A MEDIEVAL CITY WITHIN ASSYRIAN WALLS: THE CONTINUITY OF THE TOWN OF ARBĪL IN NORTHERN MESOPOTAMIA

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This study presents a first attempt at an archaeological topography of the city of Arbīl (Arbela, Urbilum, Arbail). Arbīl's large tell and citadel are among the most famous sites in northern Iraq, although research on the site has begun only recently. The study of the immediate hinterlands of the tell, complementary use of written sources, remote sensing and surveys offer a perspective on the extremely long-term evolution of the lower town, whose architectural remains have entirely disappeared under modern building development. Despite many lacunae in the data and a predominance of indirect hypotheses, the urban structure of Assyrian Arbail becomes comprehensible in the context of other Assyrian royal capitals. During the Islamic period, the city underwent a transformation, which merged the once prosperous Sasanian provincial capital with the expanding Muslim community.

1. Introduction and historical outline

Archaeological research on Arbīl (Urbilum, Arbail), an important Assyrian capital (Fig. 1), is among the great desiderata of Mesopotamian archaeology. Despite awareness of the historical importance of the town, Arbīl eluded researchers until recent decades, due mainly to the dense modern settlement in the area of ancient Urbilum. Nevertheless, this obstacle to Arbīl's excavation was limited until the 1970s only to the citadel—the built-up area on the top of Arbīl's large tell—and its immediate surroundings. The marginalization of Arbīl in the praxis of Mesopotamian archaeology and historiography, in contrast to the attitude taken toward other major Assyrian urban centres, contributed to a significant loss of information when the archaeological remains on the plain under the citadel, partially visible on the surface, were obliterated by the boom of modern urban expansion, which took place without any research or documentation.

Our reconstruction of the spatial evolution and the settlement topography of the town, presented here, is based on several distinct data sources. The ancient and medieval textual evidence represent the first group: in the case of Arbīl this type of information has usually lost any connection with features known in the urban landscape, and the location of these structures will remain hypothetical. Travellers' descriptions of the town form another category of literary sources, most of them dating from the period after decline of the medieval town. The individual testimonies and descriptions, albeit subjective and inaccurate, have a unique value in linking the period before modern urban development with the present. These sources are to be confronted with the few known elements of Arbīl's archaeological topography. Fortunately, urban archaeology in Arbīl has become more and more intensive in recent years (see Husayn 1962; Abu al-Soof and al-Siwwani 1967; Abu al-Soof

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Fig. 1 Citadel of Arbīl, aerial view from the southwest (photo by K. Pavelka, 2006).

1969; Hijara 1973; Nováček *et al.* 2008; ʿAbdullah 2009; van Ess *et al.* 2012), and we also use results of our own observations and surveys in 2008–2011. The fourth category comprises a collection of aerial photographs and satellite imagery, which provide key data for Arbīl's topography before the building boom.

The extremely long continuity of settlement in Arbīl is a well-known phenomenon. Leaving aside the evidence of the Middle Palaeolithic settlement (Nováček *et al.* 2008; Šída and Nováček in prep.), the survey of Arbīl's tell itself (Fig. 1) has provided the earliest reliable settlement indices so far, showing settlement from the Middle or Late North Ubaid period as well as from the Late Chalcolithic (*c.* 4500–3000 B.C.). The abandonment of the Tell Qalinj Agha in the proximity of Arbīl's tell falls into the Late Gawra Period, at the end of the fourth millennium B.C. (Gut 1995: 241–42), which might correspond to the nucleation process and the increase of the central position of Arbīl's tell in the local settlement structure. In the second half of the third millennium at the latest, the city-state of Arbail was established, forming an opposition first against a Gutian king, Erridu-Pizir (*c.* 2200 B.C.) and later against the kings of the Ur III Dynasty (MacGinnis 2011). The Ur III king Šulgi (*c.* 2029–1982 B.C.) and then again his son Amar Sin (*c.* 1981–1973 B.C., according to the short chronology) conquered the land of Urbilum and incorporated it into their empire (Villard 2001: 68–69; Unger 1928: 141–42; Vacin 2011: 97).

Arbail gradually became a crossroads of super-regional importance. The route connecting Babylonia with Nineveh via Arbīl (the Baghdād—al-Mawsil line in the Middle Ages, sometimes called the Sultan's or King's Route; Fiey 1965: 180–83) was longer, but in some periods a more secure alternative to the route leading along the course of the Tigris river (Fig. 2). This axis road passed through Arbīl from south to north, and three important diversions came off this artery within the town area: the first to Assyrian Zamua and the historic Kurdish region of Šahrazūr in the east; the second to the northeast, to the Assyrian provinces of Habrūri and Mannea. The third connected Arbīl with other key centres of the Land of Aššur, Aššur itself and Kār-Tukultī-Ninurta—route segments passing the Makhmūr Plain have been identified in the landscape (Mühl 2012: Fig. 5).

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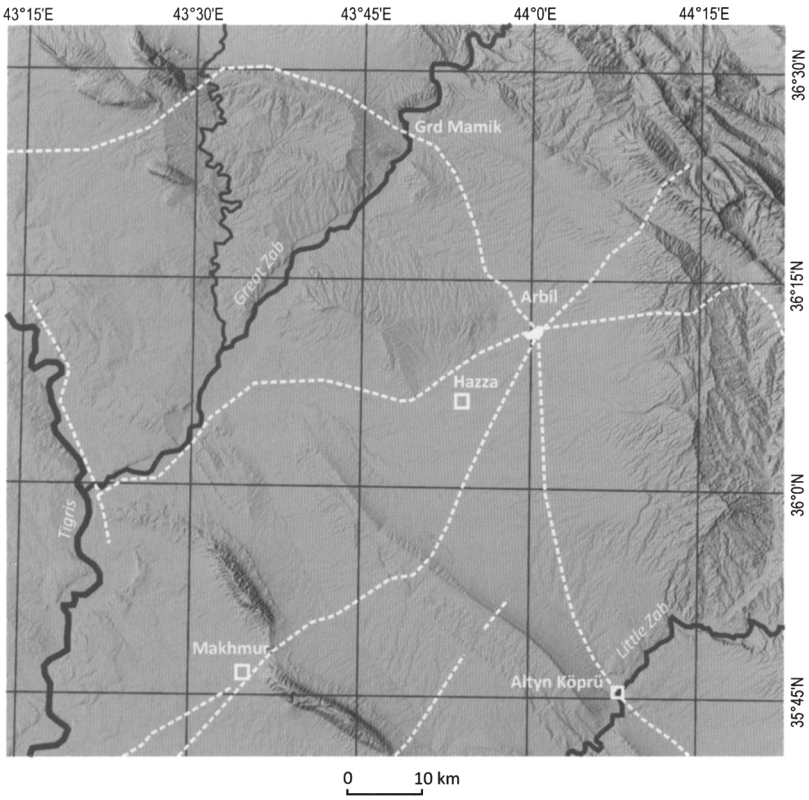

Fig. 2 Situation of Arbīl in North Iraq with reconstructed network of medieval roads and some regional central points (source map: 2000 SRTM, digital elevation model).

Very few data are available on Arbīl in the second millennium B.C. Although the continuity of the "land of Arbīl" and the town itself as a religious centre is beyond all doubt, the description of the capture of the town of Qabrā, the Arbīl province and of the defeat of its ruler Būnu-Ištar by the alliance of Šamšī-Adad I, king of Assyria, and Dāduša, king of Ešnunna, suggests a possibility that in the eighteenth century B.C. Arbīl could have been temporarily replaced as an administrative metropolis by the city of Qabrā (Eidem and Læssøe 2001: 22; Charpin 2004: 168). The town fell definitely under the control of the Assyrian Empire in the second half of the fourteenth century B.C. at the latest, when Aššur-uballit I expanded into the periphery of the former Mitanni territory; from this point forward Arbīl—together with Aššur and Nineveh—formed a triad of geopolitical and cultural centres of the unified Assyrian heartland (Radner 2011: 322–23). Several decades later Arbīl, with other towns, revolted against Šalmaneser I. At the same time, however, the town is considered to be one of the towns re-founded or renewed in the programme of Assyrian urbanization carried out during Šalmaneser's reign (Barbanes 1999). During the Neo-Assyrian period (tenth–seventh centuries B.C.), Arbīl strengthened its status as a dynamic commercial centre and superior religious metropolis connected mainly with the cult of the goddess Ištar of Arbela; her shrine, royal palace and ziggurat represented the most prominent structures of the town (Porter 2004; Unger 1928: 141; Wiseman 1952). King Aššurbanipal resided in Arbīl between ca. 653–648 B.C., and renovated the Ištar temple and city walls (Barton 1893: 159). The existence of the most important Assyrian oracle and astronomical observatory connected with the temple is supported by sources from as early as the reigns of his predecessors, Sennacherib (705–681 B.C.) and Esarhaddon (681–668 B.C.; Banks 1898; Godbey 1917).

Arbīl was taken perhaps in 615 B.C. by Medes, but escaped destruction and retained the status of an administrative centre during the rule of the Achaemenids, and on to that of the Sassanids (Oates

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2008: 190). In the period of Parthian (Arsacid) dominance (126 B.C.–A.D. 226), Arbīl's vassal dynasty ruling the Kingdom of Hidyab had converted to Judaism and took an active part in the Jewish war against Rome (A.D. 66–73), probably attempting to assume hegemony of the Near East (Neusner 1964). The local dynasty was later also distinguished by its independent politics. Christianity undoubtedly has very ancient roots in Adiabene, even though the authenticity of the Chronicle of Arbela, the main source on early Christianity at Arbīl, has been debated for more than seven decades (Fiey 1967; Kawerau 1985: 1–12; Chaumont 1987: 441; Hage 1988, etc.). In the beginning of the fifth century A.D., the bishop of Adiabene was elevated to metropolitan and his successors retained Arbīl as their seat until the ninth century (Fiey 1965: 71). Throughout the Sasanian period, the administration of the province of Nōdh-Ardašīrakan was concentrated in Arbīl, along with that of the neighbouring southern province of Garmekan. The provincial centre was divided, perhaps for a greater administrative efficiency and control, into two sites at a distance of twenty kilometers from one another: while Arbīl maintained the status of a Zoroastrian and Christian religious centre, the administrative and military centre had been shifted to the site named Hazza (Sourdel 1990: 76; Simpson 1996: 88; Wheatley 2001: 103–9; Morony 2005: 131–32).

The province of Adiabene was conquered by the Muslim commander ʿUtba ibn Farqad al-Silmī in 20 A.H/A.D. 641–42 (al-Balādhurī 1866: 331–34). The function of the provincial centre was translocated to the newly founded al-Mawsil (Forand 1969: 102). The name of Arbīl emerges only exceptionally in the sources from the second half of the seventh century to the ninth century, while the area (*tassūj*) around Arbīl became, according to Ibn Khurdādhbih (d. 300/911), a part of the larger district (*kūra*) of Hulwān (Ibn Khurdādhbih 1889, 5–6, 235). The alternative name of Adiabene—the land (*ard*) of Hazza, occurring several times in early Arabic geographies—might be a reverberation of the Sasanian administrative dualism.

In the subsequent period, the region of Adiabene became locus of political aspirations of leaders of the semi-nomadic Hadhbānī Kurds. While the written sources attest to their first political forays as early as the beginning of the tenth century (notably in the region of al-Mawsil; James 2006: 47), their control over Arbīl is documented, according to Sāmī al-Saqqār, only for the mid-eleventh century (al-Saqqār 1992: 33). The Hadhbānī period of Arbīl's history left only a weak trace in the documentary sources; nevertheless, at least some Hadhbānī ruling families are known: among them those of Ibn Mūsak, Bābakr ibn Mīkā'īl (called al-Bābakrīya), and Abū al-Hayjā' (al-Saqqār 1992: 35). Hadhbānī Kurds controlled the town until it was seized in 522/1128[2] by al-Mawsil's atabeg ʿImād al-Dīn Zangī, who handed the administration of Arbīl, Adiabene and several other provinces to his officer, amīr Zayn al-Dīn ʿAlī Kūčük, the founder of Arbīl's ruling dynasty of Begteginids.

In the works of the thirteenth-century Arab geographers, the period of the Begteginids (before 533/1138–39–630/1233) is recognized as the apogee of the medieval town's development, although the last decades of the Begteginid principality of Arbīl were marked by increasing conflicts with al-Mawsil's leader Badr al-Dīn Lu'lu' (Patton 1991), as well as with Mongols unstoppably penetrating Adiabene. The extent of the Arbīl Emirate also witnessed an expansion (Heidemann 1996: 268). Muzaffar al-Dīn Gökburī, Zayn al-Dīn's son and sultan Saladin's brother-in-law, ruling between 586/1190 and 630/1233, has been firmly accredited with the renaissance of the city. After his death, the town had to be taken by force by caliph al-Mustansir to whom Gökburī had bequeathed it. In 634/1237 the Mongols made their first, unsuccessful attempt to capture Arbīl. The city fell only in 656/1257–58 after the capture of Baghdād, after a six month siege and with the assistance of Badr ad-Dīn Lu'lu', Gökburī's old rival (Fiey 1965: 76; Patton 1991: 53, 62).

One of the consequences of the Mongol occupation was the rise of Christianity in the town, reinforced by the presence of a Nestorian patriarch who was expelled from Baghdād and found asylum in Arbīl. The prominent position of the Arbīl Christians came violently to an end with two

[2] This year of Zangī's annexion of Arbīl is preferred by most chroniclers (Abū Šāma, al-Dawādarī, Ibn Qādī Šuhba, Ibn Wāsil). Bar Hebraeus, however, quotes the year 520/1126, and Sibt ibn al-Jawzī 524/1129–30. See also Muhammad Husayn 1976: 36–42 and al-Saqqār 1992: 35.

massacres in A.D. 1295 and 1310 (Fiey 1965: 77–89). During the fourteenth century, Arbīl disappears from the focus of sources. After Jalā'irī, Qara Qoynlu, Aq Qoynlu and Persian dominance over the town, and the short-term existence of the local Kurdish emirate ruled by Saʿīd Beg Sohran (A.D. 1514–1534), Arbīl became part of the eastern borderline territory of the Ottoman Empire (province Šahrazūr, later pashalik of Baghdād) and gradually lost its importance (Zakī 1948; Minorsky 1986: 457, 460). The citadel was damaged during Nādir Šāh's siege of Arbīl in A.D. 1743, and shortly after this was repaired for the last time as a military stronghold (Streck 1987: 521; D. Michelmore, pers. comm. 2011).

2. Topography and architectural structures of Arbīl in textual evidence

The first reliable data about the physiognomy of ancient Arbīl come from the Late Assyrian sources. Earlier references such as the phrase about "captured fortified cities in the land of Urbel" on the Šamšī-Adad I stele (*c.* 1716 B.C.; MacGinnis 2011: 16), should be treated with caution. A cuneiform tablet found by coincidence in Arbīl (?) and dated to the period of the king Aššurbanipal (668–*c.* 627 B.C.), provides more detailed information (Oppert 1863: 282). The record informs us about a substantial renovation of the long-neglected town: *completion* of the town walls and ramparts is emphasized several times in the short text. The king's efforts concentrated on the Ištar temple, which was fully renovated and decorated, including its gate (Barton 1893: 159). On the contrary, the view of Arbīl on the Aššurbanipal relief from Nineveh (e.g. Reade 2002: fig. 15), a kind of graphic counterpart to the Aššurbanipal inscription, should be disregarded due to the standardisation of this group of Nineveh reliefs (compare, e.g., with Bonatz 2004: fig. 4; Novák 2004: fig. 9).

As for the medieval period of Arbīl, its topography is, in comparison with other Near-Eastern cities, poorly recorded in the written sources: no systematic topographical description of Arbīl was ever composed (or at least, none has been identified so far). Except for a few indirect references, Arbīl was also left out of the itineraries of most Arab travellers and geographers of the ninth–tenth centuries A.D. It appears, for example, in the work of Ibn Hawqal (d. after 367/977), who observed that the highly elevated houses of the town of al-Bawāzīj, constructed from *pisé*, bricks and gypsum, were nicer than those of Arbīl (Ibn Hawqal 1964: 239). Later geographical accounts provide a more detailed, though still very brief view of the town. The most informative is that by Yāqūt al-Hamawī (d. 626/1229). The later writers Zakariyā al-Qazwīnī (d. 682/1283), and Abū al-Fidā' (d. 732/1331) only provide a few details not known from elsewhere (al-Hamawī 1977: I, 137–40; al-Qazwīnī 1848: 192–93; Abū al-Fidā' 1840: 412–13).

Most information regarding the city's architecture comes from the work of an Arbīl native, Šaraf al-Dīn ibn al-Barakāt ibn al-Mustawfī al-Irbilī (d. 637/1239), the author of the biographical dictionary titled *Tārīkh Irbil* (History of Irbil[3]). This extensive work originally comprised four volumes, but only the second of these has been preserved (or been identified so far). It mentions particular pieces of architecture only if they were somehow related to the individuals dealt with in the dictionary, i.e., places of their stay, work, ritual practices, birth, death, etc. This means that the list of architectural sites that we can excerpt from Ibn al-Mustawfī's work is by no means complete. Abū al-ʿAbbās ibn Khallikān (d. 681/1282), another native of Arbīl, authored another biographical dictionary (Ibn Khallikān 1977) that, although more general in its coverage, also contains biographies of many personalities connected with the town. References to architecture are rather rare in this source, however it does uncover, in much detail, the building activities of Arbīl's most famous ruler Muzaffar al-Dīn Gökburī. Works by three historians of Iraqi origin, Kamāl al-Dīn ibn al-Šaʿʿār (d. 654/1256), ʿAbd al-Razzāq ibn al-Fuwatī (d. 723/1323), and Sibt ibn al-Jawzī (d. 654/1256), give information on Arbīl only in isolated cases. Nonetheless, the information contained in these sources

[3] The authors of our sources referred to the town of present-day Arbīl as Irbil.

and unknown from elsewhere enables us to postulate existence of several architectural structures (Ibn al-Šaᶜᶜār 2005; Ibn al-Fuwatī 2003; Sibt ibn al-Jawzī 1907).[4]

Two Syriac chronicles—Chronography by Bar Hebraeus (d. A.D. 1286; Bar Hebraeus 1932) and History of Mar Yabalaha (d. A.D. 1317) and Rabban Sauma (d. A.D. 1294; Wallis Budge 1928)—have a high degree of authenticity in describing the history of Arbīl's Christian community. To these sources exclusively we owe the information on Arbīl's Christian churches and other institutions. However, the topographical data is again accidental and scarce.

Working with the information scattered in these different sources poses serious problems for scholars studying Arbīl's medieval topography. Since all sites mentioned in them (with the exception of the citadel) have now totally disappeared, it is virtually impossible to empirically verify the existence of any of them or find their correlate in the urban landscape.[5] The research is further complicated by the impossibility of verifying whether some toponyms are not in fact referring to the same objects. The resulting conceptual model of the medieval city (Fig. 3) hence represents a hypothesis, a first step in our topographic considerations.

