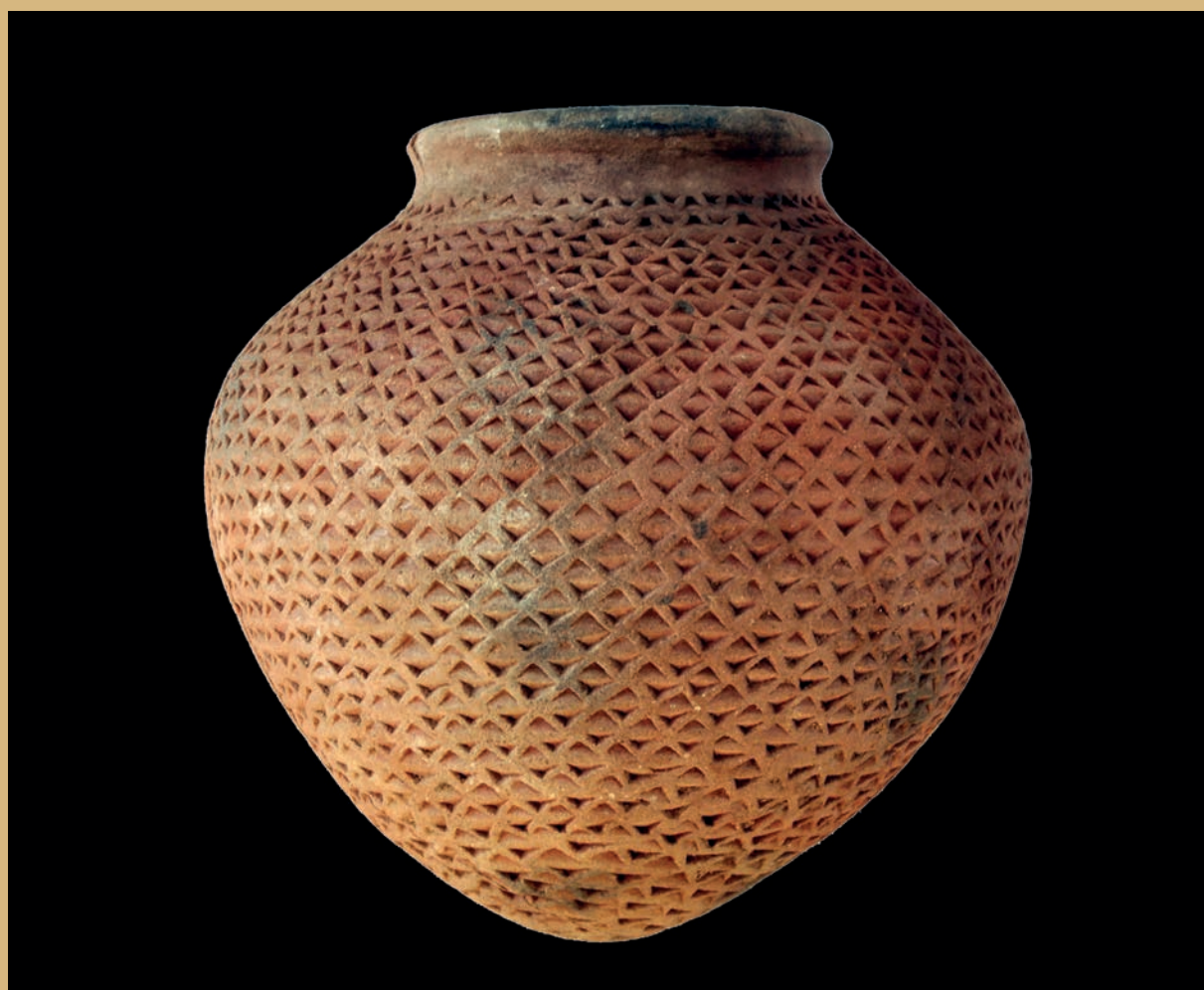


K E R M A

2015-2016 and 2016-2017

SOUDAN

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Université de Neuchâtel
Documents de la mission archéologique suisse au Soudan
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Cover figure: Early Kerma pottery found in the tomb T672, Sector CE29 (ca. 2100 BC).
Photo: Matthieu Honegger

