

Fragments of an Early Islamic Arabic Papyrus from Khirbat Hamra Ifdan

Article

Accepted Version

Friedman, H., Vorderstrasse, T., Mairs, R. ORCID: https://orcid.org/0000-0001-9192-9031 and Adams, R. (2017) Fragments of an Early Islamic Arabic Papyrus from Khirbat Hamra Ifdan. Arabian Archaeology and Epigraphy, 28 (2). pp. 285-296. ISSN 1600-0471 doi:

https://doi.org/10.1111/aae.12099 Available at https://centaur.reading.ac.uk/72377/

It is advisable to refer to the publisher's version if you intend to cite from the work. See <u>Guidance on citing</u>.

To link to this article DOI: http://dx.doi.org/10.1111/aae.12099

Publisher: Wiley

All outputs in CentAUR are protected by Intellectual Property Rights law, including copyright law. Copyright and IPR is retained by the creators or other copyright holders. Terms and conditions for use of this material are defined in the End User Agreement.

www.reading.ac.uk/centaur

CentAUR



Central Archive at the University of Reading Reading's research outputs online

Fragments of an Early Islamic Arabic Papyrus from Khirbat Hamra Ifdan

Hannah Friedman, Texas Tech University

Tasha Vorderstrasse, University of Chicago,

Rachel Mairs, Reading University

Russell Adams, University of Waterloo

Abstract

Excavations in 2013 at the site of Khirbat Hamra Ifdan in the Faynan revealed several pieces of an Arabic papyrus, the first pieces of Arabic papyrus found in Jordan. Although the papyrus is poorly preserved, a detailed analysis of the fragments based on parallels have suggested that the dates to the late seventh/early-mid eighth centuries CE. This article not only discusses the papyrus fragments but also places the fragments within their papyrological and archaeological contexts.

The study of papyri has largely focused on the well preserved pieces, ignoring smaller fragments which are often dismissed as not being particularly interesting because it is often impossible to determine their full contents. Further, most papyri in museums and libraries around the world lack a secure archaeological context, having been purchased from antiquities dealers. This often leaves any discussion of provenance to be determined by the contents of the papyrus rather than its actual find spot. In the case of the small papyrus fragments under examination here, their interest lies in the fact that they have a precise find spot as well as their date and paleographic features. These papyrus fragments are the first pieces of Arabic language papyrus found in the modern country of Jordan and as such, are extremely valuable to our understanding of the spread of Arabic language documentation in the Early Islamic period. Further, a detailed paleographic study of the fragments reveals not only their date, but also how they fit into our wider understanding of early Islamic paleography, specifically in the southern Levant and shows evidence for the use of Arabic throughout the region.

During excavations in June 2013, the Barqa Landscape Project (directed by Russell Adams with Hannah Friedman as Assistant Director, who directed excavations at Khirbat Hamra Ifdan in 2013) discovered a small fragment of papyrus bearing text at the site of Khirbat Hamra Ifdan located in the Faynan region of southern Jordan, three hours and approximately 200 kilometers south from Amman. The Wadi Faynan region has a long history of occupation due to the perennial springs and copper ore mines found there. The wadi system itself is also an important transportation route as it

connects the Jordanian plateau to the Wadi 'Araba. We present here a very preliminary account of the find, and assess some of its implications for future research.

Khirbat Hamra Ifdan, (KHI), is located on top of a rock plateau in the Wadi Fidan, the surrounding landscape eroded away leaving it as an "inselberg." The site is primarily known as an Early Bronze Age metallurgical site, which has been subject to extensive archaeological investigation (Adams 2002; Levy, Adams, Hauptmann, Range, Schmitt-Strecker, and Najjar 2002: 425-437). However, to the north of the site there is a large stone cobble building complex (Adams, Friedman, Haylock, and Grattan Forthcoming). A concentration of Roman, Byzantine, and Islamic pottery is found here, suggesting the site at least on the northern side has multiple occupation phases. However, this area is poorly preserved. In 1986, Russell Adams, as part of the SGNAS survey, visited the site (MacDonald 1992). At that time, the remains of a structure were noted on the surface of KHI. This structure, a small stone outline of a building with a distinct miḥrāb, was reminiscent of the desert mosques found in the Trans-Jordan and Negev region (Avni 1994: 83-100). While dating is not at all certain, the direction of prayer (qibla) was not towards Mecca but rather Jerusalem (personal communication: Adams) although the lack of any plan of the structure means this cannot now be confirmed. It would however be highly unusual since most similar mosques in the Negev and Early Islamic mosques in general, have their qibla oriented generally towards Mecca. The question of qibla orientation in Early Islamic mosques has been the matter of considerable discussion (Bashear 1991: 267-280; R. Hoyland 1997b: 564-570) and examined in a number of Early Islamic contexts in Palestine (Avni 1994: 95; M. S. M. Saifullah, M. Ghoniem, 'A. al-R. R. Squires, and M. Ahmed 2001; Sharon, Avner, and Nahlieli 1996: 112-114; Avni 2007: 133; Avni 2014: 284, no. 461). The structure at Khirbat Hamra Ifdan was very ephemeral during the intial surveys and by

1999 and the excavations of Adams and Levy it was no longer visible. It is likely the stones may have been used during Department of Antiquity preservation work which built walls around the excavation areas on the site. As such this structure has never been recorded officially and any record of it is purely anecdotal.

Our excavation in 2013 concentrated on the less well explored north region including a rectangular room oriented west east which was constructed out of semi-regular cobbles. On the surface a Bedouin occupation layer had re-occupied part of the building for their camp. Underneath this activity was a layer of fill and located in the centre of that fill was the papyrus, scraps of which were pressed against the rock wall and within crevices of it. There was little associated pottery at that level. Thus dating the papyrus from associated finds was not possible. Thus a papyrological analysis was esential.

General Description of P. Faynan 1

Figure 1: P. Faynan 1, photographs by Rachel Mairs, Fragment one is on the far right, Fragment 2 is second to the right, and Fragment 3 is in the center.

The fragments of a papyrus from Khirbat Hamra Ifdan are of considerable interest despite their condition which makes it impossible to reconstruct any connected text. (Fig. 1) The papyrus, P. Faynan 1, consists of seven fragments, one fragment (Fragment 1) preserves portions of four lines. There are two other fragments with writing on them, one with parts of two lines, and two with traces of one line each, but these cannot be made out into connected words. What is belived to be Arabic letters

appears on three of the largest fragments. Due to how little is preserved the sense of the text is not obvious. However, some conclusions can be drawn and a detailed discussion of the paleography of the text is therefore useful to show how the papyrus fits in to the larger picture of the epigraphy of the Levant and beyond in the Early Islamic period.