Fortification

In the twelfth and thirteenth centuries, the town of Arbīl was a large city complex, consisting of the citadel (*qalᶜa*) situated on a high hill (*tell*), and the lower town (*rabad*), stretching "wide and long" below the citadel (al-Hamawī 1977: I, 138). Even though the citadel area had all the characteristics of a complex residential town quarter (see below), it was also the most important defensive element of Arbīl. Its fortification must have been highly effective and in good condition, as it successfully resisted several Mongol attacks in the 1230s. Later on, in A.D. 1290, 1297 and 1310, the citadel repulsed another three attacks against Christians, this time supported also by heavy siege

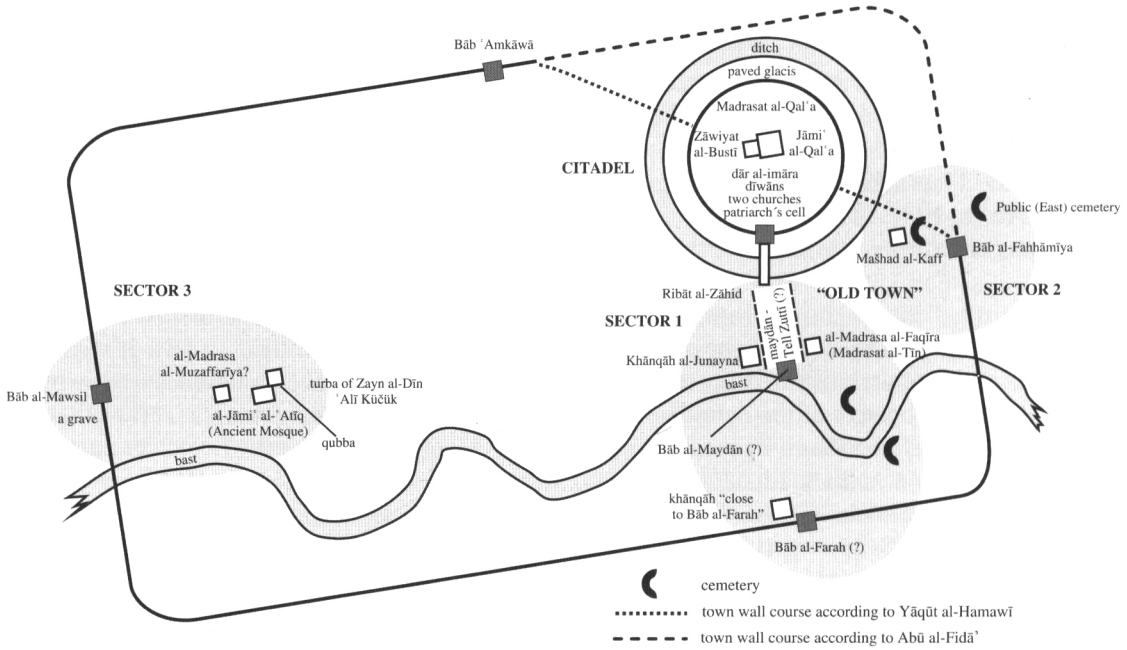

Fig. 3 Model of Arbīl's medieval topography according to 12th–13th-century sources.

[4] To identify respective sections of the quoted sources, mentioning architectural features of Arbīl, we largely depended on the work of two Iraqi historians, Husām al-Dīn al-Naqšbandī (al-Naqšbandī 1989), and Sāmī ibn Khamās al-Saqqār (al-Saqqār 1992).

[5] Paradoxically enough, the only extant piece of medieval architecture in Arbīl, the al-Muzaffarīya Minaret (the Čoli Minaret), does not have its clear counterpart in the medieval texts. See below, Section 4.

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machines (Wallis Budge 1928: 123). During the attacks on Arbīl, the citadel could be used as a refuge for all inhabitants of the town, i.e., also for those of *rabad*. Ibn al-Fuwatī, for example, describes the panic situation that arose during the siege of 634/1237, when the citadel was so densely occupied that the refugees were short of water. This caused, according to him, the death of "many thousands" of people, who could neither be buried there nor thrown down the citadel, since the corpses would fill up the ditch (*khandaq*). Therefore, the corpses were burnt in fire (Ibn al-Fuwatī 2003: 90). The deep ditch probably surrounded the whole perimeter of the citadel (al-Hamawī 1977: I, 138). From the account of Mar Yabalaha one can deduce that the entrance to the citadel was secured by only one (southern) gate (Wallis Budge 1928: 157, 165, 172) accessible via a bridge, possibly a wooden one, which was destroyed twice during the fighting in A.D. 1297 and 1310 and then swiftly repaired again (Wallis Budge 1928, 122, 129, 171). The chronicle also mentions an upper perimeter wall and a tower near the gate (Wallis Budge 1928: 157, 163, 200; Bar Hebraeus 1932: 570).

Yāqūt al-Hamawī, who visited Arbīl in around A.D. 1220, situates the citadel hill on the edge of the town so that the defensive wall enclosing the lower town was interrupted by it (al-Hamawī 1977: I, 138). Few decades later, Abū al-Fidā' described the position of the citadel in a slightly different way, as being situated on the edge of the town, but "within the [town] wall (*fī dākhil al-sūr*)" (Abū al-Fidā' 1840: 413). This difference could be a mere coincidence. Nevertheless, it is only the al-Fidā's identification which fits perfectly to the field evidence (see below, Section 5).

The fortification of the lower town of Arbīl is associated with Muzaffar al-Dīn Gökburī, who had built a defensive wall (*sūr*) along the borderline of the lower town (al-Hamawī 1977: I, 138; see also Ibn al-Fuwatī 2003: 52, 89). The access to the town was secured by at least four gates. According to Ibn al-Fuwatī, the greatest one was Bāb ʿAmkāwā (the ʿAmkāwā Gate)[6], situated in the northern part of the town wall.[7] The eastern part of the town was accessible through Bāb al-Fahhāmīya (the Charcoal Burners' Gate), being, according to Ibn al-Mustawfī, the "gate of the old town" (Ibn al-Mustawfī 1980: I, 223), which we consider to be an important hint as for the chronological heterogeneity of the lower town (see Section 6). Bāb al-Mawsil (the al-Mawsil Gate) was, no doubt, on the western side of the town, and probably represented a starting point of the route to al-Mawsil (Ibn al-Mustawfī 1980: I, 374). The remaining two gates are of unspecified position, such as Bāb al-Farah (the Gate of Joy; Ibn al-Mustawfī 1980: I, 214), or even of debatable existence, such as Bāb al-Maydān (the al-Maydān Gate— see below). If we had to place them on the map of medieval Arbīl, we would naturally think of the southern part of the town (Fig. 3).

It is worth mentioning that the lower town of Arbīl was most probably protected by a defensive system even before Muzaffar al-Dīn's rule. Ibn al-Mustawfī alludes to the words of *šaykh* ʿAdīy al-Hakkārī, who, when talking about Arbīl's holy men (sg. *walīy*), mentioned two gates: al-Bāb al-Gharbī (the Western Gate) and al-Bāb al-Šarqī (the Eastern Gate; Ibn al-Mustawfī 1980, I, 115).[8] ʿAdīy al-Hakkārī died in 557/1161–62, which indicates that the two gates existed at least twenty-nine years before Muzaffar al-Dīn Gökburī seized control of Arbīl (586/1190).

[6] The available editions of Ibn al-Fuwatī's chronicle state that Šaraf al-Dīn Abū al-Fadā'il pitched his tent opposite باب عمكا واللونه اعظم الابواب, which proves to be syntactically wrong (Ibn al-Fuwatī 2003: 52; see also al-Saqqār 1992: 73, where the Baghdad edition of 1932 is quoted). Sāmī al-Saqqār postulates, on this basis, the existence of two gates, Bāb ʿAmkā and Bāb al-L-W-N-H (al-Saqqār 1992: 73). Al-Naqšbandī assumes, on the same basis, the existence of Bāb ʿAmkā only (al-Naqšbandī 1989, 137). We believe that the editor(s) of Ibn al-Fuwatī's text were at fault, and propose to correct the reading as follows: باب عمكاوا لكونه اعظم الابواب, e.g., "the ʿAmkāwā Gate, because it was the greatest gate", which very well fits the context.

[7] The gate was named after the village ʿAmkāwā (present-day ʿAnkāwā) situated to the northwest of the town. The gate corresponds with the Amkabad Gate mentioned by Bar Hebraeus 1932: I, 467. This gate was, no doubt, a part of the town fortification, not part of the citadel as some scholars maintain (Muhammad Husayn 1976: 221–42; al-Naqšbandī 1989: 136), which is clear from the description of Arbīl's conquest by the caliph's army in A.D. 1233 (Bar Hebraeus 1932: I, 467).

[8] ʿAdīy al-Hakkārī uttered words about the two gates "when the citadel of Arbīl was mentioned before him", which can, naturally, be understood in the way that the gates were pertaining to the citadel. Taking into account the information from the other sources, we consider the link between the gates and the citadel to be highly improbable. We believe that when talking about the "citadel" of Arbīl, ʿAdīy al-Hakkārī meant the town of Arbīl, not the citadel proper. Husām al-Dīn al-Naqšbandī must have understood it in the same way, since he places the two gates, without any explanation, in the lower town (al-Naqšbandī 1989: 139).

Architectural Patronage

The majority of buildings once situated within the lower town enclosure wall, as well as in the citadel area, are mentioned in our sources as individual cases of architectural patronage. Those established by Muslim patrons were financed by revenues from *waqf* endowments, which is obvious from several allusions to this financial instrument made by Ibn al-Mustawfī and Ibn Khallikān (Ibn al-Mustawfī 1980: I, 157, 164, 214; Ibn Khallikān 1977: IV, 82, 117). In Arbīl, as in many other Middle Eastern cities, the *waqf* started to be used on a large scale to finance "public" institutions (such as mosques, schools, Sufi lodges, hospitals), causing an unprecedented urban expansion. The only available data make us believe that the architectural boom in Arbīl started when the Begteginid family took control of the town. Its most famous member, Muzaffar al-Dīn Gökburī, played a decisive role in this matter. The authors of our sources ascribe to him the founding of the following institutions: al-Madrasa al-Muzaffarīya (Ibn al-Mustawfī 1980: I, 328; Ibn Khallikān 1977: I, 215; Ibn al-Ša^{cc}ār 2005: I, 346), Dār al-Hadīth al-Muzaffarīya (Ibn al-Mustawfī 1980: I, 144, 159, 164, 172), al-Madrasa al-Faqīra (alternatively called as Madrasat al-Tīn; Ibn al-Mustawfī 1980: I, 159), a *zāwiya* of Abū Bakr Muhammad ibn al-Husayn al-Kuraydī (Ibn al-Mustawfī 1980: I, 357), Dār al-Mudīf (the Guest House; Ibn al-Mustawfī 1980: I, 157), two *khānqāhs* (Sūfī lodges; Ibn Khallikān 1977: IV, 117), social shelters for widows, orphans, foundlings, blind and chronically ill people (Ibn Khallikān 1977: IV, 116), a *qaysarīya* (roofed market place; Ibn al-Mustawfī 1980: I, 179), and, albeit not stated explicitly, he is considered to be the founder of a hospital (*bīmāristān*; Ibn Khallikān 1977: IV, 116). Muzaffar al-Dīn's father, Zayn al-Dīn ^{c}Alī Küčük (d. 563/1168) left just two imprints in Arbīl, his tomb (*turba*), and possibly also a congregational mosque, being either its builder, or the patron of its reconstruction (see below). His building activities were, however, oriented mainly towards al-Mawsil (Ibn Khallikān 1977: IV, 114; Sibt ibn al-Jawzī 1907: 170).

Architectural patronage was also carried out by two officials closely connected with the ruling family. Abū Mansūr Saraftikīn al-Zaynī (d. 559/1164), Zayn al-Dīn's manumitted slave of Armenian origin and a vice-governor of Arbīl, built Madrasat al-Qal^{c}a in the citadel area, and "many mosques in Irbil and [neighbouring] villages" (Ibn Khallikān 1977: II, 239). Mujāhid al-Dīn Qāymāz al-Zaynī (d. 595/1198), another of Zayn al-Dīn's manumitted slaves, who eventually became a regent of Zayn al-Dīn's sons, founded al-Madrasa al-Mujāhidīya and al-Khānqāh al-Mujāhidīya (alternatively called as al-Ribāt al-Mujāhidī; Ibn Khallikān 1977: IV, 82; Ibn al-Mustawfī 1980: I, 94, 169, 191). Later, he moved to al-Mawsil, where he further intensified his foundation activities (al-Janabi 1982: 52). As for the other patrons of architecture in medieval Arbīl, we can give only three names: al-Khidr ibn ^{c}Aqīl al-Irbilī (d. 567/1172), the first *mudarris* (professor) in Arbīl, who, reputedly, founded a *madrasa* in the lower town (Ibn Khallikān 1977: II, 238), Abū al-Fath Ahmad ibn al-Mubārak, the father of Ibn al-Mustawfī, who had built a *qubba* in the western part of the town (Ibn al-Mustawfī 1980: I, 112, 367), and the Sūfī, Ishāq ibn Ibrāhīm al-Khuzā^{c}ī (d. 634/1236–7), who erected a *zāwiya* (Ibn al-Mustawfī 1980: I, 317; II, 525). The identity of the other Muslim patrons remains unknown.

As yet we can identify only two patrons of Arbīl's Christian architecture. Denha I, holding the position of the Patriarch of the Nestorian Church A.D. 1265–1281, built a church and a residence (cell) in the citadel area (Bar Hebraeus 1932: I, 525). His successor, the aforementioned Mar Yabalaha, being the Patriarch of the same church A.D. 1281–1317, built for himself a new residence, also in the citadel area (Wallis Budge 1928: 150).

Topography

Of the nearly seventy buildings and other architectural structures mentioned in the sources, only a small proportion permit real topographical consideration (Fig. 3). However, we have detected several sectors of Arbīl (the citadel and another three sectors in the lower town) with relatively frequent occurence of architecture, and for this reason we are able to position several pieces of architecture that demonstrably appertained to either the citadel or one of the three sectors in the lower town. We can also suggest the approximate position of some architectural features in relation to one another. Finally, we can propose the hypothetical affiliation of some buildings to individual sectors. Nevertheless, in many cases the verification of locations is not possible at all.

According to our sources, the **citadel area** had all signs of a complex, independently fortified city quarter with the residential component emphasized. Yāqūt al-Hamawī rendered this characteristic briefly and aptly, situating markets (sg. *sūq*), citizens' houses and a congregational mosque (*jāmiᶜ*) within its precinct (al-Hamawī 1977: I, 138). Throughout the existence of an independent emirate of Arbīl in the second half of the twelfth and the first third of the thirteenth centuries, the palace (*dār al-imāra*) of the ruling Begteginid family (Ibn al-Fuwatī 2003: 54), including several *dīwāns* and a prison (known as Habs al-Halabī; Ibn al-Mustawfī 1980: I, 115), were situated there. Nonetheless, no details about their exact location and form are available. Husām al-Dīn al-Naqšbandī assumes that the palace was situated in the southern section of the citadel, since this area has been known as the Palace Quarter (Mahallat al-Sarāy; al-Naqšbandī 1989: 137). Abū al-Fidā' states that the palace, for which he uses the term *dār al-saltana*, was provided with water supply by one of the two water channels (sg. *qanāt*) entering the town (the other one led to the congregational mosque of unspecified location; Abū al-Fidā' 1840: 413). Even though we cannot know for certain that Abū al-Fidā' meant the very same palace mentioned by Ibn al-Fuwatī, the only fact that they were contemporaries makes such assumption plausible.[9] This would mean that the citadel was connected with the distant water source by the subterranean water system.

The congregational mosque, in our sources simply referred to as Jāmiᶜ al-Qalᶜa (the Citadel Mosque), was, no doubt, the core of religious life in the citadel (Ibn al-Mustawfī 1980: I, 86, 251, 252, 338). For medieval authors, it was not linked with any personality or sponsor of its construction, which signifies its rather early origin. Our sources first attest the existence of this mosque as late as in the middle of the twelfth century (Ibn al-Mustawfī 1980: I, 338). We know nothing about its appearance, nor its structure, except for the existence of a *zāwiya* (lodge) in its westernmost part, which was the place where the Sūfī, Abū ᶜAbd Allāh al-Bustī (d. 584/1188–89), settled after his arrival to Arbīl. Since that time, this place was known by his name, i.e. Zāwiyat al-Bustī (Ibn al-Mustawfī 1980: I, 112).

Madrasat al-Qalᶜa (the Citadel School), built by the vice-governor of Arbīl, Abū Mansūr Saraftikīn al-Zaynī (d. 559/1164), is the only documented educational institution in the citadel. The *madrasa* was established in 533/1138–39 for the aforementioned Arbīl's first professor al-Khidr ibn ᶜAqīl al-Irbilī (Ibn Khallikān 1977: II, 237–39). This primacy signifies that Madrasat al-Qalᶜa could be the oldest school in Arbīl, although this statement remains debatable because al-Khidr ibn ᶜAqīl had presumably built his own *madrasa* in the lower town, which some scholars consider to be even older than the one in the citadel (al-ᶜAzzāwī 1947: 142–43).

The citadel area was not restricted to the Muslim community. The Christians of Arbīl also settled there and maintained their sacral structures. This happened in the second half of the thirteenth century at the very latest, when, after the downfall of Baghdād in A.D. 1258, the seat of the patriarch was translocated to Arbīl. As it was already quoted, the Patriarch Denha I built his residence (cell) and the (Nestorian) church there. They date back to A.D. 1268 or shortly later (Bar Hebraeus 1932: 525). Roughly at the same time or slightly earlier (after A.D. 1261, at any rate), the Jacobite church of Mār Behnām was built there (Fiey 1965, 80). In A.D. 1305–6 the cell of Denha I was replaced by a new one, that patronised by the Patriarch Mar Yabalaha (see above). The new structure was built from limestone and mortar (Wallis Budge 1928: 150). At least one of the buildings survived the massacre of Christians in A.D. 1310: the church of Mār Behnām is noted again in 1369 and might have been adapted later for use as a mosque (Fiey 1965: 92).[10] The Syriac chronicles do not give direct answers to the question whether the Christian settlement of the citadel before 1310 had only

[9] Al-Naqšbandī suggests that Abū al-Fidā' meant by *dār al-saltana* a different building, situated in the lower town. This makes him speculate about its origin, which he explains simply by the relocation of the ruler's residence from the citadel to the lower town already during the Muzaffar al-Dīn's rule (al-Naqšbandī 1989: 137). We do not consider this presumption to be plausible, mainly because of Ibn al-Fuwatī's explicit statement that Šams al-Dīn Bātkīn, the governor of Arbīl— appointed by the Caliph al-Mustansir in 630/1233 only two months after Muzaffar al-Dīn's death— resided in the citadel, in "*dār al-imāra*, in which Muzaffar al-Dīn lived" (Ibn al-Fuwatī 2003: 54). This, however, does not exclude the fact that Muzaffar al-Dīn had a secondary residence in the lower town (see below).

[10] A presumption arises as to whether this church transformed into a mosque might be identical with the building visited by Lycklama a Nijeholt in 1867 (see below, Section 3).

the characteristics of an emergency refuge or asylum. The variant of a long and continual presence seems to be more probable with respect to the extremely strong tradition of Christianity at Arbīl.

