



KHARGA OASIS

KHARGA OASIS (Ar. *Kārja*), the largest oasis in the Western Desert of Egypt, approximately 200 km west of the Nile Valley ([Figure 1](#), [Figure 2](#)). Together with the neighboring Dakhla Oasis it was known in ancient Egyptian hieroglyphic as *wḥ3.t rsy.t*, the ‘southern oasis’ (Giddy, pp. 39-40). Although there is a long history of human activity and habitation in the Western Desert, the oasis was only sparsely populated during the pharaonic period of Egyptian history (Caton-Thompson, pp. 45-53). Instead, Egyptian activity in the desert was focused primarily on expeditions, trade and the procurement of raw materials (Darnell, 2013). Following the Persian conquest of Egypt around 525 BCE, [Cambyses](#) launched an invasion of the Kharga Oasis (Osing, pp. 1447-8; Cruz-Uribe, 2003, pp. 35-7). According to [Herodotus](#) (3.26), the goal of this expedition was to subdue the “Ammonians,” but recent research at Amheida in Dakhla suggests that Petubastis IV, a pretender and rebel against Cambyses, may have had a base there which was the actual target (Kaper). Although Herodotus presents this expedition as a failure, it is clear that the Kharga Oasis was under Persian control for the duration of Achaemenid rule of Egypt (see [Egypt i. Persians in Egypt in the Achaemenid period](#)), save perhaps for a brief period during the revolt of Inarus, whose name appears in a dating formula on a single demotic ostrakon from ‘Ayn Manāwir (Chauveau, 2004). There are several sites in the oasis with archaeological remains dating to the Persian period, in particular temples and subterranean aqueducts often referred to as *qanāt* (pl. *qanāthā*; Colburn 2014, pp. 149-96; forthcoming; see [Kāriz](#))

The most notable monument of Achaemenid date in the Kharga Oasis, and



indeed the best preserved temple from the Egyptian Late Period, is the temple of Amon/Amun at Hibis. Hibis, meaning “town of the plow,” was the primary settlement in the oasis, and the temple is located just north of the modern town of Kharga. The original temple consisted of a forecourt, hypostyle hall, a sanctuary, several smaller rooms, and several chapels on the upper level, accessible via staircases (Winlock; Ismail). Later a second, larger hypostyle hall and a portico were added to the entrance of the temple on the eastern side, as was an enclosure wall and pylons. The temple is richly decorated with reliefs and inscriptions on both its interior and exterior walls (Davies; Cruz-Uribe, 1988; Klotz). Most of these reliefs display images of the king making offerings to various gods, especially Amun, Mut, Khonsu, Osiris and Horus. The main sanctuary of the temple features images of some 700 different gods from throughout Egypt in high relief. These reliefs have been interpreted as “cult-topographical,” that is, they serve to catalog deities and cult practices from across Egypt (Sternberg-el Hotabi; Kessler; Colburn, 2014, pp. 187-89), a well-known feature of temples of the Ptolemaic and Roman periods.

The foundation and construction of the temple is usually attributed to [Darius I](#), whose name appears many times on the walls of the earliest part of the temple (Winlock, pp. 7-9; Colburn 2014, pp. 177-78). However, some scholars argue that construction actually began under Psamtik II (r. 595-589 BCE), on the grounds that Psamtik’s Horus name (i.e., one of his royal names) appears once in the forecourt (Cruz-Uribe, 1988, pp. 164-65). But this evidence is not definitive. First, royal names were sometimes reused in order to confer legitimacy (Kahl), and it is entirely possible that Darius used Psamtik’s Horus name. Second, none of the cartouches naming Darius in the temple show signs of painting over or re-cutting of Psamtik’s name (Ismail, pp. 21-22).