Papyrological Context

In the area to the east of the Jordan River, the amount of comparative material to these papyrus fragments is small. Clearly papyri were used in the region, as indicated by the find of sixth century Greek papyri from the Petra Church (Frösen, Arjava, and Lehtinen 2002: 5). But again, this is an isolated find of papyri which suggests that there were other Greek language documents that were not preserved. Ancient North Arabian scripts such as Safaitic and Hismaic are found in large numbers in graffiti throughout Jordan as well as neighboring regions although not, apparently, in the Faynan region, but the use of the Arabic script is extremely rare. The way Arabic was vocalized is indicated by the presence of transliterated Arabic words that are in Greek inscriptions (Macdonald 1992: 303; Macdonald 2004: 488-489; Hoyland 2007: 232-233; Macdonald 2009: 21-23; Hoyland 2010: 34; Macdonald 2010: 16-17, 21; Fiema et al 2015: 397; Kaplony 2015: 2-3; al-Jallad 2015a: 2, 6; al-Jallad forthcoming). There are many Arabic words in the Greek Petra papyri, for instance (al-Jallad, al-Ghul, and Daniel 2013: 23; Kaplony 2015) and there is an Arabic inscription on wood from the same context as the Greek archive, which dates to the end of the 6th/beginning of 7th century AD, which also has diacritic marks, making it the earliest Arabic inscription attested with diacritics (al-Ghul 2004).

Greek funerary inscriptions of individuals with Arabic names from the region, which primarily date to the sixth to seventh century, continue in small numbers after the Islamic conquest possibly into the eighth Century. Greek was also used in mosaics which indicates the transition to Arabic was a gradual one during the Early Islamic period (Schick 1994: 138-142). The Arabic spoken prior to the Islamic conquest in the region does not seem to be the same as post-Islamic conquest Arabic, arguing for a different form of Arabic arriving in the region with the conquerors. Nevertheless, the exact relationship between Ancient North Arabian and Arabic remains unclear (al-Jallad 2015b: 10-11; al-Jallad 2016: 1).

Texts from the southern Levant dating to the Early Islamic period have received much less attention than similar documents from Egypt, because of their rarity. Early Islamic papyri have been found in southwest Palestine, most famously at the site of Nessana in the Negev. While vast majority of the papyri at Nessana are written in Greek, thirteen papyri are bilingual Greek-Arabic papyri or Arabic papyri and date to 672-689 CE (Kraemer 1958: Nos. 56, 60-67, plate 6; Grohmann 1963: x; Gruendler 1993: 22-23; Hoyland with Cotton 2015 2015: 53). Less well known than Nessana is the is the site of Hirbet el-Mird, located on the western side of the Dead Sea near Qumran. Both Greek and Arabic papyri were found there. The Arabic papyri were dated to the seventh/eighth centuries and some later Arabic paper fragments were subsequently found in excavations (Grohamnn 1963). There are also ninth-century papyri that mention Syria. They were bought in Damascus and therefore might be from Syria but their archaeological provenance beyond this cannot be established (Abbott 1938: 38). It is likely that the "official" sealing (a lead bulla), found at the Negev site of Nahal Shahaq, was once attached to a papyrus that has since disappeared (Magness 2003: 169; Avni 2014: 275).

The challenge when trying to place the Khirbat Hamra Ifdan fragments in their wider Levantine context is that the publication of the Nessana material has includes few photographs: only one of the papyri with Arabic in the Pierpont Morgan Library was published with a photograph (Kraemer 1958: No. 60, Pl. 6). Hoyland and Cotton have now published a photograph of another papyrus in the Rockefeller Museum (Hoyland with Cotton 2015: 51-71. As Grohmann noted in his study of the Hirbet el-Mird papyri the paleography of those papyri resembles papyri both from Nessana and Egypt. In addition, some of the handwriting from this site looks similar to Qurrah letters from Egypt and the marble ostraca of Khirbet el-Mafjer that date to the early eighth century (Grohmann 1963: xiv-xv).

Aside from other papyri there are a variety of different types of inscriptions from Jordan that can be used as comparanda to P. Faynan 1. The most important is an ink inscription from Umayyad site of Qasr Kharana, a well preserved building located to the east of Amman (Urice 1987). This ink inscription dates to 710 and is is very similar to the paleography of papyri from Egypt (Abbott 1946: 195; Imbert 1995: 403-416). There are other ink inscriptions from Jordan, such as the one at the Umayyad bath house at Qusayr 'Amra (Imbert 2007: 45-46, Fig. 84b; Imbert 2015: 332, Fig. 3), but it is not as well preserved. There are also inscriptions from Qusayr 'Amra that are related to the wall paintings at the site (Imbert 45-46; Imbert 2015: 337, Fig. 6, 341-342, Fig. 9). Important incised inscriptions (Lindstedt 2014: 110-114) include Umayyad funerary stela from the cemetary of Qastal al-Balqa (Bacquey and Imbert 1986: 397-404; Bacquey and Imbert 1989: 141-144; Imbert 1992: 17-60) and the Umayyad inscriptions from the first half of the eighth century in the Wadi Shīreh (Hoyland 1997a: 98-100; (Bqā'īn, Corbett, and Khamis 2015: 93-126).

Other significant finds of Arabic texts in southern Palestine are the marble

ostraca found at a number of sites. In Jordan, a few marble ostraca have been found,

three at Jerash (Walmsley et al 2008: 123-126) and one from Qusayr 'Amra (Vibert-

Guigue and Bisheh 2007: Fig. 87.1). The largest number of marble texts are from the

site of Khirbet el-Mafjer at Jericho. The ink inscribed marble ostraca and additional

incised texts have been briefly published by Sharon (2017: 186-200, Nos. 58-81, Figs.

56-82a), and a more detailed publication of the ostraca is forthcoming (Vorderstrasse

2014: 74-76). Finally there are also incised pottery ostraca, including one from Tall

Jawa in Jordan (Johnson 2010: 351-365). In addition to ostraca, there have been a

number of significant publications of Early Islamic inscriptions from the Negev, which

are comparable to the papyrus in their style in certain aspects (Nevo, Cohen, and

Heftman 1993).

Edition

Despite the paucity of surviving letters, it is still possible to make significant

statements about the P. Faynan 1 as it currently exists. Using the sources described

above this section looks at the letters and tries to reconstruct the context and

paleography.

P. Faynan 1. 7 cm x 10 cm

Jordan?, ca. late 7th/early-mid 8th century CE

Fragment 1: (Fig.1)

الله

٧ ه لا

...حم

[Note to editors: the • in Line two should be written as if it is a final • that is connected to a letter that as since disappeared but I cannot get it to do this .If necessary I can write out the text and send it in]

Line 1:

Figure 2: Close up of word Allāh in Line 1, Fragment 1

The foot of the *alif* clearly bends to the right (Fig. 2). In most cases of the word *alif*, whether it is on papyri or some other media, is written with the foot bent to the right in Arabia, Iraq, Palestine, and Jordan in the seventh or early eighth centuries CE (Abbott 1939: Pl. V; Bacquey and Imbert 1986: Pl. XCIX.1-4; Gruendler 1993: 35; al-Ghabbân 2008: 227-228; al-Bqā'īn, Corbett, and Khamis 2015: 107-108). In non-literary papyri, however, the writing of *alif* in this way persists in protocals and official documents (Grohmann 1963: xxx-xxxi, Fig. 6; Khan 1992: 27-28), as well as stone inscriptions (examples include Imbert 1992: 23; al-Ghabbân 2011: 22-24, Figs. 4-7; Vorderstrasse and Treptow 2015). Few examples date after 750, the latest of which is dated to 764 (Grob 2013: 129).