Sector 1 of the lower town is the area sprawling to the south from the gate of the citadel. Ibn Khallikān's and Sibt ibn al-Jawzī's vivid descriptions of the celebrations of *mawlid al-nabī* (Prophet's birthday), held yearly in Arbīl under the auspices of Muzaffar al-Dīn Gökburī, enable us to visualise its layout in some detail. Below the citadel, there was an "extremely vast" open space (*maydān*), one of the venues of the celebrations. As the sources attest, it was used to pitch tents to accomodate *mawlid* participants, and probably, to set twenty wooden pavilions to entertain the amirs and notables (*aʿyān*) of the town. There was also a huge feast for the public (about 100,000 plates of food were distributed during the celebrations). Right before the festival, in this *maydān*, animals were slaughtered and an army-parade was held (Ibn Khallikān 1977: IV, 117–19; Sibt ibn al-Jawzī 1907: 451).

In the night of the *mawlid*, a torchlit procession came down from the citadel and headed to a *khānqāh* (Sūfī lodge)—the site where the religious part of the celebrations was held. The *khānqāh* was situated in close proximity to the *maydān* (Ibn Khallikān 1977: IV, 118). It is debatable whether the procesion route led through the *maydān* or followed another route through the town. The distance between the two venues can be imagined thanks to the description of how Muzaffar al-Dīn Gökburī observed the celebrations: he had built a wooden tower to watch, by turns, the action in the *maydān* and in the surroundings of the *khānqāh*. This *khānqāh* was, most probably, one of those built by Muzaffar al-Dīn Gökburī (Ibn al-Fuwatī 1995: III, 366–67), appearing in the sources either under the name of Khānqāh al-Junayna (the Garden Sūfī Lodge; Ibn al-Mustawfī 1980: I, 259), or, alternatively, Ribāt al-Junayna (Ibn al-Mustawfī 1980: I, 304, 260–61, 269, 304, and others).

If we take the proposed position of Khānqāh al-Junayna as given, the sources enable us to set an approximate position of al-Madrasa al-Faqīra (the "Poor" Madrasa), alternatively called Madrasat al-Tīn (the Earthen Madrasa), which was also built by Muzaffar al-Dīn Gökburī for Shafiite scholars. This building was situated to the east of the aforementioned *khānqāh* (Ibn al-Mustawfī 1980: I, 159).[11] Setting an approximate position is also possible in the case of Ribāt al-Zāhid (the Ascetic's Lodge), which was situated below the southern side of the citadel. It is obvious from Ibn al-Mustawfī's words that this *ribāt* did not exist during his lifetime, but it did still exist when Mujāhid al-Dīn Qāymāz was the deputy-governor of the town (i.e., between 559/1164 and 571/1175; Ibn al-Mustawfī 1980: I, 239).

We can find at least one cemetery (*maqbara*) in this sector. Ibn Khallikān mentions one to the south of *bast* (wadi, in Kurdish), crossing the Arbīl city to drain the flood waters of winter and spring (Ibn Khallikān 1977: V, 11–2). This cemetery should be identified with the cemetery, which is today to the southeast of the Ništiman Square. Ibn al-Mustawfī, however, alludes to another cemetery which is "close to the *maydān* known as Tell Zuttī" (Ibn al-Mustawfī 1980: I, 239). Scholars of medieval Arbīl explicitly associate this cemetery with Maqbarat Bāb al-Maydān (al-Naqšbandī 1989: 147; al-Saqqār 1992: 74; Ibn al-Mustawfī 1980: II, 408, note 6 by the editor), once mentioned by Ibn Khallikān (Ibn Khallikān 1977: III, 504).[12] If we accept this link, we would have a chance to fill in Arbīl's topographical map a little more: we could place this cemetery next to the *maydān* to the south of the citadel and consider it to be a continuation of the aforementioned cemetery to the north, on the north bank of *bast*. We could also assign a name "Tell Zuttī" to the *maydān* below the citadel, the venue of the *mawlid* celebrations, as well as postulate an existence of Bāb al-Maydān (the al-Maydān Gate), situated either somewhere in the south/southeast part of the city wall (in case the *maydān* was so extensive that it extended up to the wall), or possibly in the inner town (in case the gate was, for example, separating some *intramural* features that are not known to us yet). These proposals, however, are only conjectures.[13]

[11] There is no reason to think that this *madrasa* was, as Sāmī al-Saqqār makes it, in fact, al-Madrasa al-Muzaffarīya, established by the same patron, probably, in sector 3 (Ibn al-Mustawfī 1980: II, 256, note 4 by the editor). It is quite possible that Muzaffar al-Dīn had built two *madrasas*, each in a different part of the town.

[12] Ibn Khallikān does not place the cemetery in Arbīl explicitly, but this can be derived from the context of his narration. Nonetheless, we must also acknowledge that a cemetery of the same name is known to have been located in al-Mawsil (Ibn Khallikān 1977: VII, 85).

[13] Considering the improbability of the *maydān* stretching accross almost the entire width of the lower town, the latter proposal was preferred in the conceptual model of medieval Arbīl (Fig. 3). The northern bank of the bast might create a natural geomorphological limit, as the aerial images attest.

Considering Bāb al-Farah as being situated in the southern side of Arbīl (see above), this gate could, hypothetically, be an access point to Sector 1. This makes it possible to place in the same sector a *khānqāh* "close to Bāb al-Farah", which was probably built by Muzaffar al-Dīn Gökburī.[14] Husām al-Dīn al-Naqšbandī suggests that this *khānqāh* was the one of the *mawlid* celebrations, instead of al-Khānqāh al-Junayna (al-Naqšbandī 1989: 143), which we find improbable for two reasons: first, the *khānqāh* "close to Bāb al-Farah" was abandoned already during Muzaffar al-Dīn's life (before 618/1221; Ibn al-Mustawfī 1980: I, 214); second, Ibn Khallikān's description of the *mawlid* celebrations refers to a much later period, since he was born only in 618 AH (Ibn Šaᶜᶜār 2005: I, 346).

Sector 2 is the area that surrounded the Bāb al-Fahhāmīya (the Charcoal Burners' Gate) in the eastern part of the town. Its point of reference is Mašhad al-Kaff (the Shrine of the Palm), alternatively referred to as Masjid al-Kaff, situated in close proximity to the gate (Ibn al-Mustawfī 1980: 223, 264; al-Qazwīnī 1848: 192). This locale can be identified, according to local tradition, with a recent mosque of the same name situated to the east of the citadel. According to Zakariyā al-Qazwīnī, a stone with a human palm imprint was enshrined there. He remarks that the stone was "an object of many hearsays on the part of the people of Irbil". Judging by the local tradition, which marks this place as Panja ᶜAlī (the Palm of ᶜAlī in Kurdish; al-Naqšbandī 1989: 142), we have a good reason to consider this shrine to be the only known Shiᶜite sanctuary in medieval Arbīl.[15]

Close to Mašhad al-Kaff, there was a cemetery of the same name, i.e., Maqbarat Mašhad al-Kaff (Ibn al-Mustawfī 1980: I, 213). Concerning its more accurate position, we can just guess, if it was situated *intramuros* (occupying a rather limited area close to the *mašhad*) or if it was of extramural location. In the latter case, this cemetery would have been a part of the large cemetery area stretching from behind the wall to the east. This extramural necropolis was known as al-Maqbara al-ᶜĀmma (the Public Cemetery), or, alternatively, al-Maqbara al-Šarqīya (the Eastern Cemetery; Ibn al-Mustawfī 1980: I, 39, 46, 83, 223, 332, and others). Its present-day counterpart can be found in the cemetery which is situated to the east of the al-Khānaqā Quarter.

To define **Sector 3** of Arbīl's lower town, we have to resort to a speculation on the origin of the only preserved medieval monument in Arbīl, the minaret, commonly known as Manāra Čoli, which is situated in the western part of the town (some 950 m WSW of the citadel). According to local tradition, the minaret once belonged to the disappeared congregational mosque, al-Jāmiᶜ al-ᶜAtīq (the Ancient Mosque), dating back to the pre-Begteginid era. The results of the archeological survey (see below, Section 4), however, confirmed that the minaret once pertained to a building under the Begteginid patronage (hence another designation of the minaret, al-Manāra al-Muzaffarīya). Whatever the origin of the minaret, we have a good reason to think of this area as a self-contained town quarter, centered most probably around al-Jāmiᶜ al-ᶜAtīq with at least one Begteginid building in its proximity. We can only guess whether this building was al-Madrasa al-Muzaffarīya (Ibn al-Mustawfī 1980: I, 328; Ibn Khallikān 1977: I, 215; Ibn al-Šaᶜᶜār 2005: I, 346), or Dār al-Hadīth al-Muzaffarīya (Ibn al-Mustawfī 1980: I, 129, 138, 144, 159, 164, 172, 175, and others), both built by Muzaffar al-Dīn Gökburī. It must be stressed again that such an assumption is based on a mere conjecture. Concerning al-Jāmiᶜ al-ᶜAtīq, the existence of a mosque of this name is well attested in the written sources (Ibn al-Mustawfī 1980: I, 117; Ibn Khallikān 1977: IV, 114). The attribute *ᶜatīq* (ancient) signifies its very early origin, although no explicit information is available.

Ibn al-Mustawfī mentions a mosque, called al-Masjid al-Jāmiᶜ al-Zaynī (Ibn al-Mustawfī 1980: I, 221). Scholars sometimes associate this mosque with al-Jāmiᶜ al-ᶜAtīq, implicitly on the basis of the conviction that there was only one congreational mosque in the lower town. This leads them to relate it to Zayn al-Dīn ᶜAlī Küčük (al-Naqšbandī 1989: 140), or to his son, the brother of Muzaffar

[14] This can be proposed on the basis of the only, indirect, evidence— that Muzaffar al-Dīn "accomodated (*askana*)" Sūfīs in it (Ibn al-Mustawfī 1980: I, 214).

[15] For more on this issue, see Ibn al-Mustawfī II: 365, note 2 by the editor. A tomb situated in the western suburb of al-Mawsil can be also mentioned, where the same relic, a stone with ᶜAlī's palm imprint, was saved (hence the identical name, Panja ᶜAlī). Its origins reached, according to E. Herzfeld, towards the close of the eleventh century A.D. at least. Other similar sanctuaries are known elsewhere in Iraq and Persia (Sarre and Herzfeld 1911: 24; 1920: 275, 276).

al-Dīn Gökburī, Zayn al-Dīn Yūsuf (d. 586/1190; Ibn al-Mustawfī 1980: II, 377, note 4 by the editor). We do not exclude possibility that Ibn al-Mustawfī meant by al-Masjid al-Jāmiᶜ al-Zaynī a completely different building. It is also worth mentioning that in several places the sources refer to "a congregational mosque" without giving any specification of its position or patronage (Ibn al-Mustawfī 1980: I, 121, 170, 370; Ibn al-Fuwatī 2003: 54).

To the north of al-Masjid al-ᶜAtīq, there was a *qubba* (a domelike building), which was, with regard to the interpretation of the text, either an independent building or a building attached to the mosque. Ibn al-Mustawfī specifies its position as being to the left of the northern entrance to the mosque, though we cannot exclude the possibility that this information pertained to a different structure inside the mosque compound (Ibn al-Mustawfī 1980: I, 304). The *qubba* was built by Ibn al-Mustawfī's father, Abū al-Fath Ahmad ibn al-Mubārak, and judging by the sources, it was used to accomodate newcoming *ᶜulamā'* to Arbīl (Ibn al-Mustawfī 1980: I, 112, 117, 367). Another building, provably situated in the vicinity of al-Jāmiᶜ al-ᶜAtīq, was a *turba* (mausoleum) of Zayn al-Dīn ᶜAlī Küčük (d. 563/1168; Ibn Khallikān 1977: IV, 114). In the western part of Sector 3, close to the al-Mawsil Gate, there was an extramural burial site, which can be assumed based on the reference to a single grave (of a learned man) made by Ibn al-Mustawfī. This information, however, does not enable us to judge whether the grave was part of a greater cemetery (Ibn al-Mustawfī 1980: I, 374).

Non-localized architectural features

Even though all remaining pieces of architecture are usually being placed in the lower town (al-Naqšbandī 1989; al-Saqqār 1992), our sources put there, unequivocally, only a part of them (without providing enough information to put them into one of the lower town's sectors). We know that somewhere in *rabad* there was a *madrasa* of al-Khidr ibn ᶜAqīl al-Irbilī (sometimes called as al-Madrasa al-ᶜAqīlīya; Ibn al-Šaᶜᶜār 2005: V, 193), who was, according to one indirect allusion made by Ibn Khallikān, its actual founder buried there in a separate cupolaed structure (*qubba mufrada*; Ibn Khallikān 1977: II, 238; see also Ibn al-Mustawfī 1980: I, 366, 368).

Writing on Muzaffar al-Dīn's death, Ibn Khallikān specifies that this happened in the house (*dār*) in the lower town (referred to as *balad*), from where his body was transfered to the citadel and placed in a temporary tomb (later on he was buried at al-Kūfa). The house was originally a property of Muzaffar al-Dīn's *mamlūk*, Šihāb al-Dīn Qarātāyā, which Muzaffar al-Dīn confiscated from him in 614/1217–18 and occasionally dwelled there— hence his secondary residence mentioned above (Ibn Khallikān 1977: IV, 120).[16] Somewhere outside the town wall (*bi-zāhir balad Irbil*) was the aforementioned *zāwiya*, built by Ishāq ibn Ibrāhīm al-Khuzāᶜī.

We suppose that all cemeteries mentioned in the sources were situated in the lower town, or behind its enclosure wall. Those that we have not dealt with yet were: Maqbarat al-Sūfīya (The Sūfīs' Cemetery; Ibn al-Mustawfī 1980: I, 122, 171); *maqbara* in Sūq al-Bayātirīya al-Qadīma (a cemetery in the Old Farriers' Market; Ibn al-Mustawfī 1980: I, 221); Maqbarat al-Zamnā wa al-ᶜUmyān (the Cemetery of Blind and Chronically Ill People), situated "close to the place of their stay" (Ibn al-Mustawfī 1980: I, 185, 241); and Maqābir al-Māristān (The Hospital's Cemeteries; Ibn al-Mustawfī 1980: I, 245). Their possible counterparts, detected through remote sensing, are discussed below in Section 5 (Fig. 21, no. 1). Placing the cemeteries in the lower town also enables us to locate the above mentioned Sūq al-Bayātirīya al-Qadīma (Old Farriers'Market) there, as well as the *māristān* (alternative appelation for *bīmāristān*—hospital)—assuming it was situated in proximity to its cemeteries—and at least one of the social shelters (that/those for blind and chronically ill people) established by Muzaffar al-Dīn Gökburī (see above).

[16] In his translation of Ibn Khallikān, Mac Guckin de Slane understands the term *balad* as being the name of the domain of the aforementioned *mamlūk* (Ibn Khallikān 1843: II, 542) and in this way he moves Muzaffar al-Dīn's place of death out of Arbīl, to the small town (*bulayda*) called Balad, situated next to a ford on the river Tigris in proximity to al-Mawsil (for this locale, see Ibn Khallikān 1977: IV, 5). We find no reason to associate *balad* with this distant place in this case. It is obvious from the vocabulary of our authors that this term was commonly used to describe the town of Arbīl (see, for example, Ibn Khallikān 1977: IV, 114; Ibn al-Mustawfī 1980: I, 317, 374).

The medieval sources offer no signs of spatial concentration of the Christian settlement in the city. Churches and Christian private housing formed a remarkable portion of the lower town's built environment throughout the Sasanian and Early Islamic periods. After several centuries of stagnation, the Arbīl bishopric was restored in about A.D. 1190 (Fiey 1965: 75) and Christian settlement witnessed a one-century-long period of prosperity. By 1295, however, "three splendid churches", probably in the lower town, were utterly destroyed, "down to the very foundations" (Bar Hebraeus 1932: 596). Fifteen years later, during the worst attack against Arbīl's Christians in 1310, four churches were destroyed: the Nestorian church of Išoᶜ Sabhran and his twelve companions martyrs (founded shortly after A.D. 620–21), the Nestorian church of Maᶜanyo, the Jacobite church of Lady Mary and the Armenian church.[17] Also, the metropolitan's residence and many Christian houses were destroyed under the citadel (Wallis Budge 1928: 165–66). Some of the churches were then reconstructed (as was probably the church of Išoᶜ Sabhran), others were perhaps spared (such as early medieval St. Isaac church). Both mentioned structures existed even in 1600 (Fiey 1965: 95), which proves their remarkable 1000–year-long continuity. Unfortunately no church can be located precisely.

The remaining items cannot be, at least with regard to the written sources, connected with any specific part of Arbīl. It applies to Dār al-Mudīf, *qaysarīya*, and shelters for widows, orphans, and foundlings, all established by Muzaffar al-Dīn Gökburī, Madrasa al-Mujāhidīya and al-Khānqāh al-Mujāhidīya built by Mujāhid al-Dīn Qāymāz, as well as to two buildings only known by the persons staying in them, such as *zāwiya* of Ahmad ibn al-Muzaffar al-Kharrāt (Ibn al-Mustawfī 1980, I, 179), and *masjid* of ᶜUmar al-Darzījānī (Ibn al-Mustawfī 1980: I, 367). In another two cases, the location of the building is specified in the way that does not allow any topographical consideration. This applies to Masjid al-Kharrātīn, situated "on the left side of one going to *al-masjid al-jāmiᶜ*" (Ibn al-Mustawfī 1980: I, 170), and *zāwiya* of Muhammad al-Kuraydī (see above), situated in Darb al-Manāra (the Minaret Street), whose position is, however, unknown (Ibn al-Mustawfī 1980: I, 412). We know neither the position nor the patronage of Ribāt al-Manzara (the al-Manzara Lodge; Ibn al-Mustawfī 1980: I, 242, 307), nor Khān al-Saffārīn (the Brass Workers' Khān; Ibn al-Mustawfī 1980: I, 135, 248).

Apart from the Christian houses mentioned above, the common buildings of Arbīl were omitted in the sources. An ordinary architectural and construction quality follows either from Ibn Hawqal's aforementioned account or from Yāqūt al-Hamawī's observation that despite its size, the city was in its design and external appearance similar to a village, which probably means a bulk of mud-brick structures. The city lacked gardens and open watercourses (al-Hamawī 1977: I, 138).

3. Testimony of European travellers

The earliest European traveller's note on Arbīl comes from the work of the Spanish Jew Benjamin of Tudela, who visited North Mesopotamia in 1173; the note, however, includes no details, and one cannot tell whether Benjamin personally visited the town (Adler 1905: 303). From the collected corpus of thirty travelogues of the twelfth to twentieth centuries A.D. mentioning Arbīl, a continuous line commencing in the second half of the eighteenth century can be compiled (Table 1). The quality of the descriptions varies. The authentic, detailed testimonies of scholars who spent more than one day at Arbīl and concentrated their interests mainly on the topography and archaeology of the town are rather scarce (Olivier, Rich, Place, Clément, Fletcher, Lycklama a Nijeholt, Černik, Herzfeld), with very brief accounts based on the first impressions of travellers making short stops or spending a night in Arbīl during their journey from Baghdad to al-Mawsil (or vice versa) more prevalent.[18] Some authors prioritised storyline over description (e.g., Heude, Oppert, Fletcher or Benjamin). The topographic orientation is mostly poor,[19] and no author is concerned with the onomastics of the town, which reveals a lack of local informants and a language barrier. In several cases a personal

[17] These churches most probably were not the same as the churches obliterated previously (Fiey 1965: 89).

[18] Lack of time for more detailed sightseeing was explicitly stated, for example, by Buckingham, Ainsworth, Smith, Rassam or Soane. Many travellers omitted the town completely, prefering the shorter *kelek* sailing on, or using the terrestrial route along, the Tigris river.