PROTECTION AND VALORIZATION WORKS IN THE EASTERN CEMETERY AND THE MUSEUM

The Swiss Archaeological Mission at Kerma received a grant from the Qatar-Sudan Archaeological Project (QSAP), which allowed it to invest in the protection and valorisation of its heritage. After having benefited from a first grant, which was used for the exhibition “Aux origines des pharaons noirs” (The origins of the Black Pharos) at the Laténium Museum in 2014-2015, and especially for the manufacture of museographic objects (copy of a statue and small-scale models), which were subsequently donated to the National Museum of Sudan to enrich their displays on Kerma. After a one-year interruption in the QSAP project, we were able to reformulate our request for 2016-2017, to cover the cost associated with the protection and valorisation of the cultural heritage. The request specifically covered the works to complete the protection of the Eastern Cemetery (5 km of walls) and finishing the installation of the museography in the Kerma Museum, whilst also renewing certain parts of the installations after almost 10 years of use.

During the 2016-2017 season, under the supervision of Marc Bundi, 15 workers finished the works protecting the Eastern Cemetery (figure 12). They cleared sand and vegetation from some parts of the site, rebuilt some sections of the surrounding wall, which is 5 km long, covered with earth (liaza) other sections, and manufactured 500 cement pillars 120 cm long, to be set up along the edges of agricultural fields in order to prevent their extension (figure 13). This additional protection was essential to avoid the encroachment of agricultural land, with its irrigation which is not always well controlled, rendering the periphery road impracticable and undermining the protective wall. The protective system is now in place, although the southern wall will need to be covered in earth (liaza) next year.



Figure 13/ Cement pillars marking the edges of the fields around the Eastern Cemetery.



Figure 14/Visitors' Pavilion set up at the southern end of the Eastern Cemetery, where visitors arrive and park their vehicles.

Figure 15/Works in progress in the central hall of the Kerma Museum, where the 7 statues of the Black Pharos, discovered at Dokki Gel in 2003, are exhibited.

Figure 16/ Central hall of the Kerma Museum once the works were completed. The wall to the rear of the statues has been rebuilt and the size of the podium has also been reduced to correspond to the original scenography, and better set off the statues.

Close to the southern edge of the necropolis, we decided to build a visitors' pavilion (figure 14). The structure is 8 metres long by 4 metres wide. Over the next few years we will attach panels inside, with pictures and explanations in both English and Arabic for the visitors. These will show the plan of the Eastern Cemetery with its chronology and the location of the main structures, the plan of the Pre-Kerma agglomeration, the evolution of funerary rituals, the evolution of the chapels and the plan of the great tumuli of the end of Kerma civilization.

The rehabilitation of the Kerma Museum began this year (figures 15-16). The works consisted in the removal of the wall behind the statues, which was no longer stable, and the construction of a new cement wall; the size of the podium was also reduced to correspond to the original scenography, and its surroundings were reinforced; other maintenance works were undertaken in the Museum as well as the refurbishment of the electric installations; the exhibition cases were cleaned, with their upper part protected against dust, and the podium of the small-scale models painted; finally, paving was laid (170 m² in the forecourt and 185 m² in the backyard).