The *alif* is written straight rather than bent, whereas the examples from the Nessana papyri tend to slant heavily to right, as do many mid-late seventh century papyri (Gruendler 1993: 35; Hoyland with Cotton 2015: 51-71) although the way the rest of the word is written after the *alif* in the bilingual papyrus from Nessana of 674 is similar (Kraemer 1958: No. 60, Pl. 6). The writing of the *alif* most closely resembles a papyrus from Hermopolis written in 696 CE (PERF 585) (Gruendler 1993: 23), Qurrah

papyri of 709-710 (Gruendler 1993: 24-25), the ink inscription from Qasr Kharana of 710 (Abbott 1946: Fig. 1; Gruendler 1993: 77-78), an Umayyad funerary inscription from Qastal (Bacquey and Imbert 1986: 530, Pl. XCIX.1-2), the ink inscription from Qusayr 'Amra (Imbert 2015: Fig. 3), the painted inscriptions from Qusayr 'Amra (Imbert 2015: Figs. 6, 9), and the early eighth-mid-eighth century incised and painted inscriptions from Shivta and other sites in the Negev (Nevo et al 1993: numerous examples; Moor 2013: 115).

The way that the final $h\bar{a}$ is written clearly resembles similar writings in inscriptions of the late seventh early eighth century in Arabia, Iraq, Palestine, Jordan, and Egypt (Gruendler 1993: 15-21; Nevo 1985: MA 4264, Line 1; Bacquey and Imbert 1986: Pl. XCIX.1-4; Nevo et al 1993: numerous examples; Moor 2013: 115) and to papyri from Egypt, Nessana papyri, and painted inscriptions from Jordan (Grohmann 1952: pull out handout; Gruendler 1963: 22-28, 107) as well as in protocols dating to the eighth century (Grohmann 1963: xxxvi-xxxviii).

The overall writing of Allāh appears similar to the Qasr Kharana inscription of 710 (Abbott 1946: Fig. 1; Imbert 1995: 404-405, Fig. 4), a Nessana papyrus of 674 (although the *alif* slants to the right), two inscriptions in Wadi Shīreh in southern Jordan (al-Bqā'īn, Corbett, and Khamis 2015: 109-110, Fig. 10, 116, Fig. 15), Jebel Seis located to south of Damascus, which dates to 737 CE (Grohmann 1971: 88, Abb. 61), the Taif inscription in Arabia of 677-678, although in that example the *alif* slants to the left (Gruendler 1993: 15-16, 155; al-Bqā'īn, Corbett, and Khamis 2015: 109-110, Fig. 10, 116, Fig. 15), a Mecca inscription of 699 CE (Gruendler 1993: 18, 154), the writing of Allāh in Line 1 of an inscription from Antinoe of 735 CE (Grohmann 1963: xxviii, Fig. 5), as well as a papyrus of 757/758 (Khan 1992: 28), and an early eighth century marble ostracon from Khirbet el-Mafjer (Rockefeller Museum 42.61). It also resembles

some of the undated Arabic inscriptions from the central Negev (Nevo et al 1993: many examples but most similar are MM 103, line 1, ES 351, line 2).

Line 2 (Fig. 3)

Figure 3: Line 2 of Fragment 1

The fragmentary sign at the beginning of Line 2 (Fig. 4 left) is clearly the same as the final $h\bar{a}$ ' in the Allāh on Line 1 (Fig. 4 right). It too could belong to a writing of Allāh, but it is too fragmentary to be sure and it could easily be another word. The way that it is written is the same as the parallels noted above.

Figure 4: the indistinct letter at Line 2 (left) and a close up of $h\bar{a}$ in Line 1

The writing of the ligature *lām-alif* seems to start in the upper right and then ends in the upper left (Fig. 3). It is similar to the Qasr Kharana inscription of 710 CE (Abbott 1946: Fig. 1, Line 10; Imbert 1995: 404-405, Fig. 4), an inscription in Wadi Shīreh in southern Jordan (al-Farajat and al-Nawafleh 2005: 32; al-Bqā'īn, Corbett, and Khamis 2015: 109-110, Fig. 10), the Jebel Seis inscription (Grohmann 1997: 88, Abb. 61), several inscriptions in the central Negev (Nevo et al 1993: MA 4345, Line 1; BR 5135, line 1; AR 280; MA 4825), an Umayyad graffiti located to the south of Tabuk in Saudi Arabia (Al-Ghâbban 2011: no. 8, 232), a seventh century Egyptian papyrus (Grohmann 1952: pull out handout), a protocal text of 709/710 CE (Gruendler 1993:

121), and the Mount Mugh parchment document of 718/719 CE (Kratchkovskaya and Kratchkovsky 1934: Plate facing page 55).

Line 3:

Figure 5: an indistinct portion of Line 3 of Fragment 1

This indistinct portion (Fig. 5) is similar to letters in the Qasr Kharana inscription (Abbott 1946: Fig. 1; Imbert 1995: Fig. 4), the Qusayr 'Amra ink inscription (Imbert 2015: Fig. 3), the Wadi Shīreh inscription of 728 (al-Bqā'īn, Corbett, and Khamis 2015: 114, Fig. 14), several inscriptions from the Negev (Nevo et al 1993: BR 5102; BR 5117; BR 5134, Line 1), and a milestone from the site of Fig in the southern Golan dating to 704. (Sharon 2004: Pl. 65, Line 6). The loop of the *mīm* is written above the line and is also akin to some early papyri and inscriptions (al-Ghabban with Hoyland 2008: 228), although it is not common in paleographic tables. It does resemble the Qusayr 'Amra ink inscription (Imbert 2015: Fig. 3), a tombstone of 691 from Aswan and early eighth century Egyptian papyri (Gruendler 1993: 99; Grohmann 1952: pull out handout), as well as the Mugh parchment of 718-719 (Gruendler 1993: 99). It is also attested in ninth/tenth century stelae from Qastal (Imbert 1992: 23, Fig. 4-7) and in the Negev inscriptions. In general, the round $m\bar{\imath}m$ is typical of the Umayyad period although it does appear in 8th century 'Abbāsid inscriptions (Moor 2013: 96, 115. See also other examples from the Negev published by Nevo et al 1993: HS 4156, Line 9; MA 4254). Although it seems to be most likely that it is a mīm, it might also be a fā' without any dotting. This way of writing the fa' is not that common, but it does appear in the Negev (Nevo 1984: BR 5102, Line 1; Nevo 1993: SM 2220, line 2; HS 3157; MA 401B, Line 1; MA 408), as well as in an inscription of Khirbat Nițil near Madaba of 718/719 (Grohmann 1971: Abb. 55; Gruendler 1993: 83). The writing of the $h\bar{a}$ '/ $h\bar{a}$ '/ $g\bar{t}m$ is again looks typical of this period, with examples from the Negev (Nevo 1985: MA 4264, Line 2; Nevo et al 1993: FG 320, Line 2; YA 3112; MA 420 A, Line 1; Moor 2013: 112), for instance, but since part of the letter is missing, it is difficult to say much about it.

