a; Kahn 2006b; Kahn 2009; Kahn 2014. Still, a more general re-evaluation of the sources and their potential to elucidate the complexity of the historical situation especially of 7th century BC Egypt remains a desideratum. Especially the Egyptian sources need to be more comprehensively re-evaluated, which has become a realistic venture due to the recent source collections by Jansen-Winkeln: Jansen-Winkeln 2007; Jansen-Winkeln 2009; Jansen-Winkeln 2014a; Jansen-Winkeln 2014b. For introductions from an Egyptian/Kushite perspective, see James 1991; Török 1997; Dodson 2012, 139–180, 200–201; Pope 2014, 257–292. For introductions to the chronological challenges posed by the Egyptian dynasties 22–26, see Kitchen 1986 [1973]; Jansen-Winkeln 2006; Moje 2014 (juxtaposition of 22–25th dynasties); Kahn 2005; Zibelius-Chen 2006 (25th dynasty); Depuydt 2006 (26th dynasty); Michaux-Colombot 2006 (Egyptian/Kushite and Assyrian synchronisms).

13 For recent introductions, see, e.g., Kahn 2013; Wenig 2013; Kahn 2006b. They are primarily cited for further references.

14 See Kahn 2013, 23.

15 See Wenig 2013, 173–174; on the consequences of the largely accepted reversal of succession between Shabaka and Shebitko for cross-regional politics see Broekman 2017b, for an introduction to the evidence and state of discussion on the reversal see most recently Broekman 2017a and Jurman 2017.

16 See Wenig 2013, 173. For the Victory Stela of Pi(ankh)y, see below note 60. For a brief survey and further references of the discussion on reading Pi(ankh)y's name see Kahn 2005–2006, 103 note 1.

17 See Kahn 2006b, 251; see also Broekman 2017b, 26–27. On the question of control over Memphis see most recently Jansen-Winkeln 2017, 33–42.

18 See, e.g., the concise overview in Wenig 2013, 176–177.

19 See Kahn 2006b, 251–257; Wenig 2013, 177; on the battle of Eltekeh, see also Radner 2012.

20 See Wenig 2013, 186–187.

21 See Kahn 2006b, 260–261; Wenig 2013, 187.

22 See Kahn 2006b, 261.

Direct Assyrian military activities in Egypt ended with Ashurbanipal's campaign to and sack of Thebes in 664/663 BC. Thus, Tanutamani's earlier conquest of Memphis that had caused Psamtik to flee to Assyria (*verbatim* Syria) has been countered.[23] After being reinstated by Ashurbanipal in both, his and his father's domains in Memphis and Sais, he adopted Egyptian royal titles, though he did not control Thebes until 656 BC, where Tanutamani was accepted as Egyptian pharaoh till then.[24]

Under Psamtik I and his successor Necho II, the Egyptian kingdom expanded once more to the 2nd Nile cataract. Furthermore, there is evidence for military activity in Western Asia northwards to the Euphrates from the late reign of Psamtik I onwards.[25] Unsurprisingly, the Egyptian kings Psamtik I and Necho II (since 610 BC) were allied once more with Assyria in its fight against Babylonia in the final decades of the 7th century BC, but this time as military powers sought out for help and not as the vassals to be summoned.[26]

2.2 Historiographical mapping of 7th-century BC Egypt: state of the art

The very limited degree that maps are made use of is a striking characteristic of ancient civilizations studies, and most prominently the study of ancient Egypt. This is probably primarily due to the phenomenon that geography is only a minor focus of research in Egyptology. It might also be because cartographic knowledge tends to be limited and the major amount of sources under consideration is not from an every-day life context, but from a funeral or sacral one.[27] This severely hampers the plotting of reconstructed contemporary 'real-life' issues, especially in historiographical thematic maps.

Consequently, ancient Egypt is often represented by topographical maps.[28] They tend to provide a sketch of major geomorphological features, such as rivers and coast lines, and the rough or rather detailed position of modern archaeological sites (to be) identified with ancient place names. Furthermore, egyptological maps are usually illustrative in nature. They highlight a specific issue discussed in a text which they accompany; most of them are not meant to stand on their own or to be the primary source of information only supplemented by explanatory text. This is also the case for the most straightforward examples of historiographical atlases of ancient Egypt, i.e. the *Cultural Atlas of Ancient Egypt* by John Baines and Jaromír Málek and *The Penguin Historical Atlas of Ancient Egypt* by Bill Manley.[29]

Detailed physical *cum* topographical maps or even atlases are still rare[30] and those attempting to visualizes the ancient physical and topographical landscape at a specific time – like the *Helsinki Atlas of the Ancient Near East in the Neo-Assyrian Period* – are quite exceptional.[31] Although such attempts in cartography should be much encouraged, the focus of this paper is to illustrate the need for additional thematic maps – and how much more carefully academia in Ancient Near Eastern studies and Egyptology should deal with them.

Cartographic studies aiming at an ancient history in maps, i.e. historiographical atlases visualizing historical developments primarily or exclusively cartographically (in contrast to maps illustrating a textual presentation of historical issues), do exist, but not specifically for Egypt. Egypt is included in several such historiographical atlases that cover the area of the wider Eastern Mediterranean region east towards the Zagros Mountains (and beyond). All of them cover a large time span in addition to their (often very broad) geographical width.[32] A detailed analysis of the visualization of 7th century BC Egypt in these studies requires the scope of a separate

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23 See Kahn 2006b, 263–264; Spalinger 1976, 136–137; 142–143.

24 See Wenig 2013, 192–193; Kahn 2006b, 265–267.

25 See Kahn 2013, 24; James 1991, 714–715.

26 See James 1991, 714–715; Spalinger 1977, 221–225.

27 This is very prominently reflected, e.g., in the epigraphic oriented TAVO map on Late Period Egypt Gamer-Wallert and Schefter 1993 in contrast to, e.g., the more generally archaeology orientated maps of Nubia and Kush Zibelius and Haas 1981 as illustrated by the choice of categories underlying the topographical icons: "royal palace/residence, fort-like construction/fortified city, sacral building activity, royal necropolis/burial, private necropolis, animal cemetery, stele" vs. "settlement, fort/fortified settlement, sanctuary, building, single tomb/cemetery, important single find(s)".

28 Cf. most maps in exhibition catalogues, but also, e.g., the historiographi-

cal atlas projects Baines and Málek 1980 (resp. the revised edition Baines and Málek 2000) and Gamer-Wallert and Schefter 1993.

29 See Baines and Málek 2000; Manley 1996.

30 For Egypt, cf. Berg 1973.

31 See Parpola and Porter 2001.

32 Prominent examples are the *Tübinger Atlas des Vorderen Orients*: cf. Zibelius and Haas 1981; Kessler and Schlaich 1991; Gamer-Wallert and Schefter 1993; Wittke, Prayon, et al. 1993; the *Penguin Atlas of Ancient Civilizations*: Haywood 2005; *The New Penguin Atlas of Ancient History*: McEvedy 2002 [1967]; supplement 3 of *Der Neue Pauly*: Wittke, Olshausen, and Szydlak 2007; *Birken's Neuer Atlas zur Geschichte des alten Orients*: Birken 2004; *The Penguin Atlas of Ancient Egypt*: Manley 1996. See also, e.g., Roaf 1998 [1990]; Baines and Málek 2000; Pemberton 2005.