BIBLIOGRAPHY

- Abbink, J. 2000. "Tourism and its discontents : Suri-tourists encounters in Southern Ethiopia", *Social Anthropology*, 8, 1: 1-17.
- Abbink, J., Askew, K., Dori, D.F., Fratkin, E., Gabbert, E., Galaty, J.G., LaTosky, S., Lydall, J., Mahmoud, H.A., Markakis, J., Schlee, G., Strecker, I., and Turton, D. 2014. "Lands of the future : transforming pastoral lands and livelihoods in eastern Africa", *Max Planck Institute for Social Anthropology - Working Papers*, 54: 1-29.
- Almagor, U. 1978. *Pastoral partners : affinity and bond partnership among the Dassanetch of South-West Ethiopia*. Manchester: Manchester University Press.
- Anderson, D.M. 1993. "Cow power : livestock and the pastoralist in Africa", *African Affairs*, 92, 366: 121-133.
- Anselin, A. 2000. "Bœufs et pasteurs – Soudan, Libye, Égypte antique", *Cahiers caribéens d'Égyptologie*, 1: 71-119.
- Aufderheide, A. Rodriguez_Martin, C. 1998. *The Cambridge encyclopedia of human paleopathology*. Cambridge : Cambridge University Press.
- Barfield, T.J. 1993. *The nomadic alternative*. Englewood Cliffs: Prentice Hall.
- Barich, B.E., Lucarini, G., Hamdan, M.A., Hassan, F. 2014. *From lake to sand. The archaeology of Farafra Oasis, Western Desert, Egypt*. Sesto Fiorentino: All'Insegna del Giglio.
- Barnard, H. 2009. "The archaeology of the pastoral nomads between the Nile and the Red Sea", in: Szuchman, J. *Nomads, tribes, and the state in the Ancient Near East : cross-disciplinary perspectives*, Chicago: Oriental Institute of the University of Chicago: 15-41.
- Barton, J. 1921. "Notes on the Suk tribe of Kenia Colony", *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 51: 82-99.
- Barton, J. 1923. "Notes on the Kipsikis or Lumbwa tribe of Kenya Colony", *The Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 53: 42-78.
- Baxter, P.T.W., Hogg, R. 1990. *Property, poverty and people : changing rights in property and problems of pastoral development*. Manchester: Department of Social Anthropology and International Development Centre, University of Manchester.
- Beckwith, C., Fisher, A. 1999. *African ceremonies*. Vol. 2. New York: Harry N. Abrams.
- Beckwith, C., Fisher, A., Hancock, G. 1990. *African art : people and ancient cultures of Ethiopia and the Horn of Africa*. New York: HN Abrams.
- Beech, M.W.H. 1911. *The Suk. Their language and folklore*. Oxford: Clarendon Press.
- Behnke Jr, R.H. 1980. *The herders of Cyrenaica : ecology, economy, and kinship among the Bedouin of Eastern Libya*: University of Illinois Press.
- Berhe, M., Butera, J.-B. 2012. *Climate change and pastoralism : traditional coping mechanisms and conflict in the Horn of Africa*. Addis Abeba: Institute for Peace and Security Studies and University for Peace.
- Bietak, M. 1968. *Studien zur Chronologie der nubischen C-Gruppe. Ein Beitrag zur Frühgeschichte Unternubien zwischen 2200 und 1550 vor Chr.* Denkschriften der

- österreichischen Akademie der Wissenschaften 97. Wien: H. Böhlau Nachf.
- Bietak, M. 1979. "Ceramics of the C-Group Culture", in: Hintze, F. ed. *Africa in Antiquity. The Arts of Ancient Nubia and the Sudan*. Meroitica 5: 107-127.
- Bollig, M., Schnegg, M., Wotzka, H.-P. 2013. *Pastoralism in Africa : past, present and future*. New York: Berghahn Books.
- Bonnet, C. 1982. "Archaeological excavations at Kerma (Sudan): preliminary report for the seasons 1980-81 and 1981-82", in: Bonnet, C. et al. *Archaeological excavations at Kerma (Sudan)*, *Geneva, ns*, 30: 1-25.
- Bonnet, C. 1984. "Archaeological excavations at Kerma (Sudan): preliminary report for the seasons 1982-83 and 1983-84", in: Bonnet, C. et al. *Archaeological excavations at Kerma (Sudan)*, *Geneva, ns*, 32: 1-22.
- Bonnet, C. (dir). 1990. *Kerma, royaume de Nubie*. Genève: Musée d'art et d'histoire.
- Bonnet, C. 1997. "Archaeological excavations at Kerma (Sudan): preliminary report for the seasons 1995-96 and 1996-97", in: Bonnet, C. et al. *Les fouilles archéologiques de Kerma (Soudan)*, *Geneva, ns*, 45: 96-112.
- Bonnet, C. 1999. "Archaeological excavations at Kerma (Sudan): preliminary report for the seasons 1997-98 and 1998-99", in: Bonnet, C. et al. *Les fouilles archéologiques de Kerma (Soudan)*, *Geneva, ns*, 47: 57-76.
- Bonnet, C. 2000. *Edifices et rites funéraires à Kerma*. Paris: Errance.
- Bruzek, J. 2002. "A method for visual determination of sex using the human hip bone", *American Journal of Physical Anthropology*, 117: 157-168.
- Bonte, P. 1978. "Pastoral production, territorial organization, and kinship in segmentary lineage societies", in: Burnham, P., Allen, R.F. *Social and ecological systems*, London: Academic Press: 203-226.
- Briois, F., Midant-Reynes, B., Machand, S., Tristant, Y., Wuttman, M., De Dapper, M., Lesur, J., Newton, C. 2012. "Neolithic occupation of an artesian spring : KS043 in the Kharga Oasis, Egypt", *Journal Of Archaeology*, 37, 3: 178-191.
- Catley, A., Lind, J., Scoones, I. 2013. *Pastoralism and development in Africa. Dynamic change at the margins*. Abingdon: Routledge.
- Chaix, L. 1984. "Troisième note sur la faune de Kerma (Soudan) - Campagnes 1983 et 1984", *Geneva, ns*, 32: 31-34.
- Chaix, L. 2006. "Bœufs à cornes déformées et béliers à sphéroïde : de l'art rupestre à l'archéozoologie", in: Gauthier, Y., Le Quellec, J.-L., Simonis R. eds. *Hic Sunt Leones, mélanges sahariens en l'honneur d'Alfred Muzzolini*, *Cahiers de l'Association des Amis de l'Art Rupestre Saharien*, 10: 49-54.
- Chaix, L., J. Dubosson, M. Honegger. 2012. "Bucrania from the Eastern Cemetery at Kerma (Sudan) and the practice of cattle horn deformation", in : Kabaciński J., Chłodnicki M. and Kobusiewicz M. *Prehistory of Northeastern Africa. New ideas and discoveries*. *Studies in African Archaeology*, 11: 189-212.
- Cleuvenot, E., Houet, F. 1993. "Proposition de nouvelles équations d'estimation de stature applicables pour un sexe indéterminé, et basées sur les échantillons de Trotter et Gleser", *Bulletins et Mémoires de la Société d'anthropologie de Paris*, 5, 1-2: 245-255.