Line 4

Figure 6: second portion of Line 4

This could also be another Allāh there does appear to be traces of an *alif* to the right of the text, but it is unclear (Fig. 6). Further, the writing is slanting down to the left as the Allāh is in fragment one line one. The word is quite stretched out but this can be seen in the Qasr Kharana inscription of 710 CE (Abbott 1946: Fig. 1; Imbert 1995: 404-405, Fig. 4), early eighth century marble ostraca from Khirbet el-Mafjer (Rockefeller Museum 42.50, 42.53, 42.54, 42.61), an inscription of 735 CE from Antinoe (Grohmann 1963: xxvii, Fig. 5), inscription from the Negev (Nevo et al 1993: ES 351), and a Qurrah papyrus OIM E13755.

Fragment 2:

Figure 7: close up of the poorly preserved letter Fragment 2

This letter is somewhat problematic. It looks like a final $-d\bar{a}l$ or $-d\bar{a}l$, that is poorly preserved (Fig. 7). There is a slight upward bend at the top of the letter, although not as hooked as one often sees in papyri from the late seventh and eighth centuries (Khan 1992: 29-30). It is similar to Qasr Kharana in both the size and shape of the letter (Gruendler 1993: 55; Imbert 1995: 404-405, Fig. 4). The letter has an upward bend at the end of the bottom line as well, which is more unusual in scripts from this period, resembling the Qurrah papyri of the early eighth century (Gruendler 1993: 55), Edfu papyrus of 703-712 Grohmann 1952: pull out handout) and the Mount Mugh parchment of 718-719 (Kratchkovskaya and Kratchkovsky 1934; Plate facing p. 55; Gruendler 1993: 55). It should be noted, however, that the letter also resembles the writing of a $k\bar{a}f$ in inscriptions in the Negev (Nevo et al 1993: numerous examples), so this might be the letterform.

Fragment 3

Figure 8: Fragment 3

The upper letter is probably a $h\bar{a}'/kh\bar{a}'$ or $\xi\bar{\imath}m$, while and the lower letter could be final $y\bar{a}'$ (Fig.8) as is seen at Qasr Kharana (Imbert 1995: 404-405, Fig. 4) and Mt. Mugh (Kratchkovskaya and Kratchkovsky 1934: Plate facing p. 55).

Handwriting

Overall when one looks at the comparisons between the paleography of the P. Faynan 1 and other examples, the handwriting is comparable to both Egypt and Palestine in terms of individual letters, but the writing of the word Allāh is more akin to Egyptian papyri. The papyrus is not comparable to many of the graffiti found in Jordan recorded by Lindstedt (2014) but it does resemble incised and painted inscriptions from Egypt, the southern Levant, and Arabia. This includes inscriptions from the Negev and the inscription from the Wadi Shīreh (Jobling 1989: Pl. 74, Fig. 2; Nevo et al 1993; al-Farajat and al-Nawafleh 2005: 31; al-Bqā'īn, Corbett, and Khamis 2015: 107). In particular, the paleography seems to be very similar to the paleography of ink inscription of Qasr Kharana in 710 CE in the shape of the letters and the handwriting. The paleography of the ostraca from the Levant, however, is generally different. The papyrus does not resemble the Evrona or Jerash ostraca and only a few of the Khirbet el-Mafjer examples.

There are certain likenesses between the paleography of an Arabic parchment from Mount Mugh located in Sogdiana (modern Tajikistan) dated to 718/719 CE and the Jordanian fragments. The shape of the letters is alike, even if the handwriting is very different (Khan 2008: 886). This similarity should not be surprising. As Khan has demonstrated, the Arabic documents from Khurasan that date to the 'Abbāsid period are extremely similar to those from Egypt (Khan 2007: 66). Nevertheless, Khan's study of the Khurasan documents make it clear that there can also be differences in the script according to region, as these documents show certain archaic features (Khan 2007: 66-67). This does not seem to be the case for the Mount Mugh documents, however. Further, Arabic inscriptions display uniformity to each other throughout the Islamic empire, even soon after the Islamic conquest (Hoyland 1997a: 90-91).

There are certain features that can be used in order to date the script (Khan 2007: 19). As has been noted by Grob, the study of Arabic papyri has tended to focus on the earliest periods of Arabic writing and the script becomes increasingly cursive through time (Grob 2010: 161; Grob 2013: 124-128. See also Khan 1997: 27; Khan 2007: 66).

The one clear word is "Allāh" (God) in two lines but otherwise no words can be reconstructed. It is however fortuitous that this word appears, since it is a common phrase preserved in inscriptions (Hoyland 1997a: 91) and papyri and lends itself well for comparisons. The fact that the word Allāh is preserved does not prove definitively that the text was written by a Muslim or for Muslims (for a similar discussion as it relates to religious inscriptions from the Negev see Nevo 1985: 13), although it is highly probable (see site archaeology below). Nevertheless, it is important to remember that the word "Allāh" for "God" was already used in the pre-Islamic period in northern Jordan (Bellamy 1988: 373) and appears in Christian manuscripts from the Judean desert possibly dating to the Umayyad period and certainly 'Abbāsid period (Dunlop Gibson 1899: 74-107; Samir 1994: 57-114; Griffith 2008: 53-57; Monferrer-Sala 2010: 195-197), and a ninth-century Christian papyrus (Graf 1998: 303-305; Swanson Leiden 2008: 386-387). The paleography of the text is however different than Early Islamic Qur'ans or other inscriptions. This further argues that it is a documentary text rather than a religious document.

It is difficult to tell whether the entire inscription of P. Faynan 1 hangs from the baseline to the left, or just these particular preserved words. In some documents, such as the Qurrah ibn Sharik document Oriental Institute Museum E37555, in one instance

the word "Allāh" is written with the final $-h\bar{a}$ sloping down to the left, while the rest of the words are written on a straight line. In other cases, in the same papyrus, the word "Allāh" is written without any hanging from the baseline, which ones sees in documentary texts (Grob 2010: 167). The style of writing is a secular script and could be used for economic and other purposes (Grohmann 1958: 222). Chancery script can also be found at seemingly insignificant sites such as Hirbet el-Mird (Grohmann 1963: xiv-xv), but the script here does not resemble chancery script. Therefore, handwriting of P. Faynan 1 suggests that it is not an official document but rather a documentary text, even if we cannot reconstruct its contents. Nor can it be proven where the text was written, but it is interesting to note that at the Negev site of Rehovot, excavators found some now illegible Arabic inscriptions inked on plaster, suggesting that they had been done *in situ*, which were they believed were done by "skilled scribes" (Nevo 1988: 192).

Arabic script becomes increasingly cursive through time, as in the letters from the late Umayyad/early 'Abbāsid period letters to the post master of Ašmūnein in Egypt (Rāģib 1992: 5-16.); this would seem to argue against a date later than the eighth century for P. Faynan 1. The available evidence reviewed here strongly suggests that P. Faynan 1 dates to the early Islamic period; more specifically has a likely origin in the early-middle eighth century CE.