	*ANE studies (Mesopotamia)	Egyptology	Classics/ancient history	World archaeology/history	Bible studies
Political	○	○	○	○	●
Economic	○		○		
Social					
Linguistic			○		

Tab. 3   Correlation of thematic overlays displaying historiographical viewpoints and historical issues in historiographical maps of 7th c. BC Egypt (corpus: historiographical atlases; ○ = single/few attestations, ● = several maps/studies; *Ancient Near Eastern).

study.[33] As a rather general picture, all these works for the time period in question are characterized by a strong focus on political maps (see Table 3) and a condensation of the whole first half of the 1st millennium BC to very few maps. In addition, the visualization of the claims of political dominion over Egypt in the 7th century BC (i.e. the Kushites, Assyrians and local powers especially in the Nile delta) does not reveal the historical complexity, but primarily the academic background of the cartographer.[34]

3   Mapping political dominion in 7th-century BC Egypt: proposition 1

In the attempt to promote more diversified approaches to cartography, I specifically want to address how historiographical maps can be designed in order to meet the aim of opening up research questions more effectively. A key feature of the proposed map design (Fig. 1) is the division of the map into several virtual layers: a physical, a topographical, and a number of thematic layers. Another is the visualization of the historical complexity in a way that keeps the map 'readable'. For ideas on mapping a higher degree of historical complexity than can readably presented in a single map, see propositions 2 and 3.

3.1   A physical map as background layer

One of the most difficult challenges concerns the physical background layer of the map, due to feasibility and mapping-inherent reasons. An 'ideal' solution for a historiographical map that conveys historical complexity in order to open up research questions consists *per se* of a compromise: 1) The best 'readability' of a map is achieved by reducing the information to the most relevant issues,[35] but the evaluation of what is perceived as most relevant information depends on the respective research questions. 2) Maps based on modern physical surface structures do not necessarily represent the historical *status quo*, thereby qualifying satellite and modern GIS maps as inherently problematic choices.[36] As we do not have sufficient data to reconstruct either the geomorphological or the topographical landscape with a substantial degree of reliability, this is currently also the case for any existing drawn maps. Subsequently, it is difficult to decide which is the better solution. At least, the obviously

33 See Wasmuth 2018.

34 Most prominently in Roaf 1998 [1990], 191 (Ancient Near Eastern studies); Manley 1996, 121 (Egyptology); less obviously, e.g., McEvedy 2002 [1967] (ancient history/classics) or Kessler and Schlaich 1991 (Ancient Near Eastern studies); see also Wasmuth 2018. To which extent the choices made predominantly root in the academic background of the cartographer (respectively the historian presenting the data to the cartographer), and which roles are played by the publisher and the target audience remains an issue to be researched and discussed (I would like to thank Susanne Grunwald for opening up this question).

35 For a cartographic comment on the advantages of drawn maps which allow reduction to a readable layer, cf., e.g., Leimgruber 2009, 26. Dorling discusses why physical geography is not suitable for displaying social spatial structures: Dorling 2012, especially xxxv; xxxviii. As his repeated use of rough physical background layers shows, this statement has to be qualified: There are aspects within spatial social structures that defy visualization on the basis of a physical map. For a science philosophical introduction to the academic debate on drawn vs. photographic images, see Daston and Galison 2007, 172–183.

36 In time, it may be possible and feasible to create a physical map which visualises a reconstruction of the landscape in the 7th century BC. Any such projects should be highly encouraged. But for the time being, any historiographical maps of Egypt in the 7th century BC have to make do with what is available now.

Complexity of political dominion in 7th c. BC Egypt (focus: 671–663 BC)

PLACE NAMES

xx   *ancient Egyptian name in transliteration*

Xx   modern Arabic name

[Xx]   common name of reference *[often derived from Greek rendering of the Egyptian name]*

TOPOGRAPHIC ICONS

Nile River (modern stream course)

Nile Cataract

Ancient (caravan) route *[based on Pope, CHANE 69, map 1; TAVO B IV 1; Pemberton, Ill. Atlas, 25; Baines/Málek Atlas 1980, 49]*

Modern (caravan) route *[based on NRAK2015 Landcover Nile Basin; Baines/Málek Atlas 1980, 31]*

Assumed ancient, but no modern (caravan) route? *[e.g. TAVO B IV 1 vs NRAK]*

Oasis *[based on Pope, CHANE 69, map 1; TAVO B IV 1; Pemberton, Ill. Atlas, 25; NRAK2015]*

Site with Kushite/25th dynasty findings *[based on TAVO B IV 1 & 3; state of the arte to be updated; plotting of non-Kushite sites needed]*

(Royal) residence *[primarily based on TAVO B IV 1 & 3, Kitchen TIP fig. 5 & 7]*

'Foreign' community *[based on Penguin Atlas: Ancient Egypt, 121]*

Major battle (with year) *[based on Der Neue Pauly Suppl. 3, 53A]*

KUSHITE & ASSYRIAN DOMINION

25th dynasty / Kushite domain *[based on building activities / Kushite findings]*

(probable) Kushite claim of control *[based on evidence for use of roads]*

likely Kushite claim of control *[based on the assumption that scarcely or non-permanently inhabited areas between major routes in use / under control are included in a territorial claim; north of Thebes lost from 664 onwards]*

possible Kushite claim of dominion *[likely in case of use of 'modern' routes]*

Assyrian claim of dominion / control *[based on battles and Assyrian 'official' sources]*

LOCAL DOMAINS IN NORTHERN EGYPT
[see Pi(ankh)y's Victory Stela; based on Penguin Atlas: Ancient Egypt, 107; Kitchen TIP fig. 5, 7; TAVO B IV 1]

'Kingdom of the West' / Saitic / 24th and (later) 26th dynasty *[from 671/664 onwards (nominally) Assyrian vassals; Assyrian actual control to be questioned; in 2nd half of 7th c. expansion to the 2nd cataract (thin hatching)]*

22nd dynasty (Tanis)

Chiefs of the Mā

23rd dynasty (Leontopolis)