[19] The sketched plan of the town occured first in Herzfeld's report.

TABLE 1: List of the travelogues used for analysis

No	*Traveller*	*Year of visit*	*Reference*	*Note*
1	Benjamin of Tudela	1173	Adler (ed.) 1905: 303	personal visit?
2	L. Rauwolf	1575	Rauwolf 1582: 164.	
3	J. B. Tavernier	1643	Tavernier 1713: 245.	
4	C. Niebuhr	1766	Niebuhr 1780: 278.	
5	D. Sestini	1781	Sestini 1789: 245.	
6	G. A. Olivier	between 1794 and 1798	Ehrmann (ed.) 1805: 608–9	
7	A. Dupré	1807	Dupré 1819: 128–29	
8	R. P. G. Campanile	between 1802 and 1815	Campanile 1818 (2004): 48–49.	
9	J. S. Buckingham	1816	Buckingham 1827: 325–27	
10	W. Heude	1817	Heude 1819: 210–14	
11	C. J. Rich	1820	Rich 1836: 15–18.	
12	F. de Beaujour	1829	Beaujour 1829: 77–78.	personal visit? compiled from Dupré 1819
13	J. Shiel	1836	Shiel 1838: 98–99.	
14	W. F. Ainsworth	1837	Ainsworth 1888: 309.	marginal note
15	H. Southgate	1837	Southgate 1840: 215.	
16	J. P. Fletcher	1843	Fletcher 1850: 41–49.	
17	I.-J. Benjamin	between 1846 and 1851	Benjamin II 1858: 85–87.	
18	D. W. Marsh	1851	Salibi and Khoury 1997: 295	
19	V. Place	1852	Place 1852: 456–60	
20	A. Clément	1853	Clément 1866: 263–64.	
21	H. Lobdell	1854	Salibi and Khoury 1997: 452	
22	J. Oppert	1854	Oppert 1863: 281–83.	
23	T. M. Lycklama a Nijeholt	1867	Lycklama a Nijeholt 1875: 89–96	
24	J. Černik	1873	von Schweiger-Lerchenfeld 1876: 1–2; von Schweiger-Lerchenfeld 1882: 334–35, XXXVIII.	
25	G. Smith	1873	Smith 2002: 47.	
26	H. Rassam	1878	Rassam 1897: 196.	
27	W. H. Ward	1884	Ward 1886, 15–16.	
28	E. Sachau	1898	Sachau 1900: 111–13	
29	E. B. Soane	before 1912	Soane 1912: 108–113.	
30	E. Herzfeld	1916	Sarre and Herzfeld 1920: 313–18.	
31	A. M. Hamilton	1928	Hamilton 1937: 43–44.	
32	ʿA. S. al-Kūrānī	1931	al-Kūrānī 1939: 118–20	

visit to the town is doubtful (Tavernier, de Beaujour). A substantial part of most of the reports is comprised of the narrative of the battle of Arbela in 331 B.C. and various attempts at identifying the battlefield.

When we leave aside the astonishment provoked by the size of Arbīl's tell, the second basic impression of most of Arbīl's visitors was the division of the town into the upper part on the top of the tell and the lower part adjacent to the south gate of the citadel. The authors provide surprisingly sparse information about the city on the tell summit. Its description is given mostly in from below and at a distance, and most of the travellers apparently avoided visiting the citadel, either due to time constraints, the barely penetrable labyrinth of narrow paths among houses in bad condition, or the presence of the garrison and strong Turkish troops. Even though the travellers describing the citadel were concerned mainly with its external appearance, their information about the citadel's fortifications is far from reliable. Carsten Niebuhr (1766) and several later authors (Rich, Fletcher, Herzfeld) defined the citadel's perimeter as a continual front of mud brick house façades, while others saw the perimeter wall with bastions (Shiel), gun niches (Dupré) or towers (Černik). Only Clément explicitly noted in 1853 that the citadel wall was built of mud-brick; according to Southgate

the wall was in better condition than that around the Kirkūk citadel (Southgate 1840: 215), where the mud-brick wall with bastions is preserved till today. Victor Place remarked that the cracked wall stood on the very edge of the summit, that one could not walk around it and suprisingly it had not collapsed yet. From the views of the citadel, published in Rich's Narrative (Rich 1836: 14–15) and Sachau's account (Sachau 1900: 113), it is obvious that the basic element of the citadel's fortification is the perimeter wall, pierced irregularly at several places by the aforementioned features and windows of adjacent houses. House façades began to replace the wall in great measure only from the late nineteenth century onwards. Ernst Herzfeld saw the result of the process in 1916, as photographs of the same date attest. The travellers mostly perceived only one, south, gate: a massive, mud-brick structure with a long, narrow gateway, accessible by a side ascent and over a drawbridge (Fletcher: 1843).[20] The citadel's much less noticeable north-east entrance (today's Gičik Kapi) was mentioned sporadically (first indirectly Heude, Fletcher, Sachau, Herzfeld). The stone cladding of the citadel's slope was still visible (Černik); a large ditch around the foot of the hill, partly filled up, appeared in the descriptions only until the beginning of the nineteenth century (Sestini, Olivier, lastly Dupré 1807).

The travelogues relate only blurred and sketchy information about the inner structure of the citadel. The bad condition of the buildings, the number of ruins, empty houses and streets without busy traffic were repeatedly emphasized between 1815 and 1867 (Campanile, Buckingham, Heude, Clément, Lycklama a Nijeholt). A. Clément depicted a sharp contrast between the busy lower town and the silent, almost dismal atmosphere of the citadel. This impression does not occur later, and this general shift in the citadel descriptions also supports the hypothesis of rapid repopulation and building transformation of the citadel during the second half of the nineteenth century. Reports from the late eighteenth and early nineteenth centuries note the presence of a strong corps of Janissaries from Constantinople and elsewhere (Niebuhr, Olivier, Heude, Fletcher), which means that old barracks with several Syriac (Christian) inscriptions, demolished at the beginning of the nineteenth century (Cuinet 1892: 847–48, 856–58), were most likely located on the citadel. The garrison building and the provincial prison flanked the central square in the south entrance part of the citadel. The residence of the local governor (*mudīr*) was situated perhaps in the same area, mentioned by Heude, Fletcher and Lycklama a Nijeholt, who all visited it themselves. According to Oppert and Lycklama the citadel was settled by Turkish authorities, the houses were simply built of stone (!?; Lycklama a Nijeholt) or more plausibly of bricks and clay (Clément, Place), their high, plain walls flanked by towers had almost no openings. J. Černik perceived that the upper town consisted of private merchants' houses and official residences of *qā'imaqām*s. He alone stated the exact number of three mosques in the upper town; more than forty years later, Herzfeld mentioned one mosque in the citadel area, obviously identical with today's mosque of Mullā Afandī. Lycklama a Nijeholt describes his visit to an age-old peristyled church converted to a mosque, with a tall minaret added: this building was certainly located on the citadel, but at the same time cannot be identified with the Mullā Afandī Mosque, which does not correspond to this description.[21]

Local tradition about the findings of inhumation burials in the past or about large, vaulted subterranean spaces built from unstamped bricks of large dimensions did not escape several authors' notice (Rich, Oppert, Schweiger-Lerchenfeld). An interesting piece of information mentioned nowhere else is Campanile's account of a water source, which spouted in the middle of the fortress and powered a watermill, as well as the description of the poor, corrupt goldsmiths and many home-slippers-makers. The emphasis on a lack of sources of drinking water in the citadel (Clément) seems more realistic.

More precise data were gathered about the town in the plain. Reflections of dynamic urban development of this quarter during the nineteenth century can be clearly seen in the reports: while Niebuhr (1766) outlined it as "only several bad houses" and subsequent authors omitted the lower

[20] The tradition about the construction of the south gate in 1860 (al-Naqšbandī 1989: 151, note 14) contradicts these continually identical descriptions of the structure.

[21] The mosque of Mullā Afandī acquired its present form through rebuilding in an Ottoman-Qajar style, completed some twenty years before Lycklama's visit (Sarre and Herzfeld 1920: 314).

town completely, from Buckingham (1816) onwards the building quality and busy trade activity of the lower town were emphasized.[22] At exactly the same time, mentions of the wide ditch surrounding the tell vanished completely, which might mean that the expanding lower quarters had reached the foot of the tell and the filled-in ditch had been partly used as a perimeter street. Yet in 1837 the lower town was concentrated in a depression below the citadel's gate so that no houses were visible for someone who was approaching (Southgate). J. P. Fletcher (1843) described the building of the lower town as "straggling" but at the same time remarked that the houses were constructed mostly from bricks, were covered with white-wash or cement, and the principal streets were well drained. Mentions of the communal buildings of the lower town gradually become more numerous and diverse. From the 1810s onwards, visitors noticed one or two *hammāms* and several caravanserails serving the many travellers passing through Arbīl (firstly Rich; Lycklama a Nijeholt specified the number of these facilities as four). Herzfeld first listed two small mosques and several unimportant cupola-domed mausolea; some of these were located in the east proximity of the citadel hill (Fletcher). An attempt to erect a new synagogue was made around 1850 (Benjamin 1858: II, 87), which indicates that an older synagogue probably existed on the citadel.[23] The commercial traffic of the town was concentrated into three or four busy, well supplied bazaars covered by boughs with leaves. During the last decades of the Ottoman era (surely after 1867), the open bazaars were replaced with a vaulted *qaysarīya* (*bedesten*), first mentioned by Herzfeld in 1916.

It is clear that the settlement area in the plain, formerly of poor building quality and a low level of urbanization, underwent spatial and architectural transformation during the first half of the nineteenth century, expanding and assuming a position along the southern foot of the citadel hill. The nucleus of the Ottoman lower town developed without any sign of continuity with its medieval predecessor, ruins of which surrounded the Ottoman settlement, as the travelogues repeatedly described. Apart from the minaret Čoli situated among the brick ruins of a "great mosque" (as seen by Niebuhr, Rich and, for the last time, Fletcher), all the vast field of settlement traces had the form of merely relief-modelled remains and debris heaps among which no structures could be recognized (thus explicitly Rich and Shiel). The area of the visible remains was not specified in detail, but its maximum extent may not have exceeded the perimeter of the ruined town fortification, which was clearly visible until the first half of the twentieth century. One can probably find the first mention of the partly destroyed town walls in the writings of the Bavarian Renaissance traveller Leonhard Rauwolff, who visited Arbīl in 1574: the town in the plain was apparently in an advanced stage of decay at that time. The enclosure consisted of a collapsed wall (from mud-brick, after Shiel) and a ditch: their sections were recognizable in the vicinity of the lower town, particularly in the southwest (Rich) and southeast (Herzfeld).[24] The ditch still helped to drain the area when the local wadi Saʿid Hawa Dere (i.e., the aforementioned medieval *bast*) was overfilled with floodwater (Černik). The overall size of the abandoned town has been compared by Rich to the size of nineteenth-century Baghdād, which amounts to about 3 km^2 (Wallis Budge 1920: 109).[25]

4. Archaeological topography

The Arbīl citadel occupies an irregularly oval summit of the completely artificial tell[26] which rises 25–32 m above the plain (Fig. 1). The maximum dimensions of the summit are 430 × 340 m, and its total area is 10.2 ha. Its dense settlement is structured by a fan-like network of lines converging towards the citadel's south gate, demolished in 1960. This organically-grown pattern was disturbed in 1958 by a 12 m-wide boulevard cutting the citadel in a north–south direction. The architecture of the citadel has been the subject of several evaluations (e.g., Hasan 1985; Sahid 2004; Nováček 2008); for the purposes of this paper, the most important conclusion is that no surviving structure or house nucleus can be dated earlier than to the Late Ottoman period. The mosque of Mullā Afandī and

[22] Except for Heude's mention of "bazars and dirty lines" under the citadel (1817).

[23] Brauer (1993: 249) knows of the so-called Slōlet Qalʿa (the Citadel Synagogue), reputedly from the sixteenth century.

[24] Herzfeld plotted the situation of the short portion of the southeast wall on a sketch map (Sarre and Herzfeld 1920: Abb. 294).

[25] Schweiger-Lerchenfeld estimated the deserted town area to be as large as 4 km^2, but his information did not come from first-hand data.

[26] The hypothesis on the basis of a geophysical survey in 2006 (Nováček et al. 2008) has been recently confirmed by drilling (Colliva *et al.* 2011: 45).

adjacent bath (*hammām*) are exceptions that originated in the eighteenth century (Muhammad Amīn 2008; Mohamed 2009) and their floors sunken *c.* 190 cm under the current surface give a good idea about the levelling dynamics in the central part of the citadel throughout the last three centuries. The demolished south gate, mosque of Mullā Afandī and bath are the only known firm points of the citadel's pre-modern urbanistic structure; the chronology of the street pattern remains unclear.

Research on the citadel is at its very beginning, and as yet has produced only preliminary data on stratigraphy and settlement history (Nováček *et al.* 2008). Several Parthian and medieval finds were obtained by chance during previous building activities and irregular digs in the citadel area (Rassam 1897: 196; Sachau 1900: 112; Unger 1928; Lehmann-Haupt 1928: 272). Some unpublished observations were made during the building of the new south gate in 1979 and later, during reconstruction of the ascending entrance street. Historical accounts repeatedly bear witness to the citadel's underground (see previous chapter); a cavern or tunnel of unclear origin, leading up to the citadel, was reputedly revealed during a partial removal of the eroded west slope of the hill (al-Naqšbandī 1989: note 26; Ghaidan and al-Dabbagh 2005). The main component of the citadel fortification, a massive mud-brick perimeter wall described in the travelogues by Place and Clément (see above), was recorded in November 2009 in two sections created by demolition of the south gate in 1960 (Fig. 4). The inner face and adjacent, 2 m-thick body of the wall, constructed from 6.5–7.5 cm high mud-bricks, is visible on the east section. The face is covered by an ochre, loamy embankment with the presence of Late Islamic pottery fragments (plain, creamy, hard fired ware). On the opposite west section, the nearly complete wall profile with a thickness of 5 m remains accessible for more detailed observation (Fig. 5).

No apparent structures of pre-eighteenth-century periods have been identified in the lower city, south and east of the citadel. The mosque of al-Hājj Dāwūd in the *sūq*, 200 m south of the south citadel's gate, considered to be the largest and oldest mosque in this quarter, was erected in 1212/1797,

Fig. 4 The Arbīl citadel, reconstruction of the south gate's outline and fortification course according to a cadastral map from the 1920s (hatched), location of sections with remains of the perimeter wall (a, b), heritage houses (dark grey).

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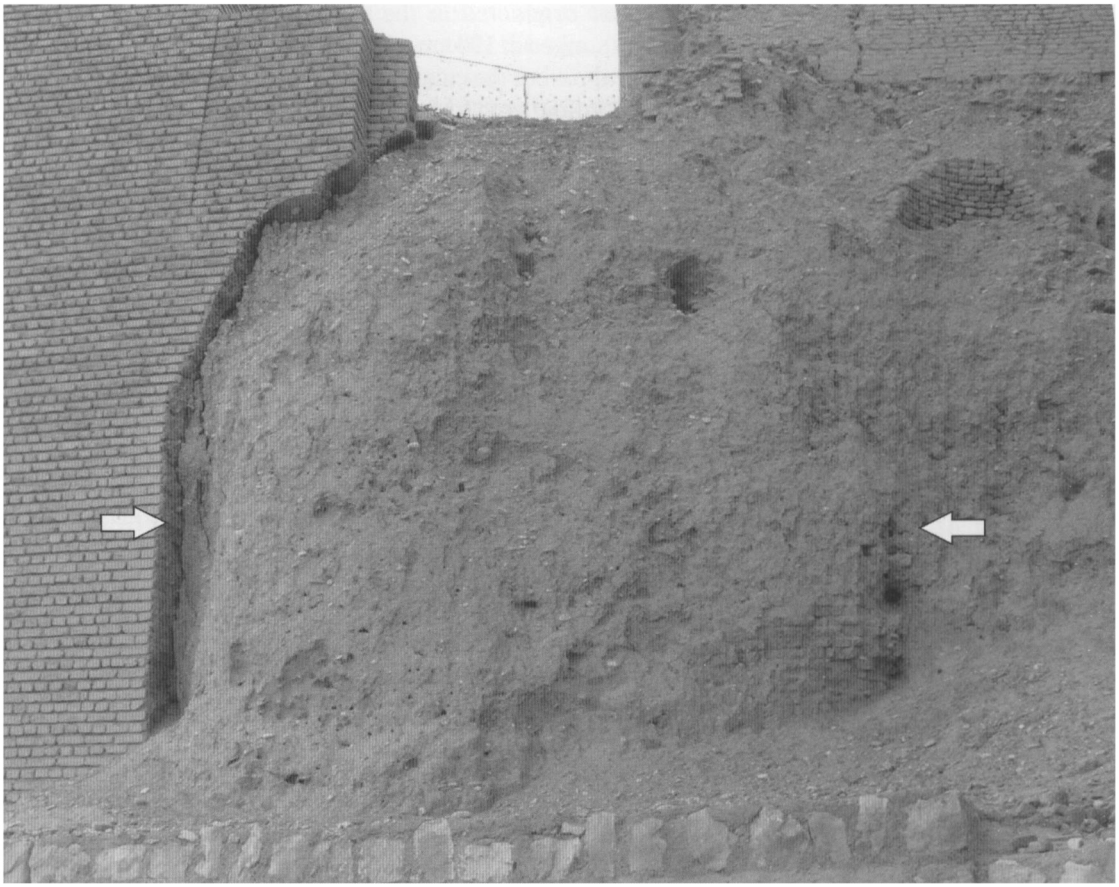

Fig. 5 The Arbīl citadel, west section of the mud-brick perimeter fortification with faces highlighted by arrows (see Fig. 4: a).

as its dedication inscription bears witness. The building has no visible earlier phases.[27] Several other buildings (e.g., a preserved part of an Ottoman bath and the nearby mosque of al-Hājj Mawlūd in the al-Khānaqā Quarter; several mausolea) might be dated at the earliest to the eighteenth to nineteenth centuries. Today's Mosque of al-Kaff, known as a shrine from the thirteenth-century sources (see above, Section 2) and situated 400 m northeast of the citadel's south gate, is entirely recent. Its possible association with its medieval counterpart is indicated only by one fragment of limestone frieze bearing a relief inscription which is preserved in the shrine's sacral grave.[28]

Differences in the microrelief of the surface under the citadel might be a sign of settlement dynamics. Even after all the dramatic changes caused by modern building development, some areas of the city are still situated on slight elevations. This is the case, for example, with the al-Khānaqā Quarter in the south-east proximity of the citadel. The stratigraphy of the upper part of that elevation has been recorded in the southern part of the quarter, on perimeter section of a partly sunken parking area (survey by the authors and J. Jamīl Asʿad, October 11, 2009; Fig. 21: a). The accessible, *c.* 120 cm-high stratification consists mostly of mud-brick rubble with the presence of a creamy, hard fired, well levigated ceramic ware (plain, exceptionally with turquoise glaze) dated to the Middle or

[27] During the radical rebuilding of the mosque in May 2008, four levels of the courtyard pavement were recorded. The earliest one, laying on a thick, seemingly sterile layer at a depth of about 50 cm, consisted of square baked tiles (observation by P. Justa and M. Houska, GemaArt Group, Prague). Nevertheless, the pavement cannot be linked with any older structure.