Wadi Faynan in the Early Islamic Period

Taken with the previous archaeological data this papyrus points to Early Islamic activity in the Wadi Faynan, a poorly understod period in this region. The main economic activity in the Faynan (and main archaeological focus for scholars) has been

the copper industry. While there are signifigant sites centered on metallurgical production dating to the Early Bronze, Iron, Roman periods the pollution profiles argue strongly for a gap in copper mining and smelting from the fifth/sixth centuries CE until the thirteenth century CE. If copper smelting did continue, it was not an a large scale (Barker and Mattingly 2008: 427-428; Newson et al 2008: 366; Friedman 2013: 316; Jones, Najjar, and Levy 2014: 183-184; MacDonald 2015: 98). The Early Islamic settlement is located in the Khirbat Faynan area, four kilometres away from KHI. Khirbat Faynan is the largest site in the Faynan area with an extensive irrigation system, but it has never been excavated (Mattingly et al 2007: 313-319; Friedman 2008: 118-124; Jones et al 2012: 67, 70-71, 91; Jones et al 2014: 184; MacDonald 2015: 79). The epigraphic evidence from the site dates to the Byzantine period (there is an inscription referring to the construction or reconstruction of the church in 580/581) and is all in Greek, including tombstones, with names that seem to be typical of those used elsewhere in the region during Byzantine rule (Meimaris and Kritikakou-Nikolaropoulou 2008: 147-161). One tombstone, which dates to 592, mentions that individuals did not have enough to eat in the region and that one-third of the population died. This is mentioned in two other tombstones that may describe the same event since all of them are similarly in both paleography and content (Meimaris and Kritikakou-Nikolaropoulou 2008: Nos. 68-70, 148-149, 150-153).

This rather hyperbolic statement seems to be supported by an unpublished Greek inscription on a beam from the el-Aqsa mosque that also mentions a famine by an individual who lived in a region between Petra an et-Tafile. The text, which is paleographically similar to the Faynan inscription, may date to the late 6th century and be referring to the same event (Meimaris and Kritikakou-Nikolaropoulou 2008: 149). It remains unclear what impact this event may have had on the 7th century occupation

at the site, but Khirbet Faynan during the Early Islamic was an agriculturally based settlement of modest size, as it had been from the later part of the Byzantine period after the collapse of the copper industry. The Wadi Faynan survey of the site suggests that it continued until at least the beginning of the 'Abbāsid period in the middle of the 8th century (Jones et al 2014: 177, 182). One of the churches at the site is said to have been re-used in the Islamic period (Creighton et al 2007: 138-139), but no precise date is given.

The archaeological suggestions of an Early Islamic mosque at KHI dating to the seventh or eighth century is supported by the find of the papyrus. Certainly KHI fits the model of the Negev desert mosques that are located on hilltops near settlements and in some instances, near water (Avni 1994: 84, 89, 91-92). In this case, the mosque would have been located near the spring of Ain el-Fidan. The structures surrounding the missing mosque may in fact be similar to the rectangular buildings identified near mosques in the Negev (Avni 1994: 84, 91-92), perhaps part of the Early Islamic agricultural system in the area. Indeed, Jones et al cite as yet unpublished radiocarbon dating from the "Roman caravanserai" at Khirbet Hamra Ifdan as evidence that the building continued to be used into the at least the late 8th century or even the late 9th century CE (Jones et al 2012: 182).

The papyrus find hints that the structures surounding the missing mosque were a host for economic or social purposes, perhaps connected to the agricultural estates found elsewhere in the region. One possible parallel may come from the large farm of Evrona, located in the southern part of the 'Arabah, not far from Aqaba. A number of ostraca were found at the site, the best preserved of which contains a list of names with values in dirhems. This is likely a list of orders for payment to the individuals listed or a list of payments owed by them (Avner and Magness 1998: 48, Fig. 12; Avni 2014:

277 (who gives the date of the inscription as 9th century). In turn, this ostracon may be connected to texts from Jerash which preserve the list of debtors and how much they owe in dirhems (Walmsley et al 2008: 123-126).

Looking at the wider south Levantine area, there is evidence for continuation of settlement in the Early Islamic period (Genequand 2003: 34; al-Bqā'īn, Corbett, and Khamis 2015: 104-105, 119) throughout the Byzantine/Islamic transition. In the southern Wadi 'Araba, in contrast to further north, one can see the continuation of copper production and mines, with many villages and other sites found in the region. Indeed, the copper mines in the Nahal Amram in modern Israel, were most intensively used in the Early Islamic period. The copper industry supplied the city of Aqaba on the Red Sea and probably the wider Red Sea network and the region was intensively settled with estates and villages. It seems that the copper exploitation here began to intensify as a *result* of the Islamic conquest (Rothenberg 1988: 1-4; Cobb 1995: 417-28; Avner and Magness 1998: 40; Whitcomb 2006: 239-242; Avni 2008: 10; Damgaard 2009: 89-90, no. 30; Jones et al 2012: 70; Eisenberg-Degen and Rosen 2013: 243-244; Avni 2014: 275, 278; Jones et al 2014: 185; al-Bqā'īn, Corbett, and Khamis 2015: 105-106; Jones 2016: 111).

Despite the fact that the north of the Wadi 'Araba, including the Faynan, seems to have been used less intensively than the southern part of the region in this period and the use of the landscape transformed (Barker and Mattingly 2008: 428; Newson et al 2008: 351; Jones et al 2014: 185; MacDonald 2015: 86), one should not assume that settlement in the region entirely ceased, as the evidence from Khirbat Hamra Ifdan and other sites suggest. Indeed, as Jones states, "the nature of settlement and the economic transformations that occurred during the Late Byzantine and Early Islamic periods in Faynan are still poorly understood" (Jones 2016: 112). To the north of the Faynan the

closest large settlement is Shuqayra al-Gharbiyya. Located on the Karak Plataue about two hours north of the Faynan, it is a large Umayyad and 'Abbāsid period (seventh to ninth century) complex that is currently bening excavated by Mu'tah University (Shdaifat and Ben Badhann 2008: 185-188; Ben Badhann 2009: 8-13). It is an elite residence with agricultural focus likely with trade along the nearby Via Nova/Desert Highway. However this work is preliminary and has yet to be fully published.

Therefore it is not supprising to find evidence of occupation at KHI during the Islamic period as it likely was indicative of human activities through the whole region. While the ephemeral evidence of a desert mosque makes absolute dating impossible certainly what can be said is that there is a long history of Islamic habitation in the area and it was of religious and economic activity. The papyrus and mosque indicate Arabic speakers and probably Muslims, as part of this continuing population.

Conclusion

This papyrus, while poorly preserved, is extremely important for our understanding for the spread of Arabic usage outside of Egypt. It is perhaps surprising, given the dry climate of Jordan that papyri dating to the Early Islamic period have not been found before, although they are also rare in Palestine. As sites in the region continue to be excavated, it is possible that additional scraps of documents will be found, perhaps revealing more detail about Early Islamic settlement in the Faynan.

Bibliography

- Abbott, N. (1938) Arabic Papyri of the Reign of Ga'far al-Mutawakkil 'ala-llāh (A. H. 232-47/A. D. 847-61). *ZDMG* 92: 88-135.
- Abbot, N. (1939) The Rise of the North Arabic Script and its Kur'ānic Development, with a Full Description of the Kur'ān Manuscripts in the Oriental Institute.

 Oriental Institute Publications 50. Chicago: University of Chicago Press.