Princes of the 22nd/23rd dynasty
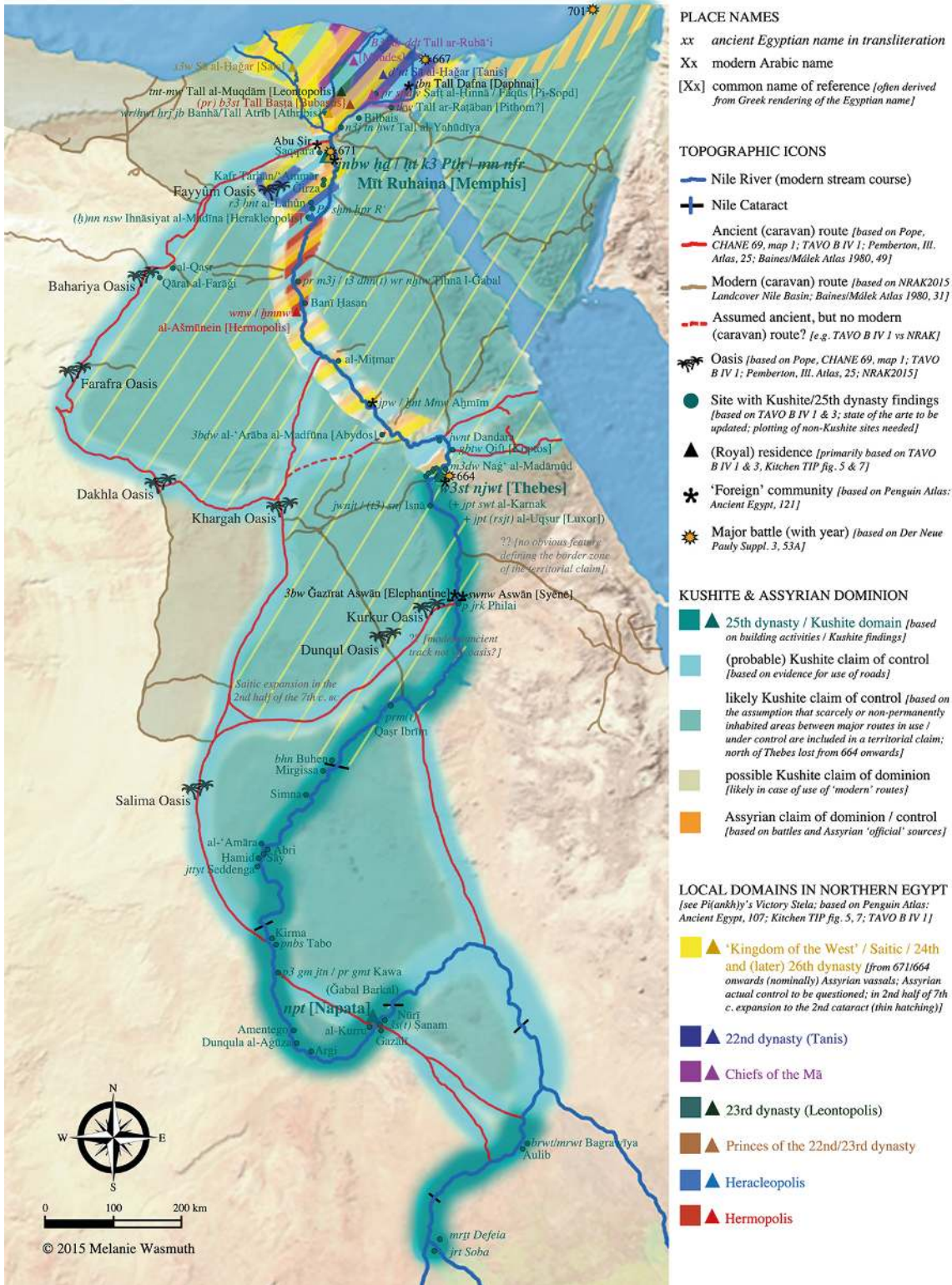
Heracleopolis

Hermopolis

Fig. 1   Design proposition for a historiographical condensation map visualizing historical complexity. Key elements are the indication of a. political claims vs control (conflicting claims, official hegemony vs local political leeway, likelihood of territorial claims), b. the interrelation of physical features resp. land cover and dominion, c.) some degree of historical depth (dates of battles, changes in 664 and 2nd half of the 7th century BC) and transcultural impact (foreign communities).

mismatched photographic map is less likely to be read as historically reliable, but it is also the most historically distorted one as prominently witnessed by the area covered nowadays by Lake Nasser.

Taking feasibility factors into account, the choices are limited, especially if the area to be depicted comprises regions beyond the scope of a single academic subject area. On maps from classics/ancient history, Ancient Near Eastern studies and Levantine/Bible studies, Egypt tends to be only partially included (if at all).[37] Similarly, maps depicting Egypt and – as necessary for the map to be devised – the wider Nile area up to the confluence of the White and Blue Nile (near modern-day Khartoum), tend to be cropped north and east of the Sinai Peninsula or at most of the southern Levant.[38] If the aim is to create a map of the Eastern Mediterranean Area of Connectivity in the 8th–6th century BC, which covers the whole area of close interconnections from south of the 5th BC Nile cataract to the Balkan peninsula and from the Italian peninsula to the Zagros Mountains (and beyond),[39] only two historiographical physical maps are currently available, both of them drawn maps: fig. 8 of the *New Penguin Atlas of Ancient History* and the inner cover of *Der Neue Pauly Suppl. 3*.[40] Both are not detailed enough for incorporating physical features (especially constrictions and leeway for living, building, cultivation, moving around etc.) into the display of spatial social structure.

If the area to be displayed is reduced to the Nile Valley, also composite maps such as Berg's *Historische Karte des alten Ägypten* or the *Barrington Atlas* come into focus.[41] Though Berg's set of maps would provide a strongly profiled physical map, it is unsuitable for other reasons. The area is reduced to the east-west dimension of the Nile delta, thereby missing substantial parts of the territorial

claims in the western desert. In addition, the 26 plus 23 individual sheets to be assembled do not always join properly. Parts are missing and the colouring (reflecting the elevation) is not applied consistently. Similar issues characterise the *Barrington Atlas*, which is not a map cut apart and spread over several pages, but a combination of separately processed maps with individual labelling etc.[42] The physical background underlying the *Barrington Atlas* is unfortunately not available any more.[43]

Apart from their cropping and/or their meager detailedness, these maps of Egypt display elevation as most prominent aspect of the physical surface structure. This substantially distorts the picture due to the commonly used colour scheme, which indicates low elevation in green thereby evoking cultivable land and easy accessibility in inhabitable areas of desert in Egypt and Sudan. As a consequence, for Egypt and any other steppe and desert dominated areas, the land cover proves to be much more relevant information for spatial social structures and their developments than the elevation data usually depicted. As very prominently displayed in the *Landcover Maps* provided in the *Nile River Awareness Kit*,[44] the Nile is a very narrow river oasis cutting through rock and sand desert. The degree of possible habitation in and/or travel through these regions is not (primarily) dependent on their elevation above sea-level or above the valley bottom, but on their geomorphological surface structure and lack of water. Unfortunately, the *Nile River Awareness Kit* maps displaying the land cover are once more not suitable due to their cropping – in this case along the modern political borders of Egypt. As a consequence, an open source satellite map, which has been embellished by *Natural Earth* to reflect an idealised land cover,[45] has been chosen as best compromise for the physical background layer of Figure 1.[46]

37 Cf., e.g., Kessler and Schlaich 1991; Wittke, Prayon, et al. 1993; Wittke, Olshausen, and Szydlak 2007: e.g. 49; 51; 61; 69; 113.