[28] The form of the script allows approximate dating to the thirteenth to seventeenth centuries; the fragment, however, is not readible. The earliest known form of the building—a very modest structure visible in the aerial photos from 1936, consisting of one cupola and a small adjacent enclosure—apparently could not have borne this frieze.

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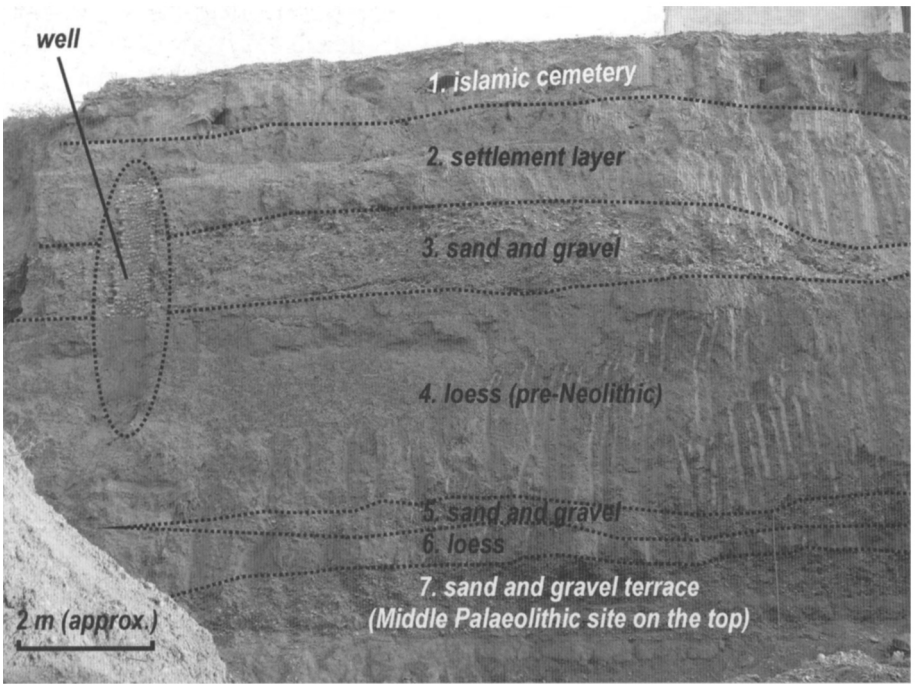

Fig. 6 Arbīl city, south section of the Bazari Ništiman's building pit with a stratigraphical interpretation.

Late Islamic periods. An analogous situation, labelled as a truncated tell with traces of both settlement and funerary activities of Late Assyrian and post-Assyrian periods, has been observed in the surroundings of the Neo-Assyrian tomb, discovered 675 m NW of the citadel's south gate (Fig. 13, a; Ess *et al.* 2012). Before the truncation, these differences in elevation within the city could indeed give the impression of an "invisible lower town" as referred to by Horatio Southgate in 1837 (see above, Section 3).

The stratification of the city could also be accessed via the 9 m deep building pit of the new shopping mall (the so-called Bazari Ništiman), 550–700 m SSE of the citadel's gate, a basic evaluation of which was done in November 2009 and November 2010 (survey by the authors, P. Šída, M. Dudík and A. Muhammad Sa'id). The sequence of cultural layers (Fig. 6) commences with a sand-and-gravel terrace bed, with concentrations of the Middle Palaeolithic stone industry of Mousterian cultural affiliation on its surface. This surface has been covered by a 3.5 m thick loess stratum, most probably of pre-Neolithic origin, and another sand-and-gravel sediment on top. Then a group of undated settlement strata, up to 2 m thick followed, while an Islamic funerary stratum, 1 m thick at its maximum, was observed on the top of the sequence. A cylindrical, *c.* 5 m deep well with a stone lining, suggesting a well of a subterranean aqueduct (*kahrīz*), was cut by the south section; its integration into such a system was not found on the section. Most likely, another *kahrīz* well was cut on the west section of the building pit, superimposing at a depth of *c.* 2.50 m from the surface a small, cornered structure of burnt bricks (a tomb?) (Fig. 13, c). The general stratigraphy of the west section was the same as that of the south one; the thickness of the upper settlement layer varied from 2.0 to 2.6 m.

The only medieval architecture preserved above ground at Arbīl, the minaret commonly called Čoli, clearly occupies a key position in any topographical considerations. The building is situated 950 m WSW of the citadel's south gate, far beyond the border of the Ottoman lower town. The minaret does not have any clear counterpart in the available medieval sources;[29] local tradition, however, links the building unambiguously with the vanished congregational mosque, the so-called

[29] Scholars sometimes tend to associate this minaret with the only reference to a minaret in the medieval sources, the Darb al-Manāra (the Minaret Street; see al-Naqšbandī 1989 and Section 2, above).

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Ancient Mosque (al-Jāmiᶜ al-ᶜAtīq). Among many published reports (Rich 1836; Creswell 1926, 295; al-Qazzāz 1960; Husayn 1962; Ulucam 1989, 123–124; Ahmad 2007), Ernst Herzfeld's elaborate analysis and interpretation remains a decisive contribution to this matter. Herzfeld challenged the relationship between the minaret and the mosque through the argument that one should assume a more central position for the town's great mosque. On the contrary, he linked the minaret with al-Madrasa al-Muzaffarīya, built between 1190–1211, a view partly supported by art-historical dating of the minaret (Sarre and Herzfeld 1920: 318). The minaret should be set into the south-eastern corner of the *madrasa*.

Sondages made during the second to last restoration of the minaret in 1960–1962[30] revealed a different situation: the minaret was situated in the north-west corner of a now-vanished enclosure formed by a 145 cm thick wall constructed of baked brick. The north–south extent of the enclosure could be estimated at 57 m (Fig. 7). The azimuth of the building was 170°, *c.* 25° less then the correct *qibla* in Arbīl should be. Three levels of pavement were unearthed in the inner area, the earliest one at a depth of more than 150 cm from the current surface. The building was identified with the Ancient Mosque and its cornerstone was hypothetically laid, based solely on the bricks' dimensions, in the Umayyad or early Abbasid periods. The minaret might have been built into the structure secondarily, separated by a joint from the inner face of the wall (Husayn 1962).

Despite these observations, some indications show the functional relationship of both structures—the minaret and the enclosure—as doubtful and allow us to go back to the former presumption of Herzfeld linking the minaret with another building situated in its north-west vicinity. The excavations in the 1960s did not solve the question of whether the unearthed wall should be considered the foundation of a courtyard frontage or outer wall of the hypothetical mosque.[31] The placement of the minaret in the courtyard corner would represent an unparalleled solution in medieval mosque architecture. On the contrary, the second possibility supposing the minaret's connection with the mosque's perimeter wall is in contradiction with the construction details and disposition of the minaret itself. Its west-facing portal, opening at half the height of the octagonal lower storey, was apparently entered from the roof of a connected building and would not have been fully functional in the case of original close contact with the unearthed enclosure.[32] The octagonal lower storey of the minaret was secondarily extended to the north-west by a rectangular support of a conspicuously worse quality, obviously at a time when the minaret had lost its natural static support from the adjacent buildings. On both edges between the original octagon and the later support, the demolished continuations of the brick lining are visible (including the decoration pattern of the *hazarbaf* type), oriented straight to the north-west. It is obvious, therefore, that the plan of the minaret's base (approximately up to the middle portion of the lower storey) was not originally a regular octagon, and both continuations connected the base with another, now vanished structure. An effort to reduce the thickness of the two walls, which probably extended from the minaret at right angles to the north and west, might be the reason for the façade's axial deformation (Fig. 8).[33]

The dating of the minaret remains debatable.[34] Herzfeld was doubtful about the existence of the dedicatory inscription (Sarre and Herzfeld 1920: 316, Anm. 1). But the local historian H.

[30] The archaeological excavations possibly continued until 1982 [sic?] without any results known (Demirji 1982: 13).

[31] An opportunity to gain deeper knowledge of the archaeological complex, which emerged during the landscaping around the minaret in 2006–2007, has been missed.

[32] The importance of this entrance into the minaret's tube was stressed by fact that at least the western ground floor entrance is a supplementary feature, while the eastern one has been remodelled during the twentieth century to such a degree that the question of its authenticity cannot be answered and its original form cannot be recognized.

[33] It is to be mentioned that this relationship of the minaret to an adjacent structure is analogous to the minarets in Sinjār, Daqūq and Abū Sudayr which represent, together with the Arbīl's minaret, a very homogenous group of buildings. All the minarets were interconnected by their octagonal bases with contemporaneously built mosques (Creswell 1926: 295), and the thickness of the perimeter walls occupied the whole width of one side of the polygonal façades. In Sinjār and Daqūq, the consoles under the roof of the mosque's courtyard wing are preserved in the right angle contained by walls extending from the minaret, and the minarets clearly were accessible from these roofs. While the minarets mentioned are relatively slender, the Čoli's sides are roughly of double length which provoked the necessity of reducing the thickness of the walls running out in the way described.

[34] The dendrochronological sample was also taken from the lintel of the uppermost window and delivered in 2007 to the M. and C. Wiener Laboratory for Aegean and Near Eastern Dendrochronology, Cornell University, Ithaca, New York. Unfortunately, the laboratory has not been able to provide any information about the fate of the sample as yet.

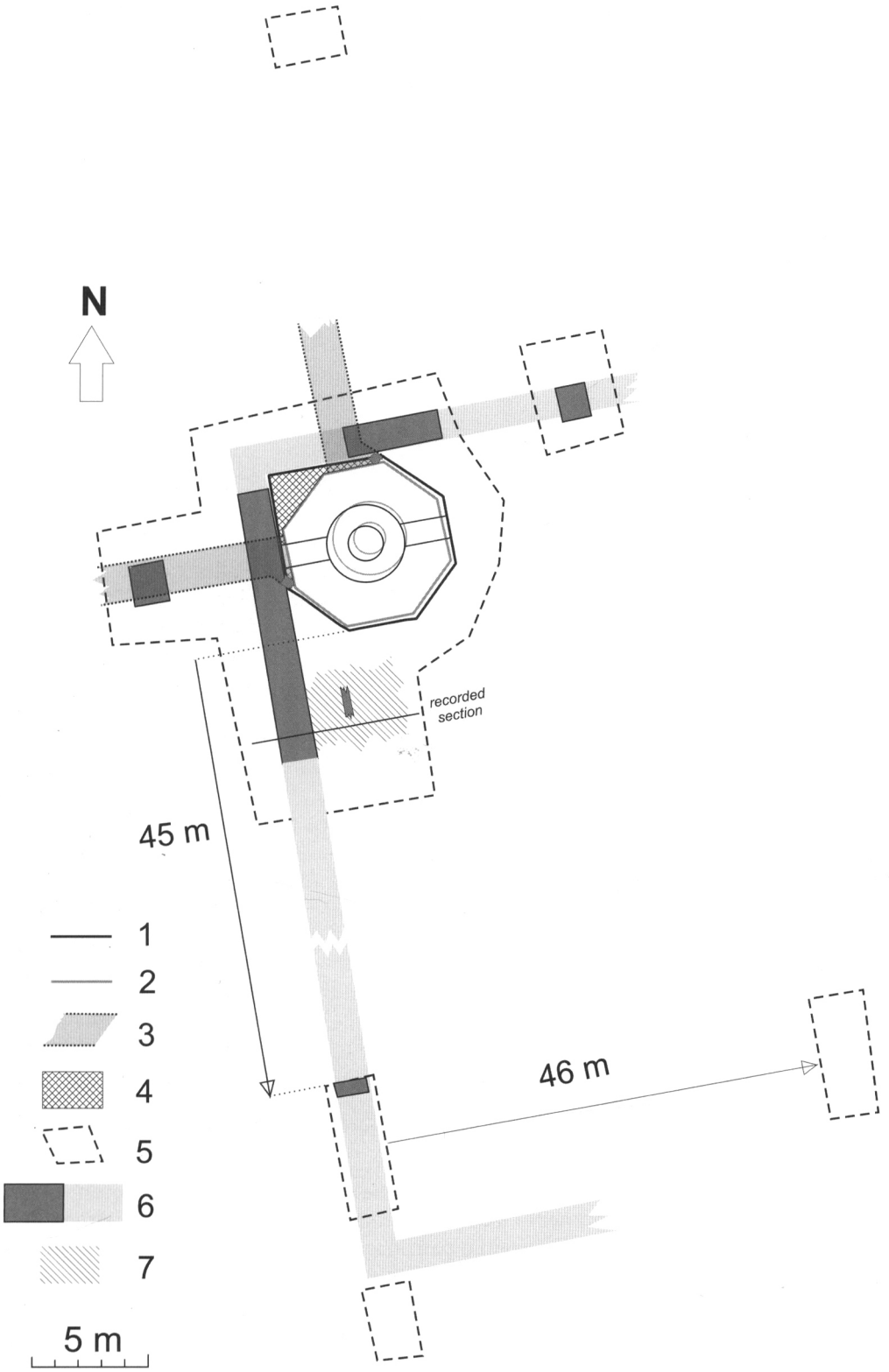

Fig. 7 Arbīl, the Čoli Minaret, groundplan with structures unearthed in 1960–62 and reconstruction of the adjacent structure: 1 – groundplan of the minaret's base, 2 – groundplan in the level of the entrance from a roof, 3 – conjectural plan of the *madrasa*'s (?) perimeter walls, 4 – the additional support, 5 – excavated areas, 6 – the wall foundations both unearthed and conjectural, 7 – pavement (drawing by K. Nováček, sources: Husayn 1962, plan of minaret provided by Gema Art Group, Prague).

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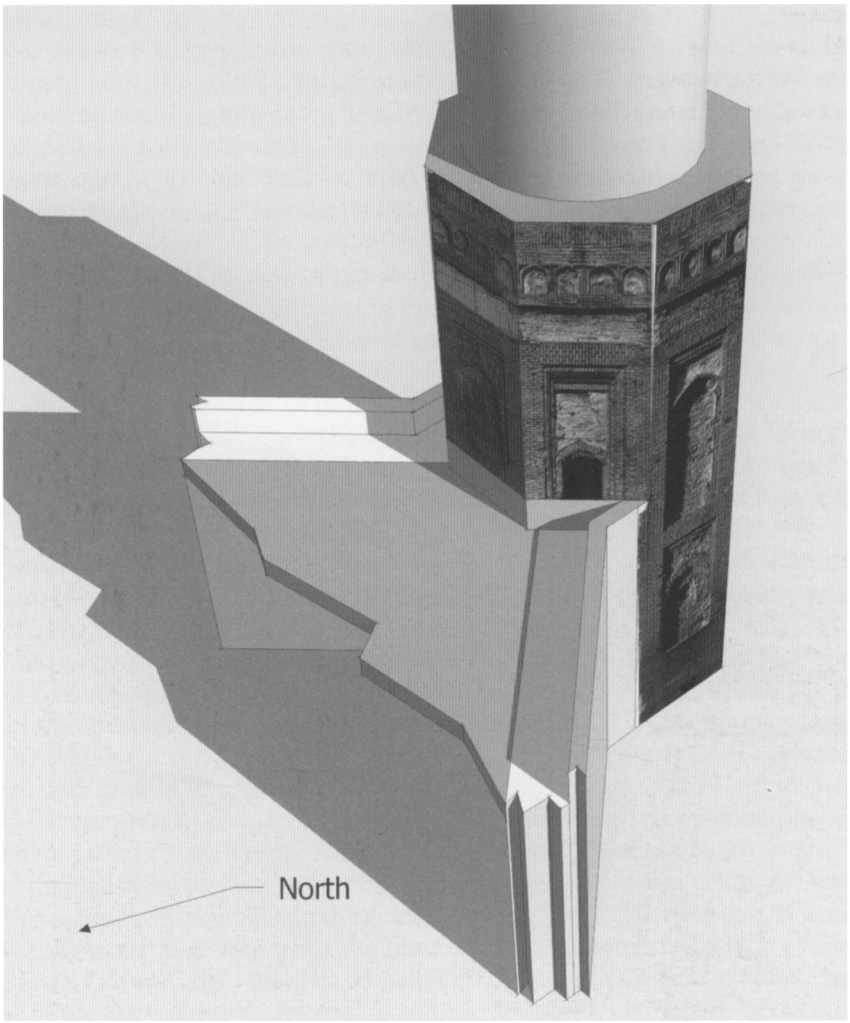

Fig. 8 Arbīl, the Čoli Minaret, digital axiometry with a reconstruction of the adjacent medieval building.

al-Naqšbandī (al-Naqšbandī 1989: 141) and recently the survey of the façade and conservation of the minaret (a Czech project carried out in 2006–2009) did confirm the position of an inscription in the niche of the west entrance originally leading from an adjoined roof. The inscription panel is clearly legible,[35] but the inscription has a character of mere identification of the architect or master builder and does not contribute to dating of the structure.

Therefore, one can conclude that sometime around the turn of the thirteenth century the minaret Čoli was erected in the southeast corner of a contemporaneously built, rectangular structure—most probably one of the *madrasas* under Begteginid patronage. The archaeologically detected structure which included the minaret in its north-west corner must be of a later date, since its enclosure was already attached to the secondarily built support of the minaret. Both structures—the enclosure and the minaret´s support—were apparently erected within a close time span, after the demolition of the complex of which the minaret was originally a part.

[35] *ʿAmal al-Hājjī Masʿūd ibn Abī Saʿd* ("the work of al-Hājjī Masʿūd ibn Abī Saʿd").

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5. Remote sensing

Substantial elements of Arbīl's past topography were revealed by the analysis of aerial and satellite imagery taken between 1936 and 1968, at the beginning of the vast urban expansion. The bulk of data could be obtained from a stereo-pair of orthogonal photographs with high resolution, taken during the Royal Air Force mission in January 1951 when the area of ca. 1860 x 1460 m was documented with the citadel in the north section.[36] A collection of oblique aerial photographs added further details.[37] For the study of wider context of the landscape, this pair of images was combined with stereo-paired images from Corona KH-4B satellites.[38] High resolution satellite image QuickBird-2 was used (Fig. 9) for the planimetric identification of features in the current urban landscape.

Fig. 9 Remains of the Assyrian and medieval Arbīl in the context of modern building (over the satellite image from 2005). Location of the ortophoto and oblique photo details with the corresponding numbers of figures.

[36] The only stereo-pair of images (perhaps formerly from a larger set) is archived in the John Bradford papers in the Pitt Rivers Museum, University of Oxford, no. 1998.296.67 and 68. John Bradford himself used it marginally, as a methodological example for reading stereoscopic images. One of the images has recently been published as an illustration in a paper on a different topic (Wilkinson 2008: figs. 1, 8).

[37] Aerial views of the citadel from 1936 (Hamilton 1937: 48) and 1957 (archive of GDA, Arbīl), a set of oblique photos taken by the RAF in 14. 11. 1938 (kept in the archives of the Archaeological Institute, University College of London, negative nos. 13852–13859), image taken in 1947 by Simmons Aerofilms (copy in the London Museum's exhibition).