Qasr el-Ghueita (known as *pr-wsh* in Egyptian), some 20 km south of Hibis, is the site of a small sandstone temple within a mudbrick fortification wall. The wall is thought to be of Roman date, but the temple itself was built in the reign of Darius I, a date confirmed by two cartouches in the main sanctuary (Darnell, 2007, p. 30). The temple consists of a forecourt, hypostyle hall, a vestibule, and three rooms at the back, oriented east to west. The middle of these, interpreted as being the temple’s main sanctuary, is decorated with raised relief and painted plaster and includes images of the king before the gods Amun, Mut, Khonsu, Min and Isis (Darnell et al.). This room is not aligned with the rest of temple, and it seems that the main sanctuary was originally a freestanding shrine that was incorporated into the temple building by Darius

(Darnell, 2007, pp. 31-32). Further additions to the temple were made during the Ptolemaic period.

In the south of the oasis there are five hill sites in the Baris basin, all of which have subterranean aqueducts, often known as *qanāts*: ‘Ayn Manāwir, Dush, Dikura, ‘Ayn Ziāda, and ‘Ayn Boreq (Bousquet, pp. 179-91, 195-202). *Qanāts* are widespread in Iran, and are generally thought to have originated there, though this is now a subject of debate (Colburn, 2014, pp. 163-67; forthcoming; Boucharlat). Twenty-two *qanāts* have been identified at ‘Ayn Manāwir, ranging in length from about 200 to 350 m (Wuttmann; Gonon); there is also a mudbrick temple, flanked by two clusters of houses (Wuttmann et al., 1996; 1998). The temple includes a forecourt, hypostyle hall, sanctuary and three chapels. Remains of painted decoration have been found in several rooms, as have several hundred bronze statuettes, many representing the god Osiris (Wuttmann et al., 2007). Abutting the temple is another, smaller structure, where numerous ostraca were recovered, bearing texts written in demotic Egyptian; it is thought to be the office of the temple scribe (Chauveau, 1996, pp. 34-35).

Around 450 ostraca have been found at ‘Ayn Manāwir, ranging in date from 483 to 370 BCE (Chauveau, 1996; 2001; 2005; 2008; 2011). Some of these texts refer to the leasing of water rights in exchange for a portion of the harvest, and they thus confirm the Achaemenid date for the settlement and its attendant *qanāts*. They also indicate that one of the main crops grown there was the castor bean, and archaeobotanical remains from the site also provide evidence of the cultivation of olives and date palms (Newton et al., 2006; 2013; Agut-Labordère and Newton, 2013; Agut-Labordère, 2016). These are all cash crops, and they attest to the success of *qanāt* irrigation in making the southern Kharga Oasis into a productive agricultural zone. Indeed, the ostraca even contain references to ‘stater of Ionia,’ which must be Athenian tetradrachm coins, as units of account (Chauveau, 2000; Agut-Labordère, 2014). These coins came into use in Egypt during the Persian period, likely as an indirect consequence of Achaemenid tribute requirements (Colburn, 2014, pp. 352-87), and their occurrence in these texts from ‘Ayn Manāwir illustrate the extent to which the oasis had become intertwined with economic activity in the Nile Valley and beyond.

Dush (ancient Kysis), about 5 km to the east of ‘Ayn Manāwir, is another settlement with two small temples, both in poor condition, and at least three *qanāts*. One of the temples is sandstone, and surrounded by a mudbrick



enclosure called the “*kasr ancien*” by Reddé. It has inscriptions dating from the reigns of Domitian (r. 81-96 CE) to Antoninus Pius (r. 138-161 CE), but a radiocarbon date obtained from the *kasr ancien* provided a range of 450-350 BCE (Reddé, pp. 172-3). The other temple is mudbrick and preserves no inscriptions; it provided a radiocarbon date of 423-179 BCE (Reddé, p. 180). These dates, along with references to Kysis in the ostraca from ‘Ayn Manāwir (Chauveau, 1996, pp. 38-9), suggest that although most of the remains from Dush date to the Roman period, the settlement itself was probably established in the fifth century BCE; the *qanāts* there may also date to this period. The other three sites in the Baris basin with *qanāts* – Dikura, ‘Ayn Ziāda, and ‘Ayn Boreq – have only been subject to limited study. While it is fairly clear they were active in the Roman period, it is possible they were established earlier as well.