- Crèvecoeur, I. 2012. "First anthropological insights on the Early Holocene funerary assemblages from El-Barga", *Kerma, Documents de la mission archéologique suisse au Soudan*, 4: 19-28.
- Davies, M., Gardiner, A.H. 1936. *Ancient Egyptian paintings*. Chicago: University of Chicago Press.
- Driberg, J.H. 1922. "A preliminary account of the Didinga", *Sudan Notes and Records*, 5, 4: 208-222.
- Duday, H., Courtaud, P., Crubezy, E., Sellier, P., Tillier, A.-M. 1990. "L'anthropologie de "terrain" : reconnaissance et interprétation des gestes funéraires", *Bulletins et Mémoires de la Société d'anthropologie de Paris*, 2, 3-4: 29-49.
- Dunham, D. 1982. *Excavations at Kerma, part. VI*. Boston: Museum of Fine Arts.
- Dupire, M. 1962. *Peuls nomades : étude descriptive des Wodaabe du Sahel nigérien*. Paris: Institut d'ethnologie.
- Dyson-Hudson, N. 1966. *Karimojong politics*. Oxford: Clarendon Press.
- Dyson-Hudson, R., McCabe, J.T. 1985. *South Turkana nomadism : coping with an unpredictably varying environment*. Vol. 2. New Haven: Human Relations Area Files.
- Ehret, C. 1967. "Cattle-keeping and milking in eastern and southern African history : the linguistic evidence", *The Journal of African History*, 8, 1: 1-17.
- Ehret, C. 1974. "Cushites and the Highland and Plains Nilotes to AD 1800", *Zamani*: 150-169.
- Ehret, C. 2011. "A linguistic history of cultivation and herding in northeastern Africa", in: Fahmy, A.G., Kahlheber, S. and D'Andrea, A.C. *Windows on the African past. Current approaches to African archaeobotany*, Frankfurt am Main: Africa Magna Verlag: 185-208.
- Elam, Y. 1973. *The social and sexual roles of Hima women : a study of nomadic cattle breeders in Nyabushozi county, Ankole, Uganda*. Manchester: Manchester University Press.
- Equipe. 1979. *Production pastorale et société*. Paris: Maison des sciences de l'homme.
- Fallet, C. 2013. "Bioarchaeological Study of the ancient Sectors of the Eastern Cemetery: latest Results. *Kerma, Documents de la mission archéologique suisse au Soudan*, 5: 32-36.
- Fallet, C. forthcoming. "Population form the Kerma Eastern Cemetery: biological Identity and funerary Practices", in: Honegger, M. (ed.), *Nubian Archaeology in the XXIst Century. Proceedings of the Thirteenth International Conference for Nubian Studies (Neuchâtel, 1-6 September 2014)*. Leuven - Paris - Walpole: Peeters Editions.
- Farelus, B. 1993. "Where does the Hamite belong", *Nomadic Peoples*, 32: 107-118.
- Fratkin, E., Galvin, K.A., Roth, E.A. 1994. *African pastoralist systems : an integrated approach*. Boulder: Lynne Rienner Publishers Inc.
- Fratkin, E., Roth, E.A. 1990. "Drought and economic differentiation among Ariaal pastoralists of Kenya", *Human Ecology*, 18, 4: 385-402.
- Friedman, R. 2001. "Excavations in the Nubian Cemeteries", *Sudan & Nubia* 5: 29-37.
- Friedman, R. 2004. "Excavation of the C-Group cemetery at HK27C, Hierakonpolis", *Sudan & Nubia* 8: 47-51.
- Friedman, R. 2007. "The C-Group cemetery at Locality HK27C: Results of the 2007