38 Cf., e.g., Berg 1973; Gamer-Wallert and Schefter 1993; Baines and Málek 2000, 49.

39 See Wasmuth 2016b.

40 See McEvedy 2002 [1967], 14, fig. 8; Wittke, Olshausen, and Szydlak 2007, inner cover. In addition, Perrot 2010, 14–15 provides a modern satellite image of the whole region, adapted to display the idealised land cover, with only rough indications of the locations of several major cities in use in the Achaemenid period (later 6th to 4th century BC).

41 See Berg 1973. The *Barrington Atlas* (see Talbert 2000) covers most of the area, but not all of it: The 1:500.000 maps are cropped at south of Kom Ombo thereby not even covering all of 'geographical' Egypt, and in a composite map deriving from the 1:500.000 and 1:1.000.000 maps

substantial amounts of the deserts east and west of the Nile valley up to Khartoum and of the Arabian peninsula will be missing (see Talbert 2000, inner cover).

42 See Talbert 2000, maps 70; 71; 73–83.

43 I would like to thank Gabriel Moss, Director of the Ancient World Mapping Center at the University of North Carolina, for his fast and helpful reply regarding the issue.

44 See Transboundary Environmental Action Project of the Nile Basin Initiative 2015.

45 See Kelso, Patterson, et al. 2015. Similar results could be achieved on the basis of closed-source satellite images like Perrot 2010, 14–15.

46 Still, this does not reflect the potentially substantial change in climate and subsequent land use, which is to be assumed for the Gebel Barkal region in the 1st millennium BC; see Pope 2014, 1 including note 3.

A different solution is prevalent in the existing historiographical maps of 7th century BC Egypt: The physical background layer is reduced to a rough indicator of the spatial setting rather than using the physical details as an integral part of the historiographical visualization.[47] The degree of reduction of physical complexity varies substantially, the most extreme reduction has been chosen by McEvedy who cuts the iconographic complexity of the background layers of the political maps back to mere to coastal lines and major rivers.[48]

3.2   Topographical overlay

The second layer is a topographical overlay (see also Table 2). The plotted features vary. Maps of the present predominantly focus on the extent of settlements and infrastructure like railways and roads, as well as on labels, e.g., the names of towns, districts, buildings, building contents, of streams, rivers, lakes, oceans, of hummocks, hills, mountains, etc. In ancient civilizations studies, the focal point is on roughly plotting find spots: find spots of towns, but more often especially in Egyptology, find spots of palaces, tombs, royal stelae, further archaeological structures, etc.[49] The choice of plotted structures is highly revealing with respect to the academic outlook of the subjects, cf. the focus on epigraphic monuments on the *TAVO* historiographical map of Late Period Egypt in contrast to the much more archaeologically oriented map of the Sudan and Nubia in the same corpus.[50] Maps focusing on visualizing the Assyrian empire on the other hand tend to be based on Neo-Assyrian royal inscriptions and monumental reliefs as well as on places indicated in the so-called 'State Archives of Assyria'.[51]

An important issue significantly depending on the aim (and readership) of the map is the question whether to provide modern place names, ancient ones, contemporary ancient ones or a mixture of all of these. All variants can be found in scientific literature and all have

their advantages and disadvantages. The most consistent example for plotting and recording ancient 'reality' for the period and area in question is the *Helsinki Atlas of the Ancient Near East in the Neo-Assyrian Period*,[52] thereby achieving a very direct and unmistakeable visualization of ancient contemporary features. Its biggest disadvantage is its restricted usability that caters primarily for the specialist. To someone unfamiliar with, e.g., Neo-Assyrian or Egyptian place names, such a visualization of ancient topography is only of limited use.

The more common alternative is a mixture of modern and ancient names, which needs to be chosen if various places are known archaeologically, but their identification with an ancient place name is either unknown or the identification remains uncertain.[53] A second issue concerns easy 'readability' due to the usage of commonly known place names. This is often taken into account – not only in mapping, but also and very prominently in encyclopaedias – in cases of towns commonly known in a derivation of their Greek or Roman names as, e.g., in the case of Memphis (Egyptian *Mn-nfr*, below and around modern Mīt Rahīna) or Sais (Egyptian *S3w*, below and around modern Ṣā al-Ḥaǧar) to cite two of the royal residences in use in 7th century BC Egypt.

As Kessler has shown,[54] the multivalence can be suitably solved in historiographical topographical mapping by plotting the place (mostly a town) and providing a label showing the variety of names. For more diversified political maps this policy is fraught with the danger of rendering the map illegible, at least when dealing with a low-resolution map. Consequently, McEvedy, who has created the most consistent *history in maps* currently in circulation for the Eastern Mediterranean Area of Connectivity, foregoes the plotting of topographical issues in his political maps and refers the viewer instead to reference maps for the places taken into account.[55]

Figure 1 displays a compromise. All Kushite find-spots identified and plotted by the *TAVO* project[56] are

47 See the references provided in note 32.

48 See McEvedy 2002 [1967], passim. In addition, he provides a more detailed physical map in the introduction: McEvedy 2002 [1967], 14, fig. 8.

49 See also above note 27.

50 See Gamer-Wallert and Schefter 1993; Zibelius and Haas 1981.

51 Cf. Kessler and Schlaich 1991 which explicitly states which sources are plotted; or the highly placative and widely received visualization in Roaf 1998 [1990], 191, which is based on the same. For the term and contents of these so-called 'state archives of Assyria', see the series *State Archives of Assyria* (SAA) and *State Archives of Assyria Bulletin* (SAAB) edited by *The*

Neo-Assyrian Text Corpus Project based at the University of Helsinki.

52 See Parpola and Porter 2001.

53 For an exemplary discussion of the shift of place identifications and the difficulty of getting an already firmly established identification changed in the general scientific reception, see, e.g., the case of ancient Pithom in the Wadi Tumilat (linking the Suez canal area immediately north of the Bitter Lakes with the Nile): cf. Thiers 2007, 3–6.

54 See Kessler and Schlaich 1991.

55 McEvedy 2002 [1967], passim; reference maps: 122; 124.

56 See Gamer-Wallert and Schefter 1993; Zibelius and Haas 1981.

Ägypter
Egyptians

Ägyptisches Reich
Egyptian empire

Fürstentum von Sais
principality of Sais

Fürstentümer von Mendes, Sebennytos und Bousiris
principalities of Mendes, Sebennytos and Bousiris