Qanāts have also been documented in the northern Kharga Oasis, at ‘Ayn Gib and Qasr el-Sumayra (Schacht), ‘Ayn Lebekha (Rossi and Ikram, 2010, pp. 238-9), and Umm el-Dabadib (Rossi, pp. 348-52; Rossi and Ikram, 2006, pp. 301-2). All of these sites are of Roman date, but the *qanāts* themselves cannot be dated firmly, and may have been dug earlier, since *qanāts* were often reused over long periods of time.

BIBLIOGRAPHY

D. Agut-Labordère, “L’orge et l’argent: les usages monétaires à ‘Ayn Manāwir à l’époque perse,” *Annales: histoires, sciences sociales* 69, 2014, pp. 75-90.

Idem, “Oil and Wine for Silver? The Economic Agency of the Egyptian Peasant Communities in the Great Oasis during the Persian Period,” in J. C. Moreno García, ed., *Dynamics of Production in the Ancient Near East 1300-500 BC*, Oxford, 2016, pp. 41-52.

D. Agut-Labordère and C. Newton, “L’économie végétale à ‘Ayn-Manāwir à l’époque perse: archéobotanique et sources démotiques,” *Arta* 2013.005 [http://www.achemenet.com/pdf/arta/ARTA_2013.005-Agut-Labordère_Newton.pdf].



R. Boucharlat, “*Qanāt and Falaj: Polycentric and Multi-Period Innovations – Iran and the United Arab Emirates as Case Studies*,” in A. N. Angelakis et al., eds., *Underground Aqueducts Handbook*, Boca Raton, 2017, pp. 279-304.

B. Bousquet, *Tell-Douch et sa région: géographie d'une limite de milieu à une frontière d'Empire*, Documents de fouilles de l'Institut français d'archéologie orientale 31, Cairo, 1996.

G. Caton-Thompson, *Kharga Oasis in Prehistory*, London, 1952.

M. Chauveau, “Les archives d'un temple des oasis au temps des Perses,” *Bulletin de la Société française d'égyptologie* 137, 1996, pp. 32-47.

Idem, “La première mention du statère d'argent en Égypte,” *Transeuphratène* 20, 2000, pp. 137-43.

Idem, “Les qanāts dans les ostraca de Manāwar,” in P. Briant, ed., *Irrigation et drainage dans l'Antiquité: qanāts et canalisations souterraines en Iran, en Égypte et en Grèce*, Persika 2, Paris, 2001, pp. 137-42.

Idem, “Inarôs, prince des rebelles,” in F. Hoffmann and H. J. Thissen, eds., *Res severa verum gaudium: Festschrift für Karl-Theodor Zauzich zum 65. Geburtstag am 8. Juni 2004*, Studia Demotica 6, Leuven, 2004, pp. 39-46.

Idem, “Irrigation et exploitation de la terre dans l'oasis de Kharga à l'époque perse,” *Cahiers de recherches de l'Institut de papyrologie et d'égyptologie de Lille (CRIPEL)* 25, 2005, pp. 157-63.

Idem, “Les archives démotiques d'époque perse: À propos des archives démotiques d'Ayn-Manawîr,” in P. Briant, W. F. M. Henkelman, and M. W. Stolper, eds., *L'Archive des Fortifications de Persépolis: état des questions et perspectives de recherches*, Persika 12, Paris, 2008, pp. 517-24.

Idem, “Les archives démotiques du temple de Ayn Manawîr,” *Arta* 2011.002 [<http://www.achemenet.com/pdf/arta/2011.002-Chauveau.pdf>].