- season ”, *Sudan & Nubia*: 11, 57-62.
- Friedman, R. 2014. “HK27C C-Group Cemetery Revisited”, *Nekhen News*: 26, 23-25.
- De Morgan, J. 1903. *Fouilles à Dahshour*. Wien: Adolphe Holzhausen.
- Gabbert, C., and Thubauville, S. 2010. *To live with others. Essays on cultural neighborhood in Southern Ethiopia*. Köln: Rüdiger Köppe Verlag.
- Galaty, J.G. 2002. “How visual figures speak : narrative inventions of ‘The Pastoralist’ in East Africa”, *Visual Anthropology*, 15, 3-4: 347-367.
- Galaty, J.G., Aronson, D., Salzman, P.C., Chouinard, A. 1981. *The future of pastoral peoples*. Ottawa: International Development Research Centre.
- Galaty, J.G., Bonte, P. 1991. *Herders, warriors and traders : pastoralism in Africa*. Boulder: Westview Press.
- Galaty, J.G., Johnson, D.L. 1990. *The world of pastoralism : herding systems in comparative perspective*. New York: Guilford Press.
- Goldschmidt, W.R., Goldschmidt, G. 1976. *Culture and behavior of the Sebei : a study in continuity and adaptation*. Berkeley: University of California Press.
- Gratien, B. 1978. *Les cultures Kerma. Essai de classification*. Lille: Université de Lille.
- Gratien, B. 1986. *Saï I. La nécropole Kerma*. Paris.
- Gratien, B. 1995, “La Basse Nubie à l’Ancien Empire. Egyptiens et autochtones”, *JEA* 81: 43-56.
- Harcourt, R.A. 1974. “The dog in prehistoric and early historic Britain”, *Journal of Archaeological Science*, 1: 151-175.
- Heidenreich, R. 1935. “Tongefäße”, in: Steindorff, G., *Aniba*. Glückstadt und Hamburg: J.J. Augustin.
- Hesse, C., and MacGregor, J. 2006. *Pastoralism: drylands’ invisible asset? Developing a framework for assessing the value of pastoralism in East Africa*. Vol. 142. London: Drylands Programme, International Institute for Environment and Development.
- Hollis, A.C. 1905. *The Masai : their language and folklore*. Oxford: Clarendon Press.
- Hollis, A.C. 1909. *The Nandi : their language and folklore*. Oxford: Clarendon Press.
- Homewood, K. 2008. *Ecology of African pastoralist societies*. Oxford: James Currey.
- Honegger, M., Dubosson, J. 2009. “Ancient graves of the Eastern Cemetery”, *Kerma, Documents de la mission archéologique suisse au Soudan*, 1: 9-10.
- Honegger, M. 2004. “Settlement and cemeteries of the Mesolithic and Early Neolithic at el-Barga (Kerma region) ”, *Sudan & Nubia*, 8: 27-32.
- Honegger, M. 2005. “Kerma et les débuts du Néolithique africain”, *Genava*, 53: 239-249.
- Honegger, M. 2006. “Habitats préhistoriques en Nubie entre le 8e et le 3e millénaire av. J.-C.: l’exemple de la région de Kerma”, in: Caneva, I., Roccati, A. (eds.), *Acta Nubica. Proceedings of the X International Conference of Nubian Studies, Rome 9-14 September 2002*. Rome : Università di Roma “La Sapienza”: 3-13.
- Honegger, M. 2010a. “The Ancient Kerma Area of the Eastern Cemetery”, *Kerma, Documents de la mission archéologique suisse au Soudan*, 2: 7-11.