[38] The images were taken in 1968, February 28th (mission no. 1039–2), 1968, August 16th (mission no. 1104-2) and 1970, June 4th (mission no. 1110-2) and are accessible on http://edcsns17.cr.usgs.gov/NewEarthExplorer/

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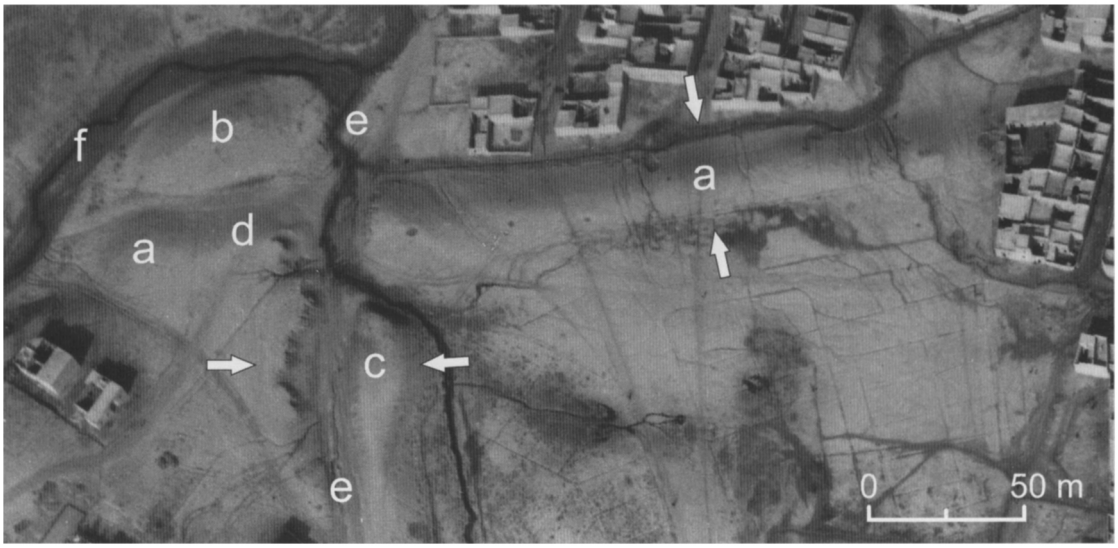

Fig. 10 Northern portion of the Fortification System I (a) in the RAF image (January 1951). The hypothetical remains of a gate (b) in front of a rampart break (d) and an inner rampart (c) partly damaged by a hollow way (e) are visible on the left. The remains are bounded by wadi Šaykh Qazi (f) using the original ditch course.

Town fortifications

Two different systems of town fortification were identified. Fortification System I consisted of a *c.* 22 m thick massive rampart body, an outer ditch and a steep slope (glacis?) between them (Fig. 13, nos. 1, 3). The best preserved, *c.* 275 m long segment with all the components clearly visible in high relief was located NW of the citadel in the al-Mustawfī Quarter. It is positioned west of Pziškan Street and was flattened and built-up at the turn of the 1950s and 1960s (Fig. 10). Slight relief traces of the rampart and ditch are still apparent in the microrelief in the north part of the city in the form of moderate elevations and depressions (Fig. 11). In the neighbouring section to the south-west, the ditch changed (secondarily?) to riverbed of the wadi (*čay*) Šaykh Qazi,[39] which caused almost total erosion of the rampart. Beyond its confluence with Saʿid Hawa Dere—the meandering wadi passing through the town area from east to west[40]—the remains of the ditch turn south-east, as is visible in the satellite images partly as shadow marks and partly as soil/crop marks (Fig. 13, no. 2). On the south side only short fragments of the rampart or ditch's counterscarp are identifiable, because of advanced housing and infrastructure development. The south-eastern and eastern town fringes were occupied by gardens and orchards as early as at the turn of the twentieth century, and no remains of archaeological features are visible there at all. North-east of the citadel, two branches of the system were identified which are clearly not contemporary. While the inner branch formed a pronounced arch and joined with the citadel mound in a way which left the east portion of the tell open to the landscape, the outer branch formed a rectangular corner with another settlement mound set in it (Fig. 12). The continuation of this branch to the south is visible in the images at a length of only *c.* 400 m. The orthogonal as well as oblique photographs make it possible to assess the chronological relationship of the two different fortifications on a highly hypothetical level: the ditch of the inner branch seems to cut the connection between the rampart of the outer branch and its continuation to the west, while the inner rampart runs continuously, indicating a later date for the inner branch (Fig. 15).

Among features clearly connected with this fortification system, the trace of a wide and perhaps original interruption in the rampart is to be mentioned. It was added on the outer side with a parallel mound of a size of *c.* 65 × 35 m (Fig. 10, b). Another fortification, which can be followed to the

[39] cf. the observation of J. Černik in 1873 in Section 3 above.

[40] i.e. the aforementioned *bast* referred to in the medieval sources—see Section 2 above.

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Fig. 11 Remains of the Fortification System I visible in the micro-relief of the lane parallel with Tairawa Street (facing north).

south, was about 150 m long and began at the east end of the interrupted rampart (Fig. 10, c). The situation, later disturbed by fluvial erosion and the cutting of the hollow way to 'Ankāwā, can be regarded as a remnant of the massive avant-corps gate and a trace of an inner division of the fortified area.[41] The whole of Fortification System I enclosed at least an area of 330 ha including 14 ha of the northeast, "outer" branch; the uncertainty of the estimate is caused by the lack of evidence in the large area southeast and east of the citadel (Fig. 13).

Fortification System II was of different construction and enclosed somewhat different area, although some segments of System I were reused. The enclosure was represented by a wall (from mud-brick, as J. Shiel witnessed, see Section 3 above) accompanied by an outer ditch (Figs. 14, 15, c, 20). According to the imagery, the individual portions of the wall differed both in design and in degree of preservation. The system formed curved lines on the north and south sides of the citadel mound which was set asymmetrically between them, therefore the south area was more than six times wider than the north stretch (Fig. 21, no. 7). The north section irregularly approaches the citadel perimeter at a distance of 140–400 m. The north-western part, preserved as far as the area of

[41] The place is located 250 m south of the Nawrūz Square in the al-Mustawfī Quarter, which is now totally built-up by private houses.

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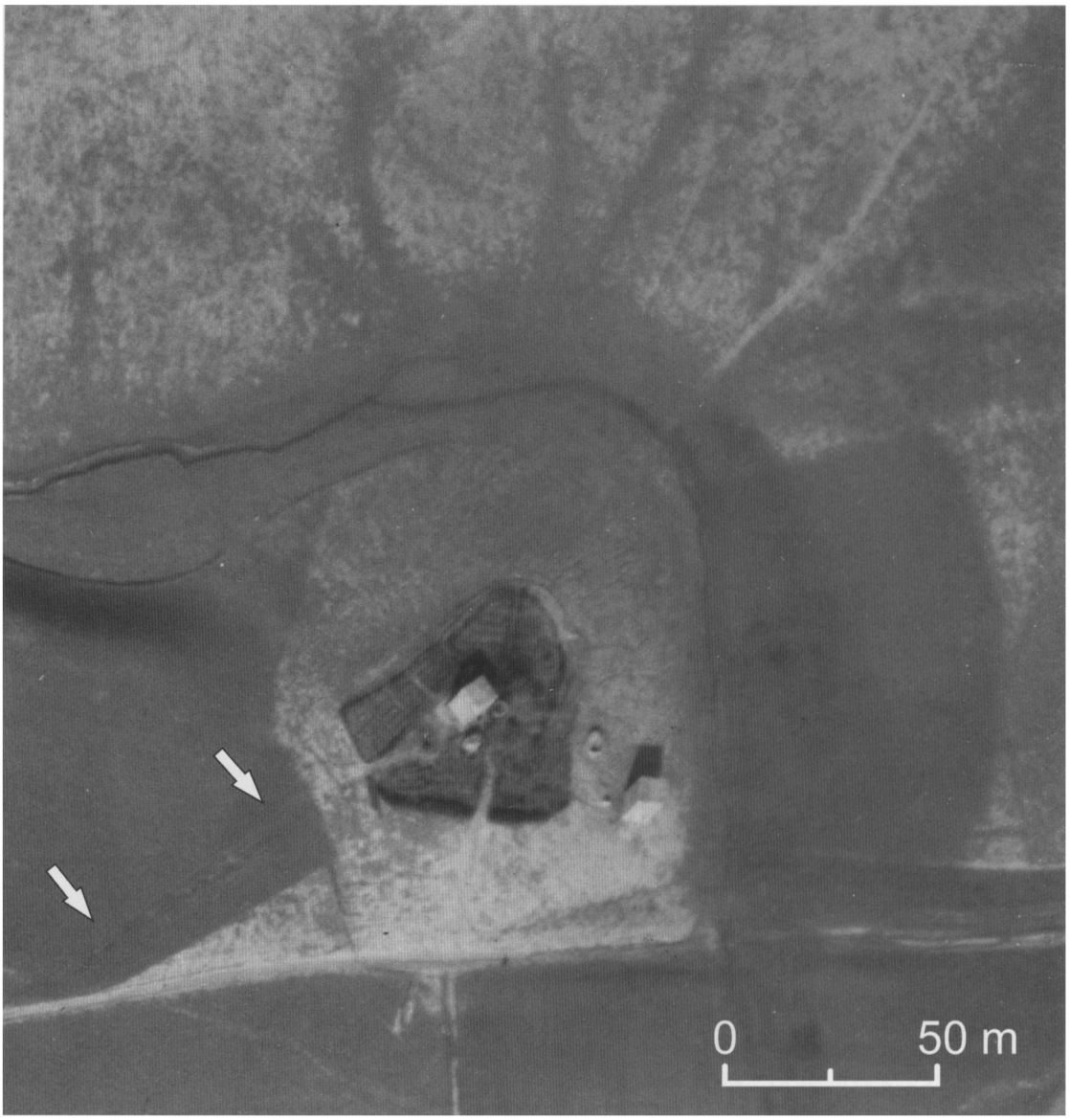

Fig. 12 Fortification System I, the settlement mound in the northwestern corner of the rampart (detail of the RAF image, 1951), a recent *kahrīz* highlighted by arrows.

today's building of Arbīl's governorate (Fig. 18, a), seems to have a continuation heading southwest in the form of a conspicuously straight road running on an embankment which might represent the flattened body of a destroyed wall. The most distant traces of the wall seem to be visible on contact with the western termination of System I and to the west of it.[42] On the southeastern side, the destroyed wall features a series of lighter spots on top, lying close to each other at regular distances (*c.* 4–7 m). They possibly represent small, eroded towers or buttresses, constructed from a different material (Fig. 16). These elements do not appear on the well-preserved north-eastern portion of the wall at all. Instead, four mounds were documented there, protruding out from the

[42] The place where both fortifications overlayed each other was situated, according to satellite images, *c.* 700 m SW of the Čwar Šra Square in the Ništiman Quarter, and was surveyed in November 2011 to little avail: the area has been recently devastated by scrapheaps and the construction of the town's main sewage system.

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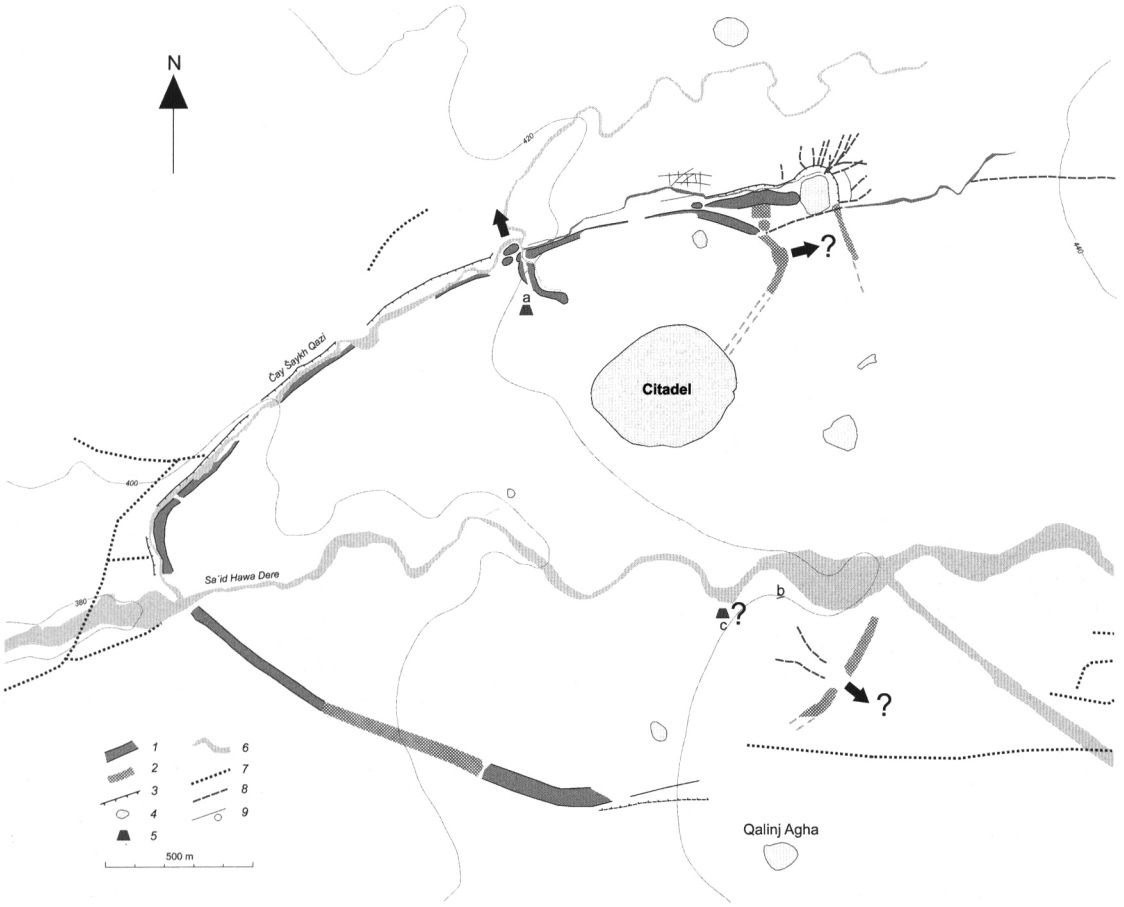

Fig. 13 Plan reconstruction of Assyrian Arbail based on satellite/aerial imagery and survey: 1 – rampart of the Fortification System I preserved in the relief, 2 – Fortification System I visible in soil/crop marks, 3 – ditch edges, 4 – settlement mounds, 5 – pre-Islamic cemeteries, 6 – wadis, 7 – subterranean aquaducts, 8 – important hollow ways, 9 – other linear and circular features; the Neo-Assyrian tomb (Ess et al. 2012) (a), Bazari Ništiman's building pit, south section (b), west section with a brick structure – a tomb? (c). Conjectural gates highlighted by arrows.

wall's remains at relatively regular intervals (280–350 m). These might correspond to isolated large towers and/or gates. The largest (of dimensions roughly 30 × 15 m) was located partly on the plot of the administrative building preceding the current building of Arbīl's governorate, as the photograph from 1936 shows (Fig. 18, a). We can note a similarly elongated mound (*c.* 75 × 25 m) at the easternmost end of the hypothetical wall course (Fig. 18: b). An indication of a partition wall between the north-western portion of the perimeter wall and the foot of the citadel hill seems to be visible in the aerial photograph from 1947, exhibited in the British Museum (Fig. 17). The eastern and western portions of the fortification had disappeared completely before the aerial images were taken, so the total area of the enclosure cannot be estimated.

The substantially later date of System II is borne out by its superposition over the soil marks of totally obliterated northeast part of System I (Fig. 14). The different spatial relationships of the two defences appears clearly in the south portion: while in the south the mud-brick wall was built up to the earthworks of the older fortification, the south-eastern segment of System II followed the inner border of the rampart using it as a form of forward defence.

Other features

The hypothetical presence of settlement mounds in the vicinity of the central tell of Arbīl, detected only by shadow marks on the aerial images, makes consideration of the local settlement pattern even

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Fig. 14 Superposition of the Fortification System I (white arrows) by the System II (black arrows, a conjectural tower in circle), northeast of the citadel (detail of the RAF image, 1951).

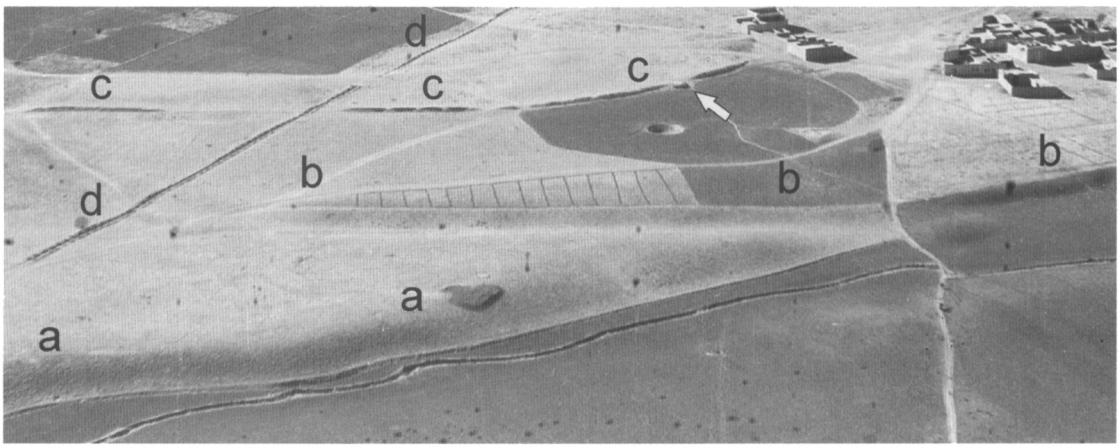

Fig. 15 Superposition of the Fortification Systems I and II, northeast of the citadel on the oblique image from 1938, facing SW: the older part of the System I (a), its later alteration (b), the best preserved part of the System II with a tower (?; white arrow) (c), a recent *kahrīz* (d).

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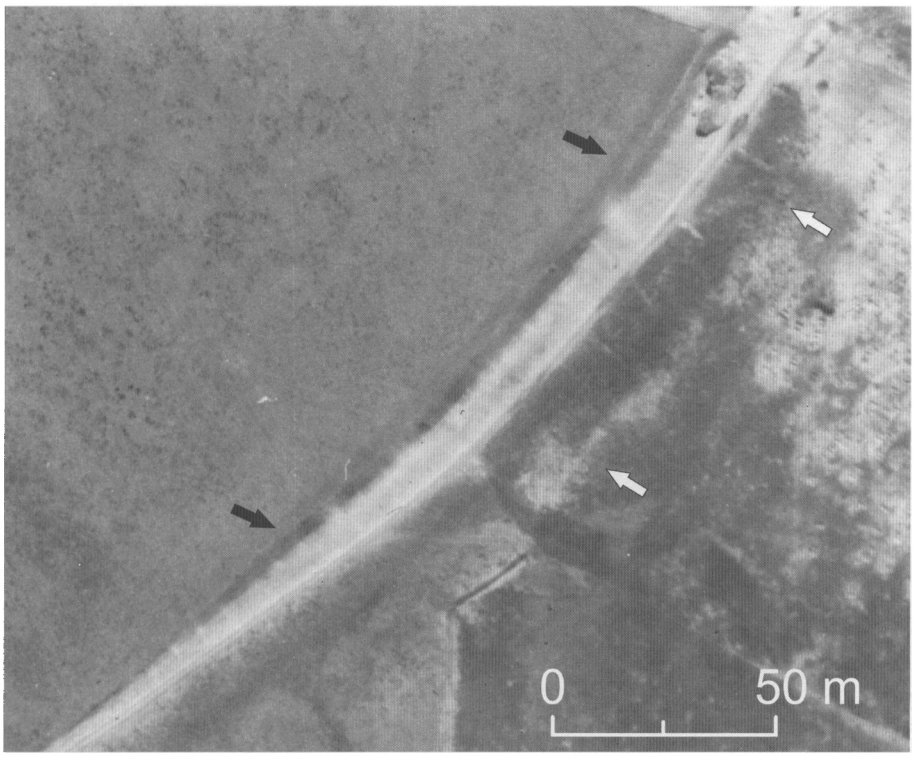

Fig. 16 Southeastern course of the Fortification Systems I (white arrows) and II (black arrows), creating a NW limit of a large, partly (?) deserted cemetery (detail of the RAF image, 1951).