- Abbot, N. (1946) The Kaṣr Kharāna Inscription of 92 H. (710 A.D.), a New Reading. *Ars Islamica* 11/12: 190-195.
- Avner, U. & Magness, J. (1998) Early Islamic Settlement in the Southern Negev. *BASOR* 310: 39-57.
- Avni, G. (1994) Early Mosques in the Negev Highlands: New Archaeological Evidence on Islamic Penetration of Southern Palestine. *BASOR* 294: 83-100.
- Avni, G. (2007) From Standing Stones to Open Mosques in the Negev Desert: The Archaeology of Religious Transformation on the Fringes. *Near Eastern Archaeology* 70: 124-138.
- Avni, G. (2008) The Byzantine Islamic Transition in the Negev. *Jerusalem Studies in Arabic and Islam* 35: 1-26.
- Avni, G. (2014) The Byzantine-Islamic Transition in Palestine: An Archaeological Approach. Oxford: Oxford University Press.
- Bacquey, S. & Imbert, F. (1986) La nécropole de Qastal. *Annual of the Department of Antiquities of Jordan* 30: 397-404.
- Bacquey, S. & Imbert, F. (1989) Epigraphie islamique en Jordanie. *Contribution française à l'archéologie:* 141-144.
- Barker G.& Mattingly, D. (2008) Archaeology and Desertification: English Summary. In G. Barker, D Gilbertson, and D. Mattingly (eds.), *Archaeology and Desertification: The Wadi Faynan Landscape Survey, Southern Jordan*. Oxford: Oxbow Books: 397-421.
- Bashear, S. (1991) Qibla Musharriqa and Early Muslim Prayer in Churches. *The Muslim World* 81: 267-280.
- Bellamy, J. (1988) Two Pre-Islamic Arabic Inscriptions Revised: Jabal Ramm and Umm Al-Jimāl. *JAOS* 108: 369-378.
- Ben Badhann, Z. (2009) Shuqayra al-Ghariyya: An early Islamic Elite Community on the Karak Plateau. *The Bulletin of Middle East Medievalists* 21: 8-13.
- Bqā'īn, F., Corbett, G. J. & Khamis, E. (2015) An Umayyad Era Mosque and Desert Waystation from Wadi Shīreh, Southern Jordan. *Journal of Islamic Archaeology* 2: 93-126.
- Cobb, P. M. (1995) Scholars and Society at Early Islamic Ayla. JESHO 38: 417-28.
- Creighton, O., Barker, G. & Mattingly, D. (2007) Recording and Classifying the Archaeological Record. In Barker, G., Gilbertson, D., & Mattingly, D. (eds.), *Archaeology and Desertification: The Wadi Faynan Landscape Survey, Southern Jordan*. Oxford: Oxbow Books, 97-140.
- Damgaard. K. (2009) A Palestinian Red Sea Port on the Egyptian Road to Arabia: Early Islamic Aqaba and its Many Hinterlands. In Blue, L., Cooper, J., Thomas, R., & Wainwright, J. (eds.), *Connected Hinterlands: Proceedings of Red Sea Project IV held at the University of Southampton September 2008*, Society for Arabian Studies Monographs No. 8, BAR International Series 2052. Oxford: Archaeopress, 85-97.

- Dunlop Gibson, M. (1899) An Arabic Version of the Acts of the Apostles and the Seven Catholic Epistles, with a Treatise on the Triune Nature of God. London: C. J. Clay.
- Eisenberg-Degen D. & Rosen, S. A. (2013) Chronological Trends in Negev Rock Art: The Har Michia Petroglyphs as a Test Case. *Arts* 2: 225-252.
- al-Farajat S. & al-Nawafleh, S. (2005) Kitābāt Kūfiyah min Minṭaqat al-Dīseh wa Ramm. *Annual of the Department of Antiquities Jordan* 49: 29-37.
- Fiema, Z., al-Jallad, A., Macdonald, M. C. A, & Nehmé, L. (2015) *Provincia Arabia*: Nabataea, the Emergency of Arabic as a Written Language, and Graeco-Arabia. In Fisher, G. (ed.), *Arabs and Empires before Islam*, Oxford: Oxford University Press, 276-373.
- Friedman, H. (2013) Agriculture in the Faynan. In Bowman A., & Wilson, A. (eds.), The Roman Agricultural Economy: Organization, Investment, and Production Oxford: Oxford University Press, 307-322.
- Frösen, J., Arjava, A. & Lehtinen, M. (2002) *The Petra Papyri I*. Amman: American Center of Oriental Research. American Center of Oriental Research Publications 4.
- al-Ghabbân, A. I. (translated with concluding remarks by Hoyland, R.) (2008) The Inscription of Zuhayr, the Oldest Islamic Inscription (24 AH/AD 644-645): The Rise of the Arabic Script and the Nature of the Early Islamic State. *Arabian Archaeology and Epigraphy* 19: 210-237.
- al-Ghabbân, A. I. (2011) Les deux routes syirenne et égyptienne de pēlerinage au nord-ouest de l'Arabie Saoudite. Textes arabes et études islamiques 44. Cairo: Institut français d'archéologie orientale.
- al-Ghul, O. (2004) An Early Arabic Inscription from Petra Carrying Diacritic Marks. *Syria* 81: 105-118.
- Griffith, S. H. (2008) *The Church in the Shadow of the Mosques: Christians and Muslims in the World of Islam.* Princeton; Princeton University Press.
- Genequand, D. (2003) Ma'ān, an Early Islamic Settlement in Southern Jordan: Preliminary Report on a Survey in 2002. *Annual of the Department of Antiquities Jordan* 47: 25-36.
- Graf, G. (1934) Christlich-arabische Texte. Zwei Disputationen zwischen Muslimen und Christen. In Bilabel, F. & Grohmann, A. (eds.) *Griechische, koptische und arabische Texte zur Religion und religiösen Literatur in Ägyptens Spātzeit.*Veröffentlichungen aus den badischen Papyrus-Sammlungen 5. Heidelberg: Universitätsbibliothek. 1-34
- Grob, E. M. (2010) Documentary Arabic Private and Business Letters on Papyrus: Form and Function, Content and Context. New York: De Gruyter.
- Grob, E. M. (2013) A Catalogue of Dating Criteria for Undated Arabic Papyri with 'Cursive' Features. In Regourd, A. (ed.), *Documents et histoire Islam, VIIe-XVIe siècle*. Hautes études orientales 15. Geneva: Librairie Droz, 115-135.
- Grohmann, A. (1952) From the World of Arabic Papyri. Cairo: Al-Maaref Press.