- Honegger, M. 2010b. "Mesolithic and Early Neolithic habitation remains of Wadi El-Arab", *Kerma, Documents de la mission archéologique suisse au Soudan*, 2: 3-6.
- Honegger, M. 2011a. "The Beginning of the Kerma Civilisation in the Eastern Cemetery", *Kerma, Documents de la mission archéologique suisse au Soudan*, 3: 9-14.
- Honegger, M. 2011b. "Excavation at Wadi El-Arab", *Kerma, Documents de la mission archéologique suisse au Soudan*, 3: 3-8.
- Honegger, M. 2012a. "Excavations at Wadi El-Araba and in the Eastern Cemetery", *Kerma, Documents de la mission archéologique suisse au Soudan*, 3: 3-9.
- Honegger, M. 2012b. "Excavations at Wadi El-Arab and in the eastern cemetery of Kerma", *Kerma, Documents de la mission archéologique suisse au Soudan*, 4: 3-9.
- Honegger, M. 2013a. "The oldest Sectors of the Eastern Cemetery: Neolithic Occupations and the early Stages of the Kerma Civilisation", *Kerma, Documents de la mission archéologique suisse au Soudan*, 4: 17-31.
- Honegger, M. 2013b. "Wadi El-Arab: seeking out occupations from the 6th millennium BC", *Kerma, Documents de la mission archéologique suisse au Soudan*, 5: 11-16.
- Honegger, M., Jakob, B. 2009. "The Early Holocene sequence of Wadi El-Arab", *Kerma, Documents de la mission archéologique suisse au Soudan*, 1: 3-6.
- Honegger, M., Fallet, C. 2015. "Archers' Tombs of Kerma Ancien", *Kerma, Documents de la mission archéologique suisse au Soudan*, 5: 16-30.
- Honegger, M., Williams, M. 2015. "Human occupations and environmental changes in the Nile valley during the Holocene: the case of Kerma in Upper Nubia (Northern Sudan)", *Quaternary Science Reviews*, 130: 141-154.
- Horard-Herbin, M. P. 2000. "Dog management and use in the late Iron Age: The evidence from the Gallic Site of Levrux (France)", in: Crock-Ford, S. J. ed., *Dog through time*. British Archaeological Reports, International Series 889: 115-121.
- Jackson, H. 1923. "The Nuer of the Upper Nile Province", *Sudan Notes and Records*, 6: 59-107.
- Jacobs, A.H. 1965. *The traditional political organization of the pastoral Masai*. Nuffield College: University of Oxford.
- Jakob B. 2015. "The knapped lithic industry from Wadi El-Arab and the perspectives of a synthesis regarding the nubian Mesolithics", *Kerma, Documents de la mission archéologique suisse au Soudan*, 6: 12-15.
- Jesse F. 2007. "Un nouvel aspect du Néolithique au Wadi Howar (Nord du Soudan): des vases caliciformes", *CRIPPEL*, 26: 187-196.
- Johnson, D.H., Anderson, D.M. 1988. *The ecology of survival : case studies from North East African history*. Boulder: Westview Press.
- Kuper, R., Riemer, H. 2013. "Herders before pastoralism: Prehistoric prelude in the Eastern Sahara", in: Bollig M. et al. (eds.), *Pastoralism in Africa: past, present and future*. New York/Oxford : Berghahn Books: 31-65.
- LaTosky, S. 2013. *Predicaments of Mursi (Mun) women in Ethiopia's changing world*. Köln: Rüdiger Köppe Verlag.