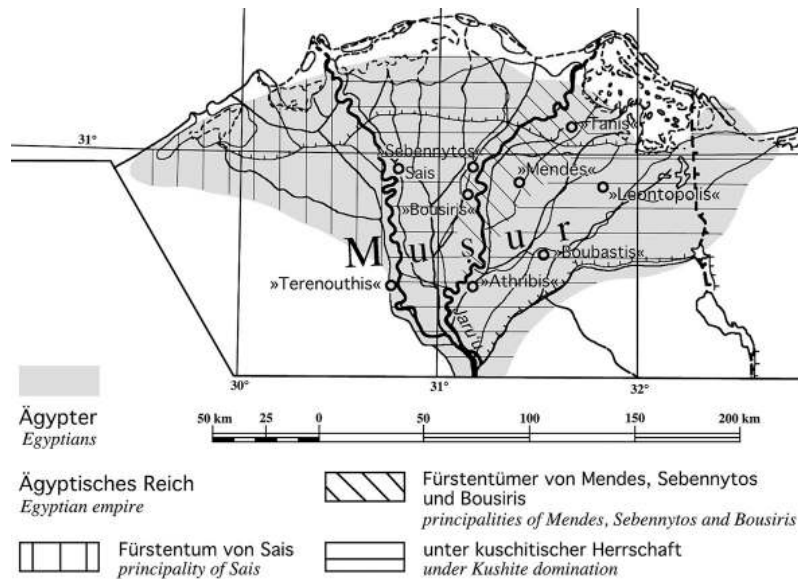unter kuschitischer Herrschaft
under Kushite domination

Fig. 2 Egypt around 700 BC according to TAVO B IV 8.

indicated and labelled with their ancient Egyptian, modern Arabic and most commonly used names (if known). In addition, the residences of contemporary local powers and towns featuring 'foreign' communities are marked in colour-code (specified in the legend) and the places of major battles are denoted. Thereby, the demographic impact of the local political leeway underlying the official hegemony of the Assyrian and Kushite kings is at least hinted at.

3.3 Thematic overlay: former power constellations

Especially in the Nile delta, local political powers had substantial political leeway to devise strategies to guarantee their personal and political survival in the contested area between the two super-powers – the Assyrian and Kushite king(dom)s.[57] It is to be considered as a key factor for the further socio-historical developments in the wider area as it triggered a boost of mobility and connectivity across the East Mediterranean, a considerable influx of 'mercenaries' and subsequently persons of various professions from all over the eastern Mediterranean

into Egypt can be witnessed, most prominently Judeans, Aramaeans, Carians, Cypriotes and Samians in addition to Kushites, Libyans, Assyrians and Arabs.[58]

One of the rare examples that visualises a certain degree of local autonomy of some of the delta rulers is rather symptomatically created from a classics/ancient history *cum* Ancient Near Eastern studies perspective and not from an Egyptological point of view: the *TAVO* map B IV 8 *(Östlicher Mittelmeerraum und Mesopotamien um 700 v. Chr.)*.[59] Only the Nile delta is included on the map. At first glance it appears to be a rather unified and separate entity due to the homogeneous blue colour shading. A closer look at the map and the legend, however, reveals a differentiation in a Saitic power zone in the western delta and a Kushite power zone in the central and eastern delta, which is cut by a further zone of local power comprised by the political entities of Mendes, Busiris and Sebennytos marked by thin yet differently oriented hatching (see Fig. 2).

As shown in Figure 1, both, the official(ly claimed) unity and the underlying political diversity especially in the Nile delta, can be partially visualised by semi-transparent layers. The chosen overlay reflects the sup-

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57 This is largely unacknowledged as testified profoundly by most of the existing maps (for references, see above note 32).

58 A discussion of the issues of 'ethnicity' vs. 'cultural identity' of these people is beyond the scope of this paper; for limited discussions of the issue, cf. Wasmuth 2011, Wasmuth 2016a on 'Egyptians' in Assyria and Hufft 2016 on ethnicity vs. cultural identity approaches towards Kushite royal display. For the concerns of this contributions the labels denote the orig-

inal or former area of living and potentially a personal affiliation to the cultural traditions of that regions. To which extent this correlation is apt is a question requiring a wider cross-disciplinary project which surveys the informative value of the available sources with regard to this issue. For an introduction to foreign contingents in the Egyptian army, see Perdu 2010, 145; Chevereau 1985, 311–315.

59 See Wittke, Prayon, et al. 1993.

posed power constellation in 728 BC, which derives from the perception of the Kushite king Pi(ankh)y of his confederates and adversaries as set out in his Victory Stela.[60]

A huge challenge to be discussed below for the claims to dominion of the major powers concerns the degree of actual control accompanying any claim for dominion. Regarding the local delta powers, this issue is set aside for reasons of 'readability' in Figure 1 (for potential solutions to highlight the complexity of the issue see below the propositions 2 and 3).

3.4 Thematic overlay: the claims to dominion of the major powers

When mapping the major political powers, historians are inevitably faced with historiographical and cartographic difficulties especially regarding the Kushites – due to their double role as Kushite kings and Egyptian pharaohs of the 25th dynasty and ultimately also because of the lack of data specifying the claimed or actually controlled expansion of the realm especially in the Kushite 'heartland'.

The question whether geographical Egypt (i.e. the region north of the 1st Nile cataract) is to be understood as part of the Napatan kingdom or whether the region between the 1st and 5th cataract is a part of pharaonic (i.e. political) Egypt from the time of adopting the role of legitimate pharaohs (of the 25th dynasty) onwards has (severe) consequences for the issue of mapping. As can be seen from the practice of either cropping the maps between the 1st and 3rd Nile cataract or of placing the legend on the Napatan core area,[61] there is an obvious *a priory* of 'geographical' Egypt as reflecting the core area of 'political' Egypt, though the rulers of the 25th dynasty originate from the Kushite kingdom and are perceived

as Kushite, and not Egyptian, e.g. by the Assyrians.[62] In order to visualise the perception of the domain either as two (equal) core areas or of Egypt as part of the Napatan kingdom or of the Napatan 'heartland' as part of the Egypt kingdom (i.e. pharaonic Egypt of the 25th dynasty) – the whole area up to the 5th cataract needs be included. For Figure 1, the decision was made to indicate the whole of the area as one in order to focus on the issue of the conflicting claims with Assyria and other local Egyptian powers. Plotting the various residences in colour-code graphically indicates a certain amount of multivalence.

Apart from the weighting of the regional power zones (pharaonic Egypt vs. Kushite kingdom), mapping the Kushite 'heartland' proves challenging due to the lack of sources specifying its perceived and/or real borders,[63] which is probably a major reason for its lack of visualization in maps.[64] Still, the various royal monuments along the Nile valley testify a certain amount of actual rule and certainly a claim over the area nearly up to the 5th cataract.[65] Therefore, it seems safe to map the lowest Nile terrace from the 1st to the last known monument slightly north of the 5th cataract as the area of claimed control (see Fig. 1; Table 4). As the land beyond the Nile valley is only partially habitable[66] and therefore unlikely to provoke contestations of a claim of dominion, the chances are high that the area circumscribed by the sinuosity of the Nile and the caravan routes providing shortcuts through the desert has at least been claimed as part of the Kushite domain of the 25th dynasty.[67]

Similar difficulties arise with respect to the areas east and west of the Nile delta within 'geographical' Egypt. Due to the lack of a detailed cartographic and sources-related commentary, the basis for the chosen borderlines depicted in the existing maps[68] remains uncertain. Con-

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60 Source of displayed overlay (Fig. 1): Manley 1996, 107. Stela: from Amun temple of Napata, Cairo Egyptian Museum JE 48862; cf., e.g., Grimal 1981; Gozzoli 2001; Kahn 2006a; Kahn 2005–2006; Assmann 2009.