- Grohmann, A. (1963) *Arabic Papyri from Hirbet el-Mird*, Bibliothèque du Muséon 52. Leuven: Publications universitaires.
- Grohmann, A. (1971) *Arabische Paläographie: II. Teil.* Vienna: Böhlau in Kommission.
- Grohmann, A. (1958) Problems of Dating Early Qur'āns. Der Islam 33: 213-231.
- Gruendler, B. (1993) *The Development of the Arabic Scripts from the Nabatean Era* to the First Islamic Century According to Dated Texts. Harvard Semitic Studies 43. Atlanta: Scholars Press.
- Hoyland, R. (1997a) The Content and Context of Early Arabic Inscriptions," *Jerusalem Studies in Arabic and Islam* 21: 77-102.
- Hoyland, R. (1997b) *Seeing Islam as Others Saw It*. Studies in Late Antiquity and Early Islamic 3. Princeton: Darwin Press.
- Hoyland, R. (2007) Epigraphy and the Emergency of Arab Identity. In Sijpesteijn, P., Sundelin, L., Torallas Tovar, S. & Zomeno, A. (eds.), *From al-Andalus to Khurasan: Documents from the Medieval Muslim World*. Leiden: E. J. Brill, 217-242.
- Hoyland, R. (2010). Mount Nebo, Jabal Ramm, and the Status of Christian Aramaic and Old Arabic in Late Roman Palestine and Arabia. In Macdonald, M. C. A. (ed.), *The Development of Arabic as a Written Language*. Supplement to the Proceedings of the Seminar for Arabian Studies 40. Oxford: Archaeopress, 29-46.
- Hoyland, R. & Cotton, H. (2015) The Earliest Attestation of the *Dhimma* of God and his Messenger and the Rediscovery of P. Nessana 77 (60s AH/680 CE). In Ahmed, A.Q., Hoyland, R. & Silverstein, A. (eds.), *Islamic Cultures, Islamic Contexts: Essays in Honor of Professor Patricia Crone*. Islamic History and Civilization 114. Leiden: E. J. Brill, 51-71.
- Imbert. F. (1992) La nécropole islamique de Qasṭal al-Balqā' en Jordanie. *Archaeologie islamique* 3: 17-60.
- Imbert. F. (1995) Inscriptions et espaces d'écriture au Palais d'al-Kharrāna en Jordanie. *Studies in the History and Archaeology of Jordan* 5: 403-416.
- Imbert. F. (2007) Note épigraphique et paléographique: l'inscription peinte sur le baldaquin. In Vibert-GuIgue C. & Bisheh, G. (eds.), *Les peintures de Qusayr 'Amra: un bain dans la bâdiya Jordanienne*. Amman and Beirut: Department of Antiquities Jordan, 45-46.
- al-Jallad, A. M. (2016) The Arabic of the Islamic Conquests: Notes on Phonology and Morphology Based on Greek Transcriptions from the First Islamic Century. Draft submitted for review. Online at <a href="http://www.academia.edu/24938389/The Arabic of the Islamic Conquests Notes on Phonology and Morphology based on the Greek Transcriptions from the First Islamic Century draft submitted for review
- al-Jallad, A. M. (2015a) Graeco-Arabica I: The Southern Levant. In Briquel-Chatonnet, F., Debié, M., & Nehmé, L. (eds.), *Le contexte de naissance de l'écriture arabe. Écrit et écritures araméennes et arabes au 1er millénaire*

- al-Jallad, A. M. (2015b) *An Outline of Grammar of the Safaitic Inscriptions*. Studies in Semitic Languages and Linguistics 80. Leiden: Brill.
- al-Jallad, A. M. (forthcoming) The Earliest Stages of Arabic and its Linguistic Classification. In *Routledge Handbook of Arabic Linguistics*http://www.academia.edu/18470301/Al-Jallad._The_earliest_stages_of_Arabic_and_its_linguistic_classification_Rout ledge_Handbook_of_Arabic_Linguistics_forthcoming_
- al-Jallad, A.M., al-Ghul, O. & Daniel, R.W. (2013) The Arabic Toponyms and Oikonyms in 17. In Koene, L., Kaimio, J., Kaimio, M. & Daniel, R. W. (eds.), The Petra Papyri II. Amman: American Schools of Oriental Research. American Center of Oriental Research Publications, 23-48.
- Jobling, B. (1989) Report of the Eighth Season of the 'Aqaba-Ma'an Archaeological and Epigraphic Survey. *Liber Annus*, January-February: 16-24.
- Jones, I. (2016) Beyond Iron Age Landscapes: Copper Mining and Smelting in Faynan in the Twelfth to Fourteenth Centuries CE. In McPhillips, S., & Wordsworth, P.D. (eds.), *Landscapes of the Islamic World: Archaeology, History, and Ethnography*. Philadelphia: University of Pennsylvania Press, 111-128.
- Jones, I., Levy, T.E. & Najjar, M. (2012) Khirbat Nuqayb al-Asaymir and Middle Islamic Metallurgy in Faynan: Surveys of Wadi al-Ghuwayb and Wadi al-Jariya in Faynan, Southern Jordan. *BASOR* 368: 67-201.
- Jones, I., Najjar, M. & Levy, T.E. (2014) 'Not Found in the Order of History': Toward a 'Medieval' Archaeology of Southern Jordan. In Stull, S. D. (ed.), From West to East: Current Approaches in Medieval Archaeology. Newcastle-upon-Tyne: Cambridge Scholars, 179-205.
- Johnson, N.J. (2010) Inscribed Vessels, Ostraca, and Plaster. In Daviau, P.M.M. & Beckmann, M. (eds.), *Excavations at Tall Jawa, Jordan. Volume 4: The Early Islamic House*. Leiden: Brill, 351-365.
- Kaplony, A. (2015) On the Orthography and Pronunciation of Arabic Names and Terms in the Greek Petra, Nessana, Qurra, and Senouthios Letters. Mediterranean Language Review 22: 1-81.
- Khan, G. (1992) *Arabic Papyri: Selected Material from the Khalili Collection*. Studies in the Khalili Collection vol. 1. London: Oxford University Press.
- Khan, G. (2008) Remarks on the Historical Background and Development of Early Arabic Documentary Formulae. In Kaplony, A. & Grob, E. (eds.), Documentary Letters from the Middle East: The Evidence in Greek, Coptic, South Arabian, Pehlevi, and Arabic (1st-15th c CE). Asiatische Studien 62, etudes asiatiques. Bern: Peter Lang, 885-906.
- Khan, G. (2007) *Arabic Documents from Early Islamic Khurasan*. Studies in the Khalili Collection vol. 5. London: Azimuth Publications.
- Kraemer, C. J. *Excavations at Nessana. Volume 3: Non-Literary Papyri.* Princeton: Princeton University Press.