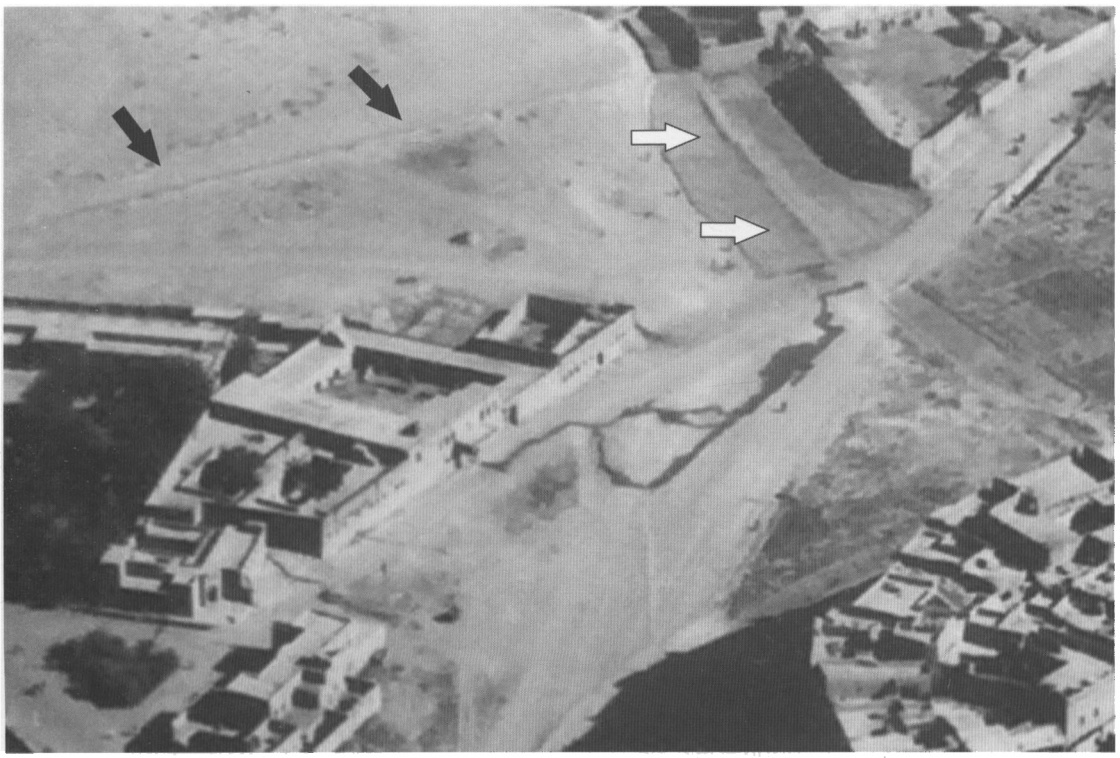

Fig. 17 Fortification System II facing north, the main line (black arrows) and an inner partition wall (white arrows), detail of an oblique photo from 1947 in the British Museum's exposition.

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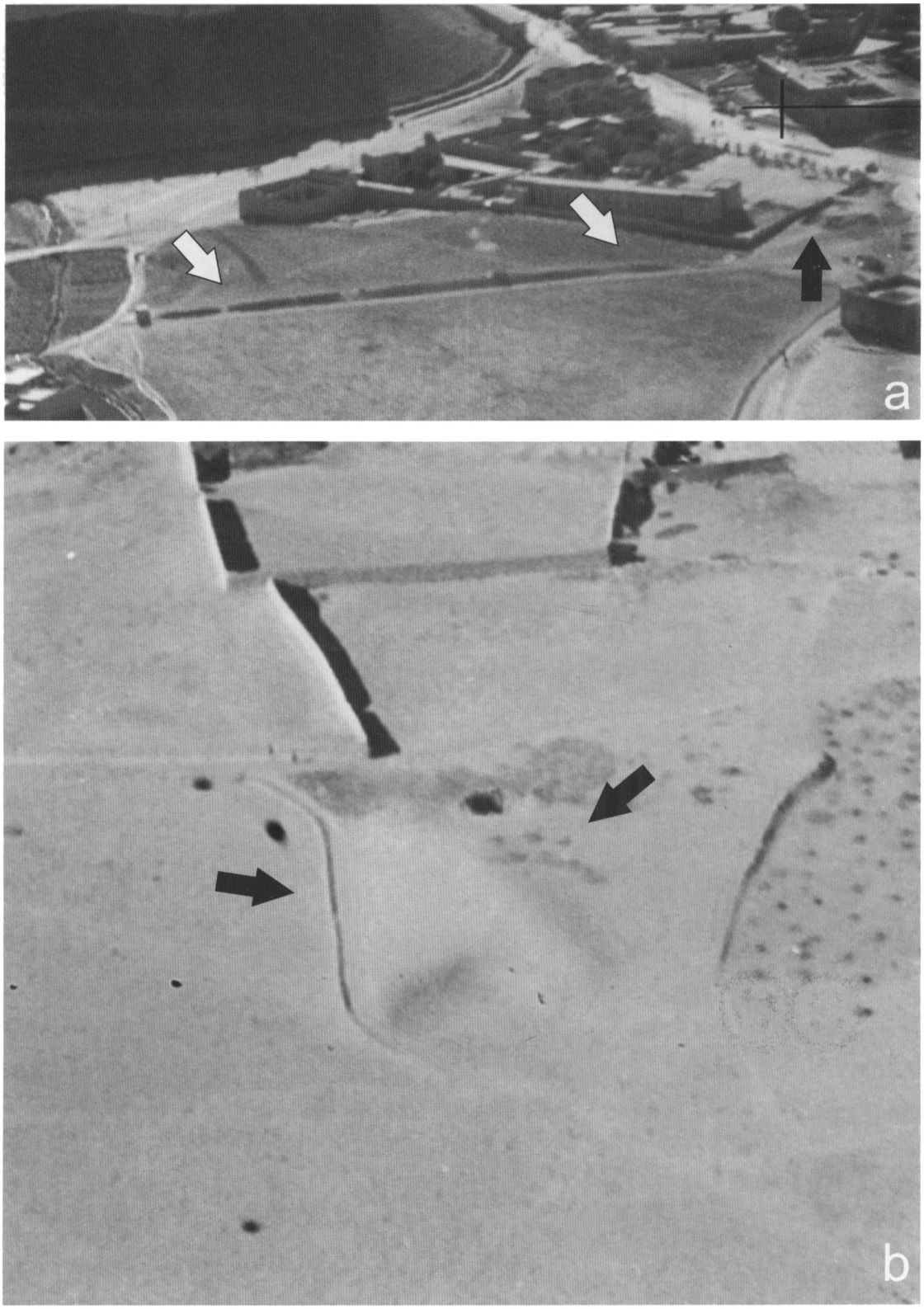

Fig. 18 Two mounds associated with the Fortification System II in an oblique image from 1938, in the northwest (a), in the east (b). Fortification line (white arrows), mounds (black arrows).

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more complex. The most conspicuous site of this type, the aforementioned tell situated in the north-east corner of the town fortification, disappeared completely during the building of the bus terminal (today's taxi garage) near the intersection of Barzani Namr and Safin Streets in the late 1960s (Fig. 12). Its approximate dimensions amounted to *c.* 120 × 100 m. Two undated prismatic towers standing on the tell's summit are distinguishable in the aerial pictures from the 1930s to the 1950s, and later were dilapidated. The tell shows an independent system of radially positioned hollow ways, visible as soil marks. This pattern has been recognized as a distinctive element of tells in North Jazīra, predominantly those of Early Bronze Age date (Wilkinson 2003, 111–17; preliminary observations in Arbīl area: Ur *et al.* in press). In this case, however, the hollow ways are rather small and narrow and are more likely connected with much later tracks.

Another tell-like feature stretched 680 m north of the citadel's south gate, within the separated area of the fortified town: a conspicuous, four-sided mound (ca. 60 × 45 m) with an accumulation of stone in its surroundings (?), traces of digging (?) and a cemetery area on its summit. A larger but less distinctive elevation 550 m east of the citadel's gate was also densely occupied by graves. The cemetery might be identical with the Public/Eastern Cemetery, which could be located outside the town walls (according to Ibn al-Mustawfī, see Section 2 above). The Late Chalcolithic Tell Qalinj Agha appears outside the town area, 300 m south of the south course of the fortifications. It also featured Late Islamic graves on its summit, according to the excavation report (Abu al-Soof 1969; Hijara 1973). Another settlement mound was situated 600 m northwest of the Tell Qalinj Agha, alongside the road heading to Altyn Köprü.

Besides these clearly identifiable mounds, several areas with an assumed presence of anthropogenic traces must be mentioned (Fig. 21, no. 2). First, a group of low, irregularly shaped elevations and depressions occurred 800 m WNW of the citadel gate; second, some more barely legible features in the south-western outskirts of the historic city, to the southeast of the cemetery near the Čoli minaret: a quarter-circular rampart or destroyed wall is the most interesting among these; third, small, isolated depressions in the north-west and north-east vicinities of the citadel, which might also be indications of partly visible archaeological features.

Cemetery areas represent another important category of the archaeological remains identifiable by aerial imagery analysis (Fig. 21, no. 1). Besides the aforementioned cemeteries, a large graveyard lay in the southern outskirts of the town. It appears markedly in the aerial photographs, divided into several subgroups both inside and outside of the obliterated town fortification. The subgroups cannot be with certainty identified with any graveyard known from the thirteenth-century sources. Some parts had been deserted long before the photograph was taken: this is the case for the group of almost fifty agglomerated, linearly-arranged and mostly square features situated in the area of today's Erbil International Hotel and to the east of it (Fig. 19). The structures are highlighted by combinations of shadow and moisture marks; hence they seem to have an elevated perimeter and a central depression, and reach dimensions of 3–7 m. They presumably represent a group of ruined medieval mausolea, either solitary-standing or organised in rows. Their form and arrangement in short rectangular lines, parallel or perpendicular to a hollow way heading to SSE, suggest the form and linear arrangement of Fatimid-period mausolea at Cairo (namely of Sabᶜ Banāt) or Aswan (e.g., Hillenbrand 2000: 312–13). Another very large funeral area was located to the SE of the town wall, in front of a break in System I (a gate?). It might come mostly from the medieval period, based on both the unified, east-west grave orientation and several solitary standing mausolea (Fig. 16). At least the largest and the partly deserted cemeteries should be of medieval or even pre-medieval origin, and can be used as a negative, very stable element in the topographical reconstruction of the past urban settlement.

The historic street pattern can only be partially traced by remote sensing. Its remains— mainly hollow ways emerging from the built-up areas (Fig. 21, no. 9)— do not indicate a system radiating regularly from the citadel, but rather follow a different pattern of individual routes coming out from the south forefront of the citadel and heading in five main directions: north (to al-Mawsil, via ᶜAnkāwā, and to al-ᶜAmādīya), east and north-east (to Koy Sanjaq and Šahrazūr on the one side and to Maraqe on the other), west (to the urbanised area in the surroundings of the Great Zāb's mouth to Tigris) and south (to Altyn Köprü and Kirkūk). The conjectural main city axes corresponding to these directions intersect each other at right angles right in the citadel's south forefront, which

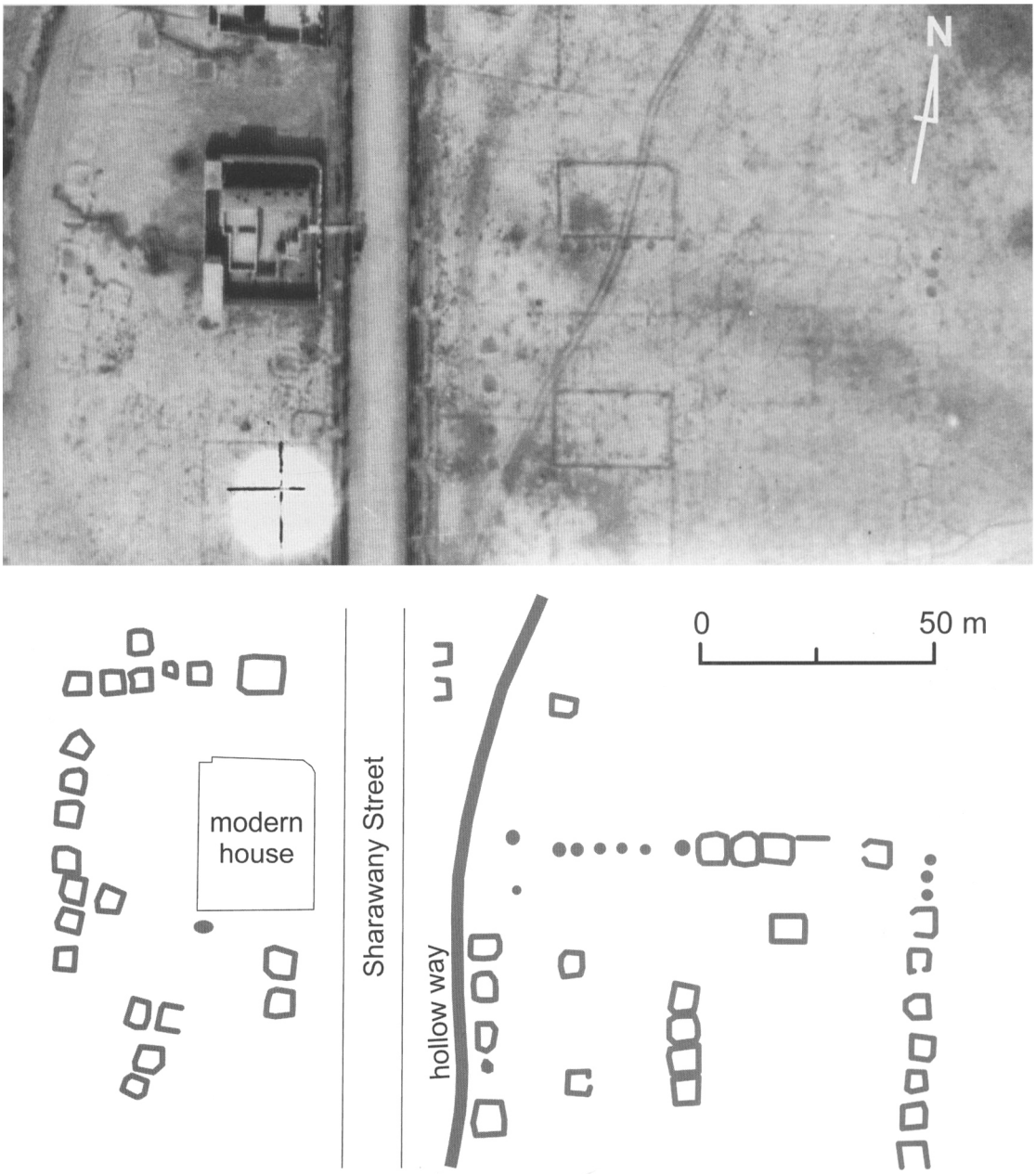

Fig. 19 Deserted medieval cemetery with mausolea remains (?) on the south periphery of the town (detail of an RAF image, 1951, below: the features traced out).

confirms that this area likely bore the main burden of communications within the city (Fig. 21, no. 10).

A square fortified structure of dimensions ca. 75 × 75 m with corner towers has been revealed 1580 m west of the citadel's south gate, situated in a solitary position on the moderate north-western slope of Šaykh Qazi Wadi (Fig. 21, b), outside both town wall systems. The feature, likely a fort or khan, shows no unambiguously datable formal signs: identical structures occured in considerable number in North Jazīra and elsewhere and their individual chronologies vary from Roman to Ottoman periods (direct parallels are, e.g., Roman to Abbasid "Castellum" near Tell Brak: Ur et al. 2011, 15–16, or the citadel at Raqqa from tenth to eleventh centuries: Heidemann 2006; see also

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Fig. 20 The Arbīl's southern outskirts with a portion of the Fortification system II (black arrows) and *kahrīz* (?) (white arrows) in an oblique aerial image from 1938.

Simpson 1996: 89). The site was truncated very recently, during the construction of the Šahīd Sāmī ʿAbd al-Rahmān Park.

Yāqūt al-Hamawī has emphasized the dependence of Arbīl on subterranean water courses (*qanāts* or *kahrīzes*) and wells (al-Hamawī 1977: 138); many of them were in use until very recently.[43] Satellite images bring evidence of several parallel systems of undated *qanāts* entering the area of the Assyrian town both from west and southeast directions (Fig. 13, no. 7). One of the features terminating on the town's south outskirts provided with conspicuous earthworks (probably remains of wells) can be also distinguished on an aerial photo from 1938 (Fig. 20). A *kahrīz* outfall in operation was identified close to the north-west foot of the citadel's tell and another *qanāt* linking the northern edge of the citadel's tell with the north-east tell seems to be of a very late date. Victor Place mentioned the digging of the *kahrīz* well (18 m deep) into the citadel slope as late as in half of the nineteenth century (Place 1852).

6. Synthesis and interpretation

Arbīl was founded on the eastern periphery of fertile, rain-fed North Mesopotamian plain, broadly in the centre of the territory bounded by the Great Zāb, Little Zāb and Tigris rivers and by the western mountain ranges (Jabal Salāh al-Dīn). Since these features were also very stable boundaries of the historic province of Arbail (Adiabene, Hidyab, Nōdh-Ardašīrakan), mentioned from the end of the third millennium B.C. and recorded in more detail as early as in the eleventh century B.C. (Postgate 1995: fig. 2), the location of the city seems to have been determined by political and administrative factors first, while the environmental conditions of the founding were of lesser importance. The lack of a watercourse and considerable distance from the aforementioned rivers caused chronic problems with water supply, which were temporarily solved by the construction of Sennacherib's aqueduct, which channelled water to Arbīl from the 20 km distant river of Bastura (Safar 1946; Safar 1947).

A combination of indicators allows us to link Fortification System I and settlement mounds in the vicinity of the central tell with the Assyrian royal city. The rampart of System I was certainly a result of the erosion of a massive wall. The gates left only weak traces: the most conspicuous hint of a large gate we found in the northern fortification course. The size and design of the fortification find parallels in Assyrian town wall systems, such as the Aššur city wall or the fortification of Nineveh, where the remains of the enclosure are 45 m thick. For instance, the outer plan of Šamaš

[43] A recent account listed 24 operating *kahrīzes* in the city area (Kaznayi 1997: 29–40).

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Gate at Nineveh had a width of 67 m, which corresponds well to the north mound in Arbīl's fortification. The character of the separately fortified north part remains unclear.