H. P. Colburn, “The Archaeology of Achaemenid Rule in Egypt,” Ph.D. diss., University of Michigan, 2014.

Idem, “Pioneers of the Western Desert: The Kharga Oasis in the Achaemenid Empire,” in B. S. Düring and T. Stek, eds., *The Comparative Archaeology of Imperial Countrysides: Investigating the Transformations of Rural and*



Peripheral Landscapes and Societies in Ancient Old World Empires, Cambridge, forthcoming.

E. Cruz-Uribe, *Hibis Temple Project I: Translations, Commentary, Discussions and Sign List*, San Antonio, 1988.

Idem, "The Invasion of Egypt by Cambyses," *Transeuphratène* 25, 2003, pp. 9-60.

J. C. Darnell, "The Antiquity of Ghueita Temple," *Göttinger Miszellen* 212, 2007, pp. 29-40.

Idem, "A Bureaucratic Challenge? Archaeology and Administration in a Desert Environment (Second Millennium BCE)," in J. C. Moreno García, ed., *Ancient Egyptian Administration*, Handbook of Oriental Studies 1.104, Leiden, 2013, pp. 785-830.

J. C. Darnell, D. Klotz, and C. Manassa, "Gods on the Road: The Pantheon of Thebes at Qasr el-Ghueita," in C. Thiers, ed., *Documents de Théologies Thébaines Tardives (D3T 2)*, Cahiers Égypte Nilotique et Méditerranéenne 8, Montpellier, 2013, pp. 1-31.

N. de G. Davies, *The Temple of Hibis in El Khāargeh Oasis III: The Decorations*, Publications of the Metropolitan Museum of Art Egyptian Expedition 17, New York, 1953.

L. L. Giddy, *Egyptian Oases: Bahariya, Dakhla, Farafra and Kharga during Pharaonic Times*, Warminster, U.K., 1987.

T. Gonon, "Les qanats d'Ayn Manawir (Oasis de Kharga, Égypte): Techniques de creusement et dynamique de l'exploitation d'une ressource épuisable de la Première Domination Perse au IIe siècle de l'Ere Commune," in *Internationales Frontinus-Symposium "Wasserversorgung aus Qanaten – Qanate als Vorbilder im Tunnelbau" 2.-5. Oktober 2003, Walferdange, Luxemburg*, Schriftenreihe der Frontinus-Gesellschaft 26, Bonn, 2005, pp. 39-57.

F. T. Ismail, "Cult and Ritual in Persian Period Egypt: An Analysis of the Decoration of the Cult Chapels F and G on the Lower Level and the Roof Chapels E1, E2, H1, and H2 of the Temple of Hibis at Kharga Oasis," Ph.D. diss., Johns Hopkins University, 2009.