- Kratchkovskaya, V.A. & Kratchkovsky, I.J. (1934) Drevneyshiy Arabskiy Dokument iz Sredney Azii."In *Sogdiiskii Sbornik: Sbornik Statei o Pamyatnikakh Sogdiiskogo Iazyka i Kultury Naydennykh na gore Mug v Tadzhikskoiy SSR*. Leningrad: Akademiia Nauk SSR.
- Levy, T.E., Adams, R.B., Hauptmann, A., Range, M.P., Schmitt-Strecker, S. & Najjar, M. (2002) Early Bronze Metallurgy: A New Discovered Copper Manufactory in Southern Jordan. *Antiquity* 76: 425-437.
- Lindstedt, I. (2014) New Kufic Graffiti and Inscriptions from Jordan. *Arabian Archaeology and Epigraphy* 25: 110-114.
- MacDonald, B. (1992) *The Southern Ghors and Northeast 'Arabah Archeological Survey*, Sheffield Archaeological Monographs 5. Sheffield: J. R. Collis Publications.
- MacDonald, B. (2015) The Southern Transjordan Edomite Plateau and the Dead Sea Rift Valley: The Bronze Age to the Islamic Period (3800/3700 BC-AD 1917). Oxford: Oxbow Books.
- Macdonald, M. C. A. (1992) The Distribution of the Safaitic Inscriptions in Northern Jordan. *Studies in the History and Archaeology of Jordan* IV: 303-307.
- Macdonald, M. C. A. (2010) Ancient Arabia and the Written Word. In Macdonald, M. C. A. (ed.), *The Development of Arabic as a Written Language*. Supplement to the Proceedings of the Seminar for Arabian Studies 40. Oxford: Archaeopress, 5-27.
- Magness, J. (2003) *The Archaeology of Early Islamic Settlement in Palestine*. Winona Lake, Eisenbrauns.
- Mattingly, D., Newson, P., Creighton, O., Tomber, R., Grattan, J., Hunt, C., Gilbertson, D., el-Rishi, H., & Pyatt, B. (2007) A Landscape of Imperial Power: Roman and Byzantine *Phaino*. In Barker, G., Gilbertson, D. & Mattingly, D. (eds.), *Archaeology and Desertification: The Wadi Faynan Landscape Survey, Southern Jordan*. Oxford: Oxbow Books, 313-319.
- Meimaris Y.E. & Kritikakou-Nikolaropoulou, K.I. (2008) Inscriptions from Palestina Tertia Vol. ib: The Greek Inscriptions from Ghor es-Safi (Byzantine Zoora) (Supplement), Khirbet Qazone and Feinan. Athens: The National Hellenic Research Foundation.
- Monferrer-Sala, J.P. (2010) Once Again on the Earliest Christian Arabic Apology: Remarks on a Paleographic Singularity. *JNES* 69: 195-197.
- Moor, B. (2013) Arabic Inscriptions at Shivta in the Early Islamic Period. *Jerusalem Studies in Arabic and Islam* 40: 73-141.
- Nevo, Y. (1985) *Sde Boqer and the Central Negev:* 7th-8th *Century AD*. Jerusalem: Israel Publications Services (IPS) Ltd.
- Nevo, Y. (1988) Arabic Inscriptions. In Tsafirir, Y. (ed.), *Rehovot-in-the-Negev. Volume 1: Northern Church.* Jerusalem: Institute of Archaeology, Hebrew University, 187-192.
- Y. Nevo, Z. Cohen, and D. Heftman, *Ancient Arabic Inscriptions from the Negev. Volume 1* (Negev: Midreshet Ben Gurion: IPS Ltd. 1993).

- Newson, P., Mattingly, D., Daly, P., Tomber, R., el-Rishi, H., Gilbertson, D., Grattan, J., Hunt, C., McLaren, S. & Pyatt, B. (2008) The Islamic and Ottoman Periods. In Barker, G., Gilbertson, D. & Mattingly, D. (eds.), *Archaeology and Desertification: The Wadi Faynan Landscape Survey, Southern Jordan*. Oxbow Books: Oxford, 349-368.
- Rāġib, Y. (1992)"Lettres de Service au maître de poste d'Ašmūn," *Archeologie islamique* 3: 5-16
- Rothenberg, B. (1988) Early Islamic Copper Smelting and Worship at Beer Ora, Southern Arabah (Israel). *Institute for Archaeo-Metallurgical Studies Newsletter* 12: 1-4.
- Saifullah, M.S.M., Ghoniem, M., Squires, al-R.R.A., & Ahmed, M. (2001) 'The *Qibla* of Early Mosques: Jerusalem or Makkah. http://www.islamic-awareness.org/History/Islam/Dome_Of_The_Rock/qibla.html. [accessed 1/29/2017]
- Samir, S.K. (1994) "The Earliest Arab Apology for Christianity (c. 750). In Samir, S.K. & and Nielsen, J.S. (eds.), *Christian Arabic Apologetics during the Abbasid Period* (750-1258). Leiden: Brill, 57-114.
- Schick, R. (1994) The Settlement Pattern of Southern Jordan: The Nature of the Evidence. In King G.R.D. & Cameron, A. (eds.), *The Byzantine and Early Islamic Near East: Land Use and Settlement Patterns*, *Studies in Late Antiquity and Early Islam*. Princeton: Darwin Press, 138-142.
- Sharon, M. (2004) *Corpus Inscriptionum Arabicarum Palaestinae. Volume Three: D-F.* Handbuch der Orientalistik. Section 1. The Near and Middle East 30: 3. Leiden: Brill.
- Sharon, M. (2017). *Corpus Inscriptionum Arabicarum Palaestinae. Volume 6: J (1)*. Handbuch der Orientalistik. Section 1. The Near and Middle East 30: 6. Leiden: Brill.
- Sharon, M., Avner, U. & Nahlieli, D. (1996) An Early Islamic Mosque near Be'er Ora in the Southern Negev: Possible Evidence from an Early Eastern Qibla? *Atiqot* 30: 107-114.
- Shdaifat, Y. M. & Ben Badhann, Z. (2008) Shuqayra al-Gharbiyya: A New Islamic Compound in Central Jordan. *Near Eastern Archaeology* 71: 185-188.
- Swanson, M. (2008) Title unknown. Modern Title: 'A Christian Arabic Disputation (PSR 438)'. In Thomas, D., Roggema, B. & Monferrer Sala, J.P. (eds.), *Christian-Muslim Relations: A Bibliographical History (600-900)*. Leiden: Brill, 386-387.
- Urice, S.K. (1987) *Qasr Kharana in the Transjordan*. Durham: Eisenbrauns.
- Vibert-GuIgue C. & Bisheh, G. (2007) Les peintures de Qusayr 'Amra: un bain dans la bâdiya Jordanienne. BAH 179. Amman and Beirut: Department of Antiquities Jordan.
- Vorderstrasse, T. (2014) Texts from Khirbet el-Mafjar. *PEQ* 146: 74-76.
- Vorderstrasse, T. & Treptow, T. (2015) *A Cosmopolitan City: Muslims, Christians, and Jews in Old Cairo*. Oriental Institute Museum Publications 38. Chicago: Oriental Institute Press.

- de Vries, B. (2010) On the Way to Bostr: Arab Settlement in South Syria before Islam the Evidence from Written Sources. In Naguib N. & de Vries B. (eds.), Heureux qui comme Ulysses a fait un beau voyage: Movements of People in Time and Space. University of Bergen: Bergen, 69-92.
- Walmsley, A., Blanke, L., Damgaard, K., Mellah, A., McPhillips, S., Roenje L., Simpson, I. & Bessard, F. (2008) A Mosque, Shops and Bath in Central Jarash: The 2007 Season of the Islamic Jarash Project. *Annual of the Department of Antiquities Jordan* 52: 109-137.
- Whitcomb, D. (2006) Land Behind Aqaba: the Wadi Arabah during the Early Islamic Period. In Bienkowski P. & Galors, K. (eds.), *Crossing the Rift: Resources, Routes, Settlement Patterns and interaction in the Wadi Arabah.* Oxford: Oxbow Books, 239-242.