- LaTosky, S. 2014. "Images of Mursi women and the realities they reveal and conceal", in: Girke, F. *Ethiopian images of self and other*, Halle: Zentrum für Interkulturelle Regionalstudien: 121-146.
- Ledermann, S. 1969. *Nouvelles tables-types de mortalité*. Paris: PUF.
- Leonard, W.R., Crawford, M.H. 2002. *The human biology of pastoral populations*. Vol. 30. Cambridge: Cambridge University Press.
- Le Provost, V. 2013. "La céramique", in: Jeuthe, C. et al. "Ayn Asil, palais des gouverneurs du règne de Pépy II. État des recherches sur la partie sud". BIFAO 113, 203-238.
- Lewis, I.M. 1961. *A pastoral democracy : a study of pastoralism and politics among the Northern Somali of the Horn of Africa*. London-New York: Oxford University Press.
- Little, K. 1991. "On safari : the visual politics of a tourist representation", in: Howes, D. *The varieties of sensory experience: A sourcebook in the anthropology of the senses*, Toronto: University of Toronto Press: 148-163.
- Little, M.A., Leslie, P.W. 1990. *The South Turkana ecosystem project : report to the government of Kenya, office of the President*. Binghamton: Department of anthropology, State University of New York.
- Little, M.A., Leslie, P.W. 1999. *Turkana herders of the dry savanna: ecology and biobehavioral response of nomads to an uncertain environment*. Oxford: Oxford University Press.
- Lydall, J., Strecker, K. 2001. *Duka's dilemma*: Ethnographic film, 16 mm, 87 min, colour.
- Lynch, B.M., Robbins, L.H. 1979. "Cushitic and Nilotic prehistory : new archaeological evidence from north-west Kenya", *Journal of African History*, 20, 2: 319-328.
- Mann, R., Hunt, D. 2005. *Photographical regional atlas of bone disease : a guide to pathologic and normal variations in the human skeleton*. Springfield : Charles C Thomas publisher.
- MacDougall, D., Blue, J., Baxter, P.T.W. 1974. *Boran herdsman, Parts I and II*: Ethnographic film, 16 mm, 66 min, colour.
- Manzo, A. 2016. *Eastern Sudan in its Setting. The archaeology of a region far from the Nile Valley*. Cambridge Monographs in African Archaeology 94.
- Merker, M. 1910. *Die Masai : ethnographische Monographie eines ostafrikanischen Semitenvolkes*. Vol. 18. Berlin: Dietrich Reimer.
- Monod, T. 1975. *Pastoralism in tropical Africa*. London: Oxford University Press.
- Montet, P. 1954. *Les bœufs égyptiens*. Paris: P. Geuthner.
- Moore, C., Fanning, E., Hunt, E. 1963. "Age variation of formation stages for ten permanent teeth", *Dental research*, 42, 6: 1490-1502.
- Murail, P., Maureille, B., Peresinotto, D., Geus, F. 2004. "An infant cemetery of the Classic Kerma period (1750-1500 BC, Island of Sai, Sudan)", *Antiquity*, 78, 300: 267-277.
- Murail, P., Bruzek, J., Houet, F., Cunha, E. 2005. "DSP: a tool for probabilistic sex diagnosis using worldwide variability in hip-bone measurements", *Bulletins et Mémoires de la Société d'anthropologie de Paris*, 17, 3-4: 167-176.
- Murail, P. 2005. Variations anatomiques non métriques : les caractères discrets, in: Dutour, O., Hublin, J.-J., Vandermeersch, B. (dir.), *Objets et méthodes en paléanthropologie*. Paris : CTHS, 2: 137-152.

- Nicolaisen, J. 1963. *Ecology and culture of the pastoral Tuareg : with particular reference to the Tuareg of Ahaggar and Ayr*. Vol. 9. Copenhagen: National Museum.
- Nordstöm, H.-A. 1972. *Neolithic and A-Group sites*. Scandinavian Joint Expedition to Sudanese Nubia 3. Uppsala: Scandinavian University Books.
- O'Connor, D. 2014. *The Old Kingdom town at Buhen*. EM 106. London: Egypt Exploration Society.
- Olibui, O., Young, B. 2009. *Shooting with Mursi*: Ethnographic film, 55 min, video HD, colour.
- Ortner, D. 2003. *Identification of pathological conditions in human skeletal remains* (Second edition). San Diego: Academic Press Elsevier Science.
- Owings-Webb, P. A., Suchey, J. M. 1985. "Epiphyseal union of the anterior iliac crest and medial clavicle in a modern multiracial sample of American males and females", *American Journal of Physical Anthropology*, 51, 4: 457-466.
- Privati, B. 1982. "New elements for a classification of the ceramics of Ancient Kerma", in: Bonnet, C. et al. *Archaeological excavations at Kerma (Sudan)*, *Geneva, ns*, 30: 53-56.
- Privati, B. 1986. "Remarques sur les ateliers de potiers de Kerma et sur la céramique du Groupe C", in: Bonnet, C. et al. *Les fouilles archéologiques de Kerma (Soudan)*, *Geneva, ns*, 34: 23-28.
- Privati, B. 1999. "La céramique de la nécropole orientale de Kerma (Soudan): essai de classification". *CRIPEL* 20: 41-69.
- Raue, D. in print. *Elephantine und Nubien vom 4. - 2. Jtd v. Chr.* SDAIK 40.
- Reisner, G.A. 1923. *Excavations at Kerma I-V*. Harvard African Studies, 2 vols. Cambridge: Peabody Museum of Harvard University.
- Ricciardi, M., Wan, B. 1971. *Vanishing Africa*. London: Collins.
- Riefenstahl, L. 1982. *Vanishing Africa*. New York: Harmony.
- Riemer, H. 2007. "Mapping the movement of pastro-foragers: The spread of desert glass and other objects in the eastern Sahara during the Holocene 'humid phase'", in: Bubenzer, O. et al. (eds.). *Atlas of cultural and environmental change in arid Africa*. Köln : Heinrich-Barth-Institut: 30-33.
- Riemer, H., Darius, F. 2011. *El Kharafish. The archaeology of Sheik Muftah pastoral nomads in the desert around Dakhla Oasis (Egypt)*. Köln: Heinrich Barth Institut.
- Riemer H., Lange M., Kindermann K. 2013. "When the desert dried up: late prehistoric cultures and contacts in Egypt and northern Sudan", in: Raue, D. et al. (eds.). *The First Cataract of the Nile: One Region - Diverse perspectives*. Berlin : De Gruyter: 157-183.
- Rigby, P. 1969. *Cattle and kinship among the Gogo*. Ithaca: Cornell University Press.
- Rigby, P. 1985. *Persistent pastoralists : nomadic societies in transition*. London: Zed Books Ltd.
- Rigby, P. 1992. *Cattle, capitalism, and class : Ilparakuyo Maasai transformations*. Philadelphia: Temple University Press.
- Ritner, R. 2009. "Egypt and the vanishing Libyan : institutional responses to a nomadic people", in: Szuchman, J. *Nomads, Tribes, and the State in the Ancient Near East*, Chicago: Oriental Institute of the University of Chicago: 43-56.
- Roberts, C., Manchester, K. 2010. *The archaeology of disease*. Stroud: The History Press.