By revealing the fortification system of the lower town, Arbīl attains a comprehensible design comparable with other Assyrian capitals; its size ranks it unambiguously among Mesopotamian megalopoleis[44] (Fig. 22). It is to be emphasized, however, that the irregularly rounded city plan with the citadel fully enclosed by a town wall is unusual among Neo-Assyrian capital cities. Besides the earliest centres (Aššur, Šubat Enlil –Tell Leilan), all the later imperial capitals and many regional cities at least from the Middle Assyrian period (Kār-Tukultī-Ninurta) show clear signs of the orthogonalisation of the plan as well as of lateral positioning of the citadel. Rounded town plans occur rather exceptionally in Assyrian urbanism, in cases where it is hard to find an apt explanation, and one can only generally refer to regional traditions or local urban preconditions (Kilizu / Qasr Šemamok, Ziyaret Tepe, north Syrian provincial cities: Novák 1999: 284; Barbanes 2003: 18–19; Battini 1998; Rouault and Masetti-Rouault 2011; Ur 2013). The configuration of ancient Arbīl has close analogies in the south Mesopotamian cities of the third millennium (Uruk, Ur, Lagaš). The key political role of the town even before the Ur III period and general urban renewal just around the middle of the third millennium in northern Mesopotamia (Ur 2010: 404–7) lend extra support to the tempting idea of Late Chalcolithic origins for the town wall's foundation, but this conjecture desperately needs empirical verification. The parallel existence of the citadel and the tell in the north-western corner of the town area provokes considerations about another characteristic feature of Assyrian residential towns: the second citadel.[45] Later alteration of the fortification course, which resulted in the opening of the citadel's east perimeter to the open landscape, stemmed from military and strategic aims and was consistently present in Neo-Assyrian royal capitals. This change, however, left a part of the earlier fortification and the aforementioned tell *extramuros*.

The town's existence remained uninterrupted into the post-Assyrian period and its status changed only gradually. Although no archaeological data are available, it is highly probable that the town's overall form—a compound, separately walled city with the sacral and residential areas situated on the central tell—was preserved from the Late Assyrian period until the advent of Islam. The early Christian church of Išoᶜ Sabhran is an important hint of the lower town's continuity: the church was erected before the Islamic invasion and was listed among the buildings destroyed in the lower town during the anti-Christian riots in 1310. Then it was renovated and lasted up until the seventeenth century.

The sparse topographical data from the sources of the twelfth and thirteenth centuries A.D. do allow some considerations about the evolution of the city during the Early and Middle Islamic periods. Another important point of departure for these considerations will be the evidence of Fortification System II, built apparently at a substantial remove in time from the desertion of System I. Its origin needs to be linked with the building activity of Muzaffar al-Dīn Gökburī, whose involvement in the fortification of the town was repeatedly stated in the sources. The enclosure defined an irregularly elongated area of maximal width of 1460 m and unknown length (perhaps more than 2600 m) (Fig. 21, no. 4) and its broadly estimated area of *c.* 300 ha ranks Arbīl among the largest medieval town foundations in Mesopotamia and makes it comparable in size with other regional capitals, such as al-Mawsil (292 ha: Sarre and Herzfeld 1920: 204). The city plan is oriented to the southwest, not in *qibla* direction.[46] The elements of spatial continuity between the Assyrian and Islamic town fortifications should be emphasized: the medieval builders used the Assyrian rampart as a construction base or a forward fortification on the south-eastern side, the north-western parts of both fortifications were parallel and the medieval fortification line might have been interrupted by a gate-like feature exactly on the axis of the conjectural Assyrian north gate. It should be stressed that our limited sources allow us to follow the continuity only between the most permanent

[44] With an area of *c.* 330 ha, Arbīl ranks between Kalkhu (360–430 ha) and Dūr-Šarrukīn (300 ha) in the size sequence of Assyrian royal capitals. The fortification has been partly recognized and its map roughly sketched (al-Haydarī 1985) as linked with the medieval city.

[45] The issue has been analysed by Novák (1999: 306–8). The earliest combination of the main and secondary citadels known so far occured in ninth-century Nimrud (under King Šalmaneser III).

[46] The azimuth of the longitudinal and transverse axes amount to 235° and 145°, while Arbīl's ideal *qibla* is 195°.

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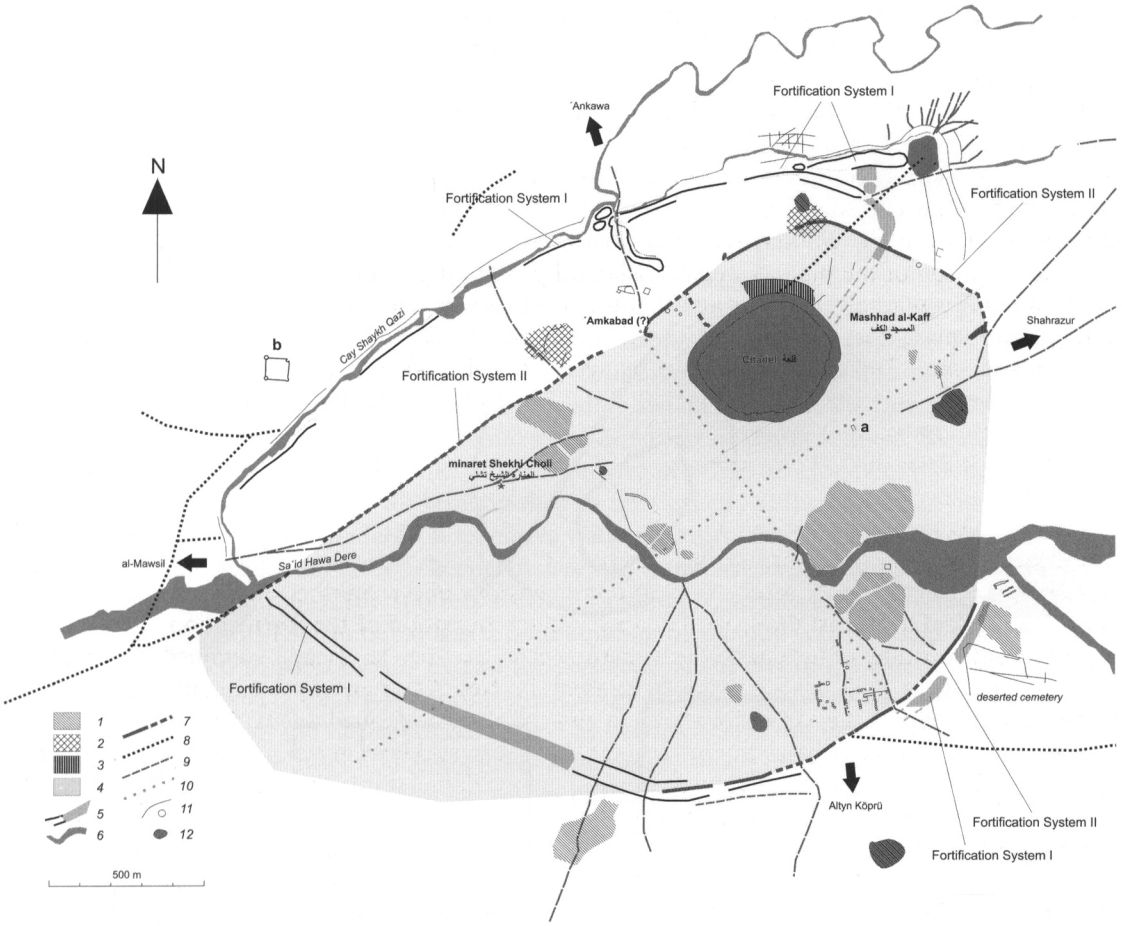

Fig. 21 Plan reconstruction of medieval Arbīl based on satellite/aerial imagery and survey: 1 – Islamic cemeteries, 2 – area of low mounds and shallow depressions, 3 – outer ditch of the citadel, 4 – hypothetical extent of the medieval city, 5 – remains of the (Assyrian) Fortification System I, 6 – wadis, 7 – medieval town wall both confirmed and conjectural, 8 – subterranean aquaducts, 9 – hollow ways, 10 – conjectural city's main axes, 11 – other linear and concentric features, 12 – settlement mounds; archeological section in the al-Khānaqā quarter (a), a square enclosure (b).

physical features such as the fortifications; the other, possibly numerous and more elaborate symbolic links, for example between pre-Islamic and Islamic sacral areas or commemorative structures, remain invisible.

Historical scholarship, in the form of Yāqūt al-Hamawī's explicit statement, agrees with the appraisal of Muzaffar al-Dīn's activity as a single act of reestablishment of Arbīl's urban status after a five-hundred-year long hiatus. This view needs to be challenged: Muzaffar al-Dīn in fact only completed, under suitable economic and political conditions,[47] the long-term transformation of the city which commenced probably just after the Islamic occupation in the seventh century. We have mentioned several hints of chronological heterogeneity of the lower town as reflected in the textual sources: On one hand we see the "old city" in the south and east forefront of the citadel, likely separately fortified in the period just before Muzaffar al-Dīn's rule, on the other the western district where several buildings of Begteginid patronage cumulated, possibly around al-Jāmiᶜ al-ᶜAtīq, originating in pre-Begteginid period. Indications of more than one congregational mosque in the

[47] The phenomenon of the economic, political and architectural revival of the post-Seljuq cities has been addressed in many recent studies, e.g. Hillenbrand 1985; Tabbaa 2001; Heidemann 2002; Korn 2004.

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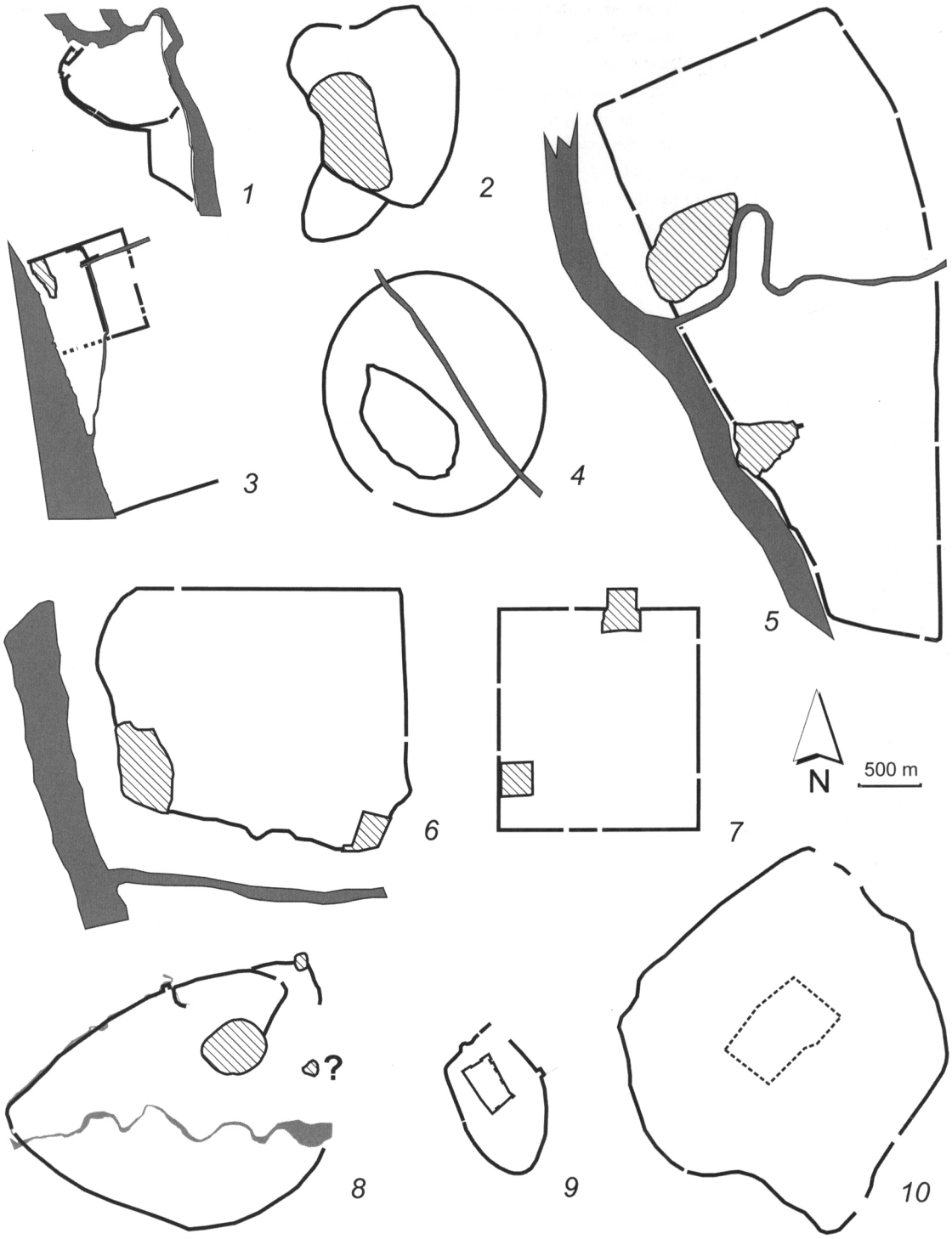

Fig. 22 Plan comparison of selected Mesopotamian capital cities: 1 – Aššur, 2 – Šubat Enlil, 3 – Kār-Tukultī-Ninurta, 4 – Mari, 5 - Nineveh, 6 – Kalhu, 7 – Dūr-Šarrukīn, 8 – Arbail, 9 - Ur (Larsa Period), 10 – Uruk (thick lines = fortification, hatched areas = citadels, grey = rivers, wadis and open canals).

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lower town—al-Jāmiᶜ al-ᶜAtīq and/alias al-Masjid al-Jāmiᶜ al-Zaynī (or, possibly, another congregational mosque mentioned several times by the mere generic name "*jāmiᶜ*")—support the conjecture of a more complicated evolution of the lower town, though it is possible to specify the hypothetical location of the first of the aforementioned mosques only. A strict regulation of number of congregational mosques, based on elaborated law opinions (most explicitly in the context of Hanafī *madhhab*), was one of reasons of typical agglomerative evolution of the Early and Middle Islamic cities (Wheatley 2001: 234–35; Heidemann 2007: 215–16). While the area situated just in the south vicinity of the citadel might have been the focus of the Sassanian provincial centre occupying a somewhat reduced area in comparison with the former Assyrian city, the western settlement can be considered to have been an independent Early Islamic town foundation (*misr* in the view of Whitcomb 1995: 491, 495–96). This dual organism in the plain under the citadel—the pre-Islamic town nucleus and Early Islamic town extension— had eventually evolved into one coherent unit, enclosed by one fortification line during the Muzaffar al-Dīn's reign at the turn of the thirteenth century. Among many examples, the Islamic transformation of the prominent Sasanian town of Istakhr in Fars offers the closest parallel of such scenario of urban development (Whitcomb 1979).

The long-term transformation of Arbīl reached its apex exactly at the time when other members of the Ayyubid family also undertook extensive military improvement and architectural reinterpretation of their residential cities. Aleppo first of all, transformed substantially under al-Malik al-Zāhir Ghāzī (ruled 1186–1216). It offers a striking analogy to Arbīl's urban development. Ghāzī, as well as Muzaffar al-Dīn, initiated the total rebuilding of the city wall; throughout the works, however, he decided to substantially extend the perimeter of the city to the east and south, which increased the town area by nearly 50 per cent to *c.* 1.6 km^2 (hence roughly half of Arbīl's hypothetical area at the beginning of the thirteenth century). The citadel, heretofore integrated into the eastern portion of the enclosure, was now completely *intramuros*, which might be seen as a sign of the increasing stability of the ruling dynasty as well as of the drawing of the citadel into the social life of the town (Ṭabbaa 1997: 19–22). A similar change in the course of the city wall might have occurred, purely hypothetically, at Arbīl: in the 1210s Yāqūt al-Hamawī still described the citadel as interrupting the enclosure; the recorded remains of medieval wall, however, had a different course and surrounded the citadel on all sides, which corresponds well to Abū al-Fidā's account from the turn of the thirteenth and fourteenth centuries.

The purpose of the Aleppine citadel had been in flux since the middle of the eleventh century from a solely military outpost to a strongly fortified palatial and administrative centre (Tabbaa 1997: 59–61). On the contrary, the more than twice as large citadel at Arbīl rather maintained, throughout the Middle Islamic period, the status of a complex independently fortified town quarter with a substantial proportion of public and administrative buildings on one hand, but also with elite housing, pious foundations and commercial facilities on the other.

The Ayyubids in Aleppo, as well as the Begteginids in Arbīl, concentrated their efforts on the architectural reinterpretation of the area in front of the (south) entrance to the citadel. In Aleppo the area was converted into a strictly official square with the tribunal (*dār al-ᶜadl*), funerary *madrasa* of al-Malik al-Zāhir Ghāzī and other administrative and religious buildings. The open place (*maydān*) in Arbīl was no doubt a much more simply structured space. Despite this, it might have fulfilled a similar purpose. The ruler's commemorative and religious foundations were, however, most probably situated also in the opposite, western part of the city. In both cases the *maydān* under the citadel was connected with the town's southern outskirts by a processional route (unless the route led, in the case of Arbīl, through the *maydān* itself). In Aleppo, the route was articulated by a symbolic mural gate, called Bāb al-Maqām (Tabbaa 1997: 67–69). In Arbīl, its "symbolic" counterpart could be a (hypothetically intramural) gate, called Bāb al-Maydān. This assumption, however, still needs to be verified. The route was also in close contact with large intramural and extramural cemeteries. In Arbīl, these comprised a large, distinctively ordered cluster of mausolea with direct parallels in Fatimid Egypt, where the construction of mausolea is generally considered to be a product of Shiᶜite patronage (Hillenbrand 2000: 312). Unlike Aleppo, Arbīl's sources are silent about sectarian struggles between Sunnites and Shiᶜites, although the existence of at least one Shiᶜite shrine, and presumably of a not insignificant Shiᶜite community in the city during the period of the

strong, officially supported Sunni revival, certainly created an environment for such confrontation. The similarities between Aleppo's and Arbīl's urban evolution and topography might be a hint of convergent social development of the post-Seljuq residential cities in Syria and North Mesopotamia. Or, at least, we can argue for the possibility of a deep personal inspiration for Arbīl's ruler Muzaffar al-Dīn Gökburī in the political and ceremonial visions of al-Malik al-Zāhir Ghāzī, embodied in the urbanism and architecture of Aleppo as his residence city.

The resulting image of the topography and settlement dynamics of Arbīl is not a mosaic of interlacing, complementary lines of evidence, but rather of parallel lines of testimonies, each one with specific values and limitations, verifying one another only occasionally. Hence, the reconstruction of the city is to be considered largely as an unverified hypothesis with many gaps in the data, in urgent need of further research. Arbīl's current urban landscape still has great archaeological potential, and the establishment of regular management of preventive archaeology in the city could substantially broaden our knowledge. In any case, our results do reposition the city of Arbīl among the most prominent Mesopotamian city foundations. Furthermore, we can tentatively confirm another set of structural and evolutionary similarities between Arbīl and the urban network in the province of Arbīl, in the region bounded by the Tigris, the Great Zāb and the Little Zāb. The investigation of nearly twenty towns abandoned during the Late Islamic period has been launched (Nováček 2013) and the issue of multi-faceted interactions among the urban centres, as well as of long-term settlement dynamics in Arbīl's hinterland, can perhaps be addressed in the future.

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