61 E.g. Kessler and Schlaich 1991; Birken 2004 without number ["7. Jh. v. Chr. (690–615)"]; Haywood 2005, 47, 51; Wittke, Olshausen, and Szydlak 2007, 53.

62 See Spalinger 1974, 318 note 18. For a discussion of the oscillating Kushite perception, see Zibelius-Chen 1997, 91–93.

63 For a brief introduction in the discussion on border lines/zones and their applicability to Nubian studies and Egyptology, see Török 2009, 7–9. For the lack of Kushite textual sources writing out, e.g., the territorial claim of their Kushite kingdom, see Zibelius-Chen 2011, 1; Zibelius-Chen 1997, 81–82. For the general claim of being ruler over the whole world, see, e.g., Zibelius-Chen 1997, 92.

64 An exception is Al Sadig 2003, 111 (map 1), a rough sketch of problematic historiographical accuracy displaying the domain of the Napatan and Meroitic Kingdom as reaching from far beyond the 6th cataract to the Mediterranean coast in 760–659 BC and to the north of the 2nd cataract in 656 BC–300 AD.

65 For a visualization of the spread of Kushite/Napatan monuments, cf. the topographical map TAVO B IV 3 of Nubia and Sudan: Zibelius and Haas 1981.

66 See above section 3.1 on the physical background layer.

67 For the use of the caravan routes, see, e.g., Zibelius and Haas 1981; Gamer-Wallert and Schefter 1993; Pemberton 2005, 25; Pope 2014, Map 1.

68 E.g. Birken 2004 without number ["7. Jh. v. Chr. (690–615)"]; Roaf 1998 [1990], 191.

sequently, for Figure 1 the same strategies of visualization have been chosen for the eastern and western desert as for the area south of the 1st Nile cataract – to map the caravan routes as area of claimed control and the desert areas between them as probably claimed dominion. The decision is once more based on the evaluation that the official use of a caravan route argues for a substantial amount of control and an almost certain actual claim to dominion over the routes and the desert areas between them.[69] More detailed research is needed to establish whether further claims to control over the caravan routes have been stated. In Figure 1, this is indicated by a comment on the lack of known conflicting data.

For a map specifically drawn to illustrate the degree of data certainty and especially the visualization of the actual impact such claims of control have on persons using those routes, one major challenge is to deal with the question whether lack of contesting/conflicting evidence necessarily argues for secure control. Perceptions may vary substantially without actually posing a conflict. The king (or any apparatus of a major political entity) may adequately claim control if his caravans are not molested, even more so, if he stations guards along the routes. But this does not necessarily imply that the routes are not equally used by others who do not perceive any need to contest a claim if it does not interfere with their 'business' or the contestation may not be preserved, e.g. due to its (e.g. oral) manner of complaint.

The evolving picture is similar to the ones drawn for political events in the Syrian Gezira and beyond in the last years.[70] This is only partially accidental. The maps have not been influential to each other, but the issue of discussing the question of visualizing claim vs. control has been an important and vividly discussed topic and the issue in Egypt/Kush and the northern Mesopotamian plain is similar. Fertile and therefore comparatively densely populated land is restricted to the river courses. The areas beyond defy evaluation. If there is no one to contest the claim it is easy and to some extent 'real' to perceive it as actively controlled, but the chances that persons living, traveling through, or hiding in such areas are actually controllable are equally small. A discussion of potential ways to find indications for such disparities and ways to map them would be highly de-

sirable, but is beyond the scope of (the data underlying) this contribution.

The key challenges of mapping political history and especially claims to dominion over the Nile valley in 'geographical' Egypt or at least from the Nile delta to Thebes are based on very different problems. Instead of lack of data which has to be partially made up for by assumptions in case of the southern part of the realm as well as the eastern and western deserts, political history of the Nile valley north of the 1st Nile cataract is difficult to map due to the degree of conflicting data which is spread over various modern academic research areas. The 'official' and internal sources of the major powers – i.e. the Kushite king(dom), the Assyrian king(dom) and the originally local dynasty of Sais whose rulers became kings of 26th dynasty Egypt – spread over the modern subject areas of Ancient Near Eastern archaeology, Assyriology, Egyptology, the only marginally existing Nubiology/Kushitology/Sudanology/Sudan archaeology[71] as well as Levantine and Greek studies.

The evaluation of only the above mentioned three political entities as major powers triggers a number of further questions: How big/autonomous/powerful must a political entity be to be recognized (by academia) as a major player? Should the degree of power be decreed by the area claimed to be under control, by the degree of actual control over the individual people living in one's (claimed) domain, or by lack of contest? How is such a differentiation to be gleaned from the sources and to which degree should/could it be visualized by mapping? These issues would require a major project on the social history of 7th century BC Egypt. They are consequently not mapped in Figure 1. The decision was made to superimpose a semi-transparent overlay indicating the territorial claims of Assyria, Kush and Sais above the older power structure that is assumed to represent to some degree local political powers (see above section 3.3).

As in the case of, e.g., conflicting claims of the northern Levant by the Hittite and Egyptian kingdoms in the second millennium BC, or overlapping claims in Asia Minor and Anatolia,[72] the area of Egypt claimed by all three major powers has been marked by hatching. As the domain of the Saitic kingdom is closely connected to Assyria (Psamtik I being originally instated as Assyrian vas-

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69 The width of that line is not proportional to the width of the caravan route; the thickness is due to graphical and visibility reasons.

70 See, e.g., Wallace et al. 2015.

71 For a brief introduction, see Wenig and Zibelius-Chen 2013.

72 See, e.g., Morkot 1996, 30–31; Wittke, Prayon, et al. 1993.

sal, though the degree of control and/or interference is to be questioned), their hatching has been joined more closely together in opposition to the Kushite claim.

For reasons of 'readability' a single map of the size of the presented proposition (Fig. 1) does not allow further differentiation of the shifting borderlines and intensity of these claims over time. In order to indicate at least the major shift between the 25th and 26th dynasty in 656 BC (Psamtik's has control over Thebes), the later expansion of Psamtik's (claim to) rule has been marked in much thinner hatching – encompassing the Eastern and Western Desert and the area up to Dorginarti at the 2nd Nile cataract.[73]

3.5 Thematic overlay: sources

Depending on the complexity of the other overlays, it is feasible to include one or several layers dedicated to explicating the underlying sources. In case of a merged single-layer print-map as in the case of Figure 1, space and the readable amount of differentiating patterns and colour-coding are limited. For a proposition how the availability and informative value of the sources could be graphically visualized, see Table 4.

Some information can be written down in spaces characterized by less complexity, though this results in a distortion of the historiographical image. As a consequence, information on the sources underlying Figure 1 has been primarily indicated in the legend and caption. But a more detailed comment of the sources underlying the map has to be relayed to the accompanying text.