- J. Kahl, "Zu den Namen spätzeitlicher Usurpatoren, Fremdherrscher, Gegen- und Lokalkönige," *Zeitschrift für Ägyptische Sprache und Altertumskunde* 129, 2002, pp. 31-42
- O. Kaper, "Petubastis IV in the Dakhla Oasis: New Evidence about an Early Rebellion against Persian Rule and Its Suppression in Political Memory," in J. M. Silverman and C. Waerzeggers, eds., *Political Memory in and after the Persian Empire*, Ancient Near East Monographs 13, Atlanta, 2015, pp. 125-49.
- D. Kessler, "Hermopolitanische Götterformen im Hibis-Tempel," in N. Kloth, K. Martin, and E. Pardey, eds., *Es werde niedergelegt als Schriftstück: Festschrift für Hartwig Altenmüller zum 65. Geburtstag*, Studien zur altägyptischen Kultur Beihefte 9, Hamburg, 2003, pp. 211-23.
- D. Klotz, *Adoration of the Ram: Five Hymns to Amun-Re from Hibis Temple*, Yale Egyptological Studies 6, New Haven, 2006.
- C. Newton, J.-F. Terral, and S. Ivorra, "The Egyptian Olive (*Olea europaea* subsp. *europaea*) in the Later First Millennium BC: Origins and History using the Morphometric Analysis of Olive Stones," *Antiquity* 80, 2006, pp. 405-14.
- C. Newton, T. Whitbread, D. Agut-Labordère, and M. Wuttmann, "L'agriculture oasienne à l'époque perse dans le sud de l'oasis de Kharga (Égypte, Ve-IVe s. AEC)," *Revue d'Ethnoécologie* 4, 2013 [<https://ethnoecologie.revues.org/1294>].
- J. Osing, "Beiträge zu den Oasen," in W. Clarysse, A. Schoors, and H. Willems, eds., *Egyptian Religion: The Last Thousand Years. Studies Dedicated to the Memory of Jan Quaegebeur*, Orientalia Lovaniensia Analecta 84-85, Leuven, 1998, pp. 1443-48.
- M. Reddé, *Douch III: Kysis. Fouilles de l'Ifao à Douch, Oasis de Kharga (1985-1990)*, Documents de fouilles de l'Institut français d'archéologie orientale 42, Cairo, 2004.
- C. Rossi, "Umm el-Dabadib, Roman Settlement in the Kharga Oasis: Description of the Visible Remains, with a Note on 'Ayn Amur,'" *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 56, 2000, pp. 335-56.
- C. Rossi and S. Ikram, "North Kharga Oasis Survey 2003 Preliminary Report: Umm el-Dabadib," *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 62, 2006, pp. 279-306.



Idem, “North Kharga Oasis Survey 2007 – Preliminary Report: Ain Lebekha and Ain Amur,” *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 66, 2010, pp. 235-42.

I. Schacht, “A Preliminary Survey of the Ancient Qanat Systems of the Northern Kharga Oasis,” *Mitteilungen des Deutschen Archäologischen Instituts, Abteilung Kairo* 59, 2003, pp. 411-23.

H. Sternberg-el Hotabi, “Die ‘Götterliste’ des Sanktuars im Hibis-Tempel von El-Chargeh: Überlegungen zur Tradierung und Kodifizierung religiösen und kulttopographischen Gedankengutes,” in M. Minas and J. Zeidler, eds., *Aspekte spätägyptischer Kultur: Festschrift für Erich Winter zum 65. Geburtstag*, Aegyptiaca Treverensia 7, Mainz am Rhein, 1994, pp. 239-54.

H. E. Winlock, *The Temple of Hibis in El Khāreh Oasis I: The Excavations*, Publications of the Metropolitan Museum of Art Egyptian Expedition 13, New York, 1941.

M. Wuttmann, “Les qanāts de ‘Ayn-Manāwīr (oasis de Kharga, Égypte),” in P. Briant, ed., *Irrigation et drainage dans l’Antiquité: qanāts et canalisations souterraines en Iran, en Égypte et en Grèce*, Persika 2, Paris, 2001, pp. 109-36.

M. Wuttmann, H. Barakat, B. Bousquet, M. Chauveau, T. Gonon, S. Marchand, M. Robin, and A. Schweitzer, “Ayn Manāwīr (oasis de Kharga): deuxième rapport préliminaire,” *Bulletin de l’Institut français d’archéologie orientale* 98, 1998, pp. 367-462.

M. Wuttmann, B. Bousquet, M. Chauveau, P. Dils, S. Marchand, A. Schweitzer, and L. Volay, “Premier rapport préliminaire des travaux sur le site de ‘Ayn Manāwīr (oasis de Kharga),” *Bulletin de l’Institut français d’archéologie orientale* 96, 1996, pp. 385-451.

M. Wuttmann, L. Coulon, and F. Gombert, “An Assemblage of Bronze Statuettes in a Cult Context: The Temple of ‘Ayn Manāwīr,” in M. Hill and D. Schorsch, eds., *Gifts for the Gods: Images from Egyptian Temples*, New York, 2007, pp. 167-73.