Different solutions are possible for other media. A digital map organized in overlays, which may be customized (displayed or hidden) according to the individual research question, tolerates any amount of detailed information. Yet, the chances to become received and incorporated into further research by a wider academic public are much higher for less complicated print maps.[74]

To some extent, such multiple layers could be devised for print versions, e.g. by means of transparencies, which can be superimposed on the background map

and/or each other, or by flaps as common in children's non-fiction books.[75] This would be an effective way to enhance historiographical complexity while keeping the map readable, especially for a historiographical atlas that aims at a wider audience. This could also be applied, e.g., to poster exhibitions or poster-like information tables in museums in order to balance the varying degrees of interest for further information. Anyone interested in more details could check out what is beneath the 'flap' – in the case of a single merged map of the political history of 7th century BC Egypt this could contain information on the sources underlying the visualization.

3.6 Textual framework: title, legend and caption

Many difficulties and potential misuses or misleading historical images taking root in the readers' minds may be suitably relativised by concisely stating on the map what is depicted. In case of Egypt in the 7th century BC, this could be, e.g., the *Assyrian claim of dominion and maximum extent of military success*, which would cover the Nile valley up to Thebes, or the *area of visible Assyrian influence*, which would reveal a map of Egypt without any (or at the most sparsely dotted) Assyrian presence. A map labelled *area of Assyrian influence* on the other hand may be in need of detailed commentary as it may not be much different from an *area of dominion of the founder of the 26th dynasty, Pharaoh Psamtik I*. Though Psamtik lived for some time at the Assyrian court[76] and was later installed as vassal in the realm of his father, the question remains whether his rule over Egypt as pharaoh (i.e. acknowledged 'king of Upper and Lower Egypt') who does not resort to Assyrian support is to be mapped as *dominion of pharaoh Psamtik I* or as *area of Assyrian influence*. Both perceptions may be justifiably argued for.

As a consequence, a rather easy and very effective way to enhance awareness of the historical complexity behind any reduced visualization in a thematic map, is to use the textual framework – the title, legend and caption – deliberately to do so. The presented map (Fig. 1) does not aim at visualizing the actual phases of expanding or declining territorial domains over time, but a con-

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73 See Kahn 2013, 24 with further references.
74 See, e.g., the relatively wide spread reception of the map in Roaf 1998 [1990], 191: e.g. in Manley 1996, 119; Haywood 2005, 47; Birken 2004, without number ["7. Jh. v. Chr. (690–615)"]; for a discussion of the effect of this practice of reduction in the process of cartographic dissemination

see Wasmuth 2018.
75 I would like to thank Jan Gerrit Dercksen for bringing up the issue.
76 For Psamtik I in the Assyrian sources, see Frahm 2001; Mattila 2002; Mattila 2011; Meyrat 2012.

Informative value	No sources	Few sources	Many sources
No specific data	?	?	?
Limited data	?	Darker, very transparent shading	Darker, less solid shading + text comment on map
Specific data	?	Brighter, less solid shading + text comment on map	Brighter, more solid shading + text comment on map
Conflicting data	?	Brighter, more solid shading + hatching in different colours + comment in title/caption	Brighter, more solid shading + hatching in different colours + text comment on map OR Series of maps

Tab. 4 Potential visualization of the informative value in relation to the amount of sources available.

densed visualization of historical political complexity. Therefore, the title *Complexity of political dominion in 7th century BC Egypt (focus: 671–663 BC)* has been chosen. This simultaneously indicates that the map does not provide a 'snapshot' representative for any given moment in time, but a condensation of thematic issues.

As indicated above, a condensation map like Figure 1 needs to relay more detailed information to the textual framework. Especially, some topographical issues and more detailed information on the sources underlying the map are provided in the legend and the caption. Still, the amount of details one can refer to is rather limited due to the available space.

4 Mapping political dominion in seventh century BC Egypt: proposition 2

An alternative approach separates the complementary perspectives of political claims to dominion to several maps. Depending on the scope of the historiographical publication and the primary illustrative concern, such juxtaposition may be an attractive alternative. On the one hand, the separation into further thematic layers and a more differentiated condensation of these allows for much more detailed mapping without cluttering up the image beyond 'readability'. On the other hand, the focus shifts. The immediate impression of each map is one of lesser political complexity – which should and could

be counteracted in the title and caption – in favour of displaying the claims as (equally) justifiable. Especially when contrasting, e.g., the 'official' claims to dominion and the degree of their reflection in the local material and documentary record, the juxtaposition of equally 'correct' visualizations may prove to be more convincing with regard to shifts in the academic paradigms, cf. the Assyrian claim over Egypt vs. the (nearly non-existing) kinds and amounts of Assyrian-influenced sources or the scope of textual indication for actual control. Such a series of maps visualizing the political diversity underlying the various claims to unity/hegemony could for instance contrast the internal perspectives of the major powers, i.e. the Kushite, Assyrian, and Saitic claims. Another interesting scenario compares further internal perspectives and 'realities', e.g., the leeway of local political powers to forge and change alliances, social impacts of the (limited) control of the major powers, economic and demographic issues evolving out of the increased cross-regional mobility, etc. (see Table 5).

Such an outspread display of virtual layers visualizing the various viewpoints highlights the uneven spread of sources and especially the unequal state of the art of their investigation. An additional advantage of displaying the various virtual layers of proposition 1 into a series of maps concerns the display of political diversity underlying the homogeneity of control claimed (and/or perceived) by the major powers. The condensation of the Kushite and Assyrian (plus Saitic) claims into the same map reduces the illustration of the local political

	Internal perspectives	External perspectives
Powers in Egypt	Further perspectives and 'realities'	(Examples)
Kushite sources	Political leeway (e.g. alliances)	Greek sources
Assyrian sources	Social background and impact	Levantine sources (e.g. Bible)
Saitic sources	(e.g. demography, economy)	Further external sources
Further local powers	Visible record (e.g. local/	
	regional archaeological evidence)	

Tab. 5   Prevalent perspectives and realities to be accounted for in a political map of 7th century BC Egypt.

leeway to a former state of territorial control or claim.[77] 'Readability' does neither allow a differentiation of the factual hold over the area and its inhabitants, nor the illustration of cross-regional connectivity that characterizes local political strategy. This would be an important asset, as the subsequently highly increased cross-regional mobility and cultural diversity is probably one of the, if not *the* most powerful key factor for the further socio-political, socio-economic, and socio-historical developments in the area. A more outspread display would allow, e.g., to visualize potential allies, formed alliances, possible alteration in existing alliances or the splitting-up of political entities due to discords in the local 'elite' with whom to ally oneself. Further issues include the question to which extent the cross-Mediterranean alliances are reflected in the observable influx of foreigners and many others.

In addition, much more detailed information regarding the underlying sources could be provided without overloading the map.

5   Mapping political dominion in seventh century BC Egypt: proposition 3

A third proposition, which neither depreciates the issues and aims of the first two proposals nor the existing historiographical atlases of a wide geographical and chronological scope targets the aim of devising a historiographical *atlas* of 7th century BC Egypt. Such a reduced geo-graphical and chronological scope displayed over a series of maps allows to really open up and promote the integration of socio-historical and socio-cultural research questions and to tackle not only its indication, but the historical complexity itself to a much greater degree. As this is not the place to design and discuss in detail potential structures of such a historiographical atlas, I would like to draw the attention to the wide scope of issues, which even a very rough categorization of thematic issues (e.g. sections of the atlas) and source genres (e.g. maps/layers within each section) immediately promotes (see Table 6).

On a formal level, I propose to take up the structural designs of the cartographic supplement volume of *Der Neue Pauly* and the *New Penguin Atlas of Ancient History*.[78] The basic concept of both historiographical atlases is to juxtapose a page of historiographical outline *cum* brief commentary on the underlying sources with a page of cartographic visualization. In view of the issues discussed in propositions 1 and 2, I suggest to extend this concept to two double pages for each map: one page for the visualization, one page for the available sources, one page for a historiographical commentary, and one page for a cartographic commentary.

For the map design, the *Penguin Atlas* provides a further stimulating paradigm: each map is projected on the same geographical framework.[79] This strongly encourages applying similar basic standards to all spatial and thematic areas under consideration. More detailed information and special issues could be visualized by additional maps within that framework.

77   As the underlying map is devised on the basis of Pi(ankh)y's Victory Stela (see above, especially note 60), in which the Kushite king 'describes' the extent of power of the delta rulers, and which therefore constitutes evidence for the externally perceived degree of control, the territorial claims depicted are likely to correspond – at least to some extent – to the actual areas of political dominion if not tangible domains.

78   See Wittke, Olshausen, and Szydlak 2007; McEvedy 2002 [1967].

79   See McEvedy 2002 [1967].

Genre of sources	Topography	Economy	Demography	Internal policy	Foreign affairs
Geomorphology	Thorough-fares, natural limitations	Natural resources, land use	Distribution of (e.g. Arable) land	Royal exploitation of resources	Cross-regional routes, external resources
Archaeology	Infrastructure, findspots	Infrastructure, instruments, silos, etc.	Spatial distribution of inhabitants	'official' buildings, e.g. 'houses of life'	Battle fields, reflection of control in the arch. record
Epigraphics: sacral sphere	Place names, spread of findspots	Temple production, acquisition, distribution, consumption	Demographic aspects of priesthood; access to sacral buildings	Support/influence of 'state' vs. local temples	Religious legitimation
Epigraphics: royal sphere	Place names, spread of findspots	'state' production, acquisition, distribution, consumption	Royal perception of the subjects	Political control, macro-perspective	Cross-regional connectivity, claims to dominion
Epigraphics: non-royal sphere	Place names, spread of findspots	Local production, acquisition, distribution, consumption	'elite' perception of themselves and the 'state'	'individual' leeway, micro-perspective	Counter claims, political leeway
Documentary texts	Place names, spread of findspots	Degree of access, workings of econ. processes	Professions, demographic 'statistics'	Administration, jurisdiction	Degree of control
Different languages	Concordance of place names	Cross-regional 'trade', integration of 'foreigners'	'foreign' communities perspective, cross-regional mobility	Policies towards 'foreigners' / 'foreign' communities	Different perspectives

Tab. 6   Historiographical atlas of 7th century BC Egypt: examples of questions opened up by visualizing the correlation of rough thematic issues and source genres.

6   Conclusions

As has been shown, mapping (and consequently also the mapping of historical events and constellations) has a very high potential for opening up research questions and to highlight their importance. Though the danger of such visualizations is not to be underestimated, the potential of mapping to function as an eye-opener makes it too powerful a tool to be ignored or handled lightly.

This is very much the case for historiographical maps on ancient times, for which *status quo* maps presenting a snapshot of a situation and constellation in a spatial area at a given date is *de facto* impossible due to the lack of comprehensive data. Accordingly, most historiographical maps including thematic maps of 7th century BC Egypt condensate processes during a time interval into one or several static 'snapshots'. The reduction of historical complexity to something tangible and therefore comprehensible – i.e. analysable, communicable and visualisable – is inherently manipulative. This is rather obviously the case in a print map, but the same applies to dynamically created digital maps, especially

when devised as a process-simulating sequence. On one hand, the degree of interpolation is higher, as the processes are not preserved, only snippets of their (preliminary) results and consequences. On the other hand, this fragmentedness of the evidence is even more elusive, especially when displayed as process simulation. Therefore, I strongly argue for using mapping as historiographical visualization techniques and for pushing the use of all of them, but also for deliberately reducing the degree of manipulativeness by specifically addressing it and by making it visible on the map(s) – at least to some degree.

This line of argumentation, which is based on a cartographic outlook on devising a historiographical map, is complemented by the historian's perspective. Historiographical research and consequently historiographical mapping (usually) aims at visualizing historical reality. The problem is that 'reality' is a matter of perception. As shown above in Figure 1, this aspect of historical complexity can be indicated even in a single map, though the comprehensiveness of that complexity is beyond our means to grasp – due to the fragmentedness of the pre-

served evidence and our outside perspective, which is coined by the complexity of our own times.

Proposition 1 (incl. Fig. 1) discusses the challenges and means of their visualization for the currently prevalent choice of a thematic historiographical map of 7th century BC Egypt, i.e. a political map. One key feature of the suggested alternative map design is a more diversified visualization of dominion by qualifying the claim of control over Egypt: by illustrating conflicting claims, by showing underlying political diversity with potentially substantial local political leeway, by providing indications of the amount, contents and informative value of the available sources supporting the visualized claims to dominion, by adding some textual comments to the map, and by using title and caption to state as concisely as possible what exactly is supposed to be visualized on the map.

Proposition 2 attempts to heighten the awareness of the degree of historical complexity even more, but in a different medium: by the juxtaposition of various perspectives that would defy readability if put into a single map. The general idea is the same: to visualize historical complexity and, thereby, to open up research questions. For more clarity or the possibility to include and highlight further issues, the various thematic layers, which are merged into a single layer (see, e.g., in Fig. 1), are separated in several layers that could either be printed as series of separate (merged) single layer maps or be rendered in layers: digitally or as print media. This would allow much further differentiation of, e.g., the differ-

ent claims of the major powers according to the various source genres, of 'inside' and 'outside' perspectives, etc.

In comparison to proposition 1, the concern of the second suggestion is primarily a different kind of visualization of historical complexity, not so much another degree of its illustration. That is the motivation for Proposition 3, which aims at promoting further research foci in addition to the prevalent political one that is dominated by a major-power perspective. By devising a historiographical atlas of comparatively small geographical scope and historical depth, various other facets of the historical complexity of 7th century BC Egypt can come into focus: particularly socio-historical, socio-cultural, socio-political and socio-economic issues as well as issues of infrastructure and natural resources. A further key feature of proposition 3 is the additional space dedicated to a more detailed cartographic *and* historiographical commentary. The scope of such a two-fold commentary and its form of visualization obviously depends on the function of the desired historiographical map. A map that is supposed to stand on its own needs to be more explicit than a map illustrating a written treatise. Still, especially with hindsight to a potentially wider reception and re-use of the map in another context, markers (directly on the map, in the legend, title and caption) indicating that more detailed and/or more balanced information is to be found and looked for in the text would substantially help to keep research questions from being obliterated.

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