- Roccati, A. 1982. *La littérature historique sous l'Ancien Empire égyptien*. Paris: Éditions du Cerf.
- Roset, J.-P. 1983. "Nouvelles données sur le problème de la néolithisation du Sahara méridional: Air et Ténéré, au Niger", *Cahiers ORSTOM. Série Géologie*, 1, 2: 119-142.
- Salvatori, S., Usai, D., Abdelrahman, M. F., di Matteo, A., Iacumin, P., Linseele, V., Magzoub, M. K. 2014. "Archaeology at El-Khiday: New insight on the prehistory and history of Central Sudan", in: Anderson, J. R., Welsby, D. A. (eds.). *The Fourth Cataract and Beyond. Proceeding of the 12th International Conference for Nubian Studies*. Leuven-Paris-Walpole : Peters: 243-257.
- Säve-Söderbergh, T. 1989. *Middle Nubian Sites*. Scandinavian Joint Expedition to Sudanese Nubia 4. Uppsala: Scandinavian University Books.
- Schaefer, M., Black, S., Scheuer, L. 2009. *Juvenile osteology : a laboratory and field manual*. London: Academic Press Elsevier Science.
- Schneider, H.K. 1979. *Livestock and equality in East Africa. The economic basis for social structure*. Bloomington: Indiana University Press.
- Schmitt, A. 2005. "Une nouvelle méthode pour estimer l'âge au décès des adultes à partir de la surface sacro-pelvienne iliaque", *Bulletins et Mémoires de la Société d'anthropologie de Paris*, 17, 1-2: 89-101.
- Schröder, M.-K. forthcoming. "Nubian pottery assemblage from the C-Group cemetery HK27C at Hierakonpolis", in: Honegger, M. (ed.), *Nubian Archaeology in the XXIst Century. Proceedings of the Thirteenth International Conference for Nubian Studies (Neuchâtel, 1-6 September 2014)*. Leuven - Paris - Walpole: Peeters Editions.
- Schweinfurth, G. 1874. *The heart of Africa: three years' travels and adventures in the unexplored regions of Central Africa, from 1868 to 1871. Volume 1*. Translated by Frewer, E.E. New York: Harper and Brothers.
- Silvester, H. 2006. *Les peuples de l'Omo*. Paris: La Martinière.
- Sobania, N. 2002. "But where are the cattle ? Popular images of Maasai and Zulu across the twentieth century", *Visual Anthropology*, 15, 3-4: 313-346.
- Spear, T., Waller, R. 1993. *Being Maasai : ethnicity and identity in East Africa*. London: James Currey Publisher.
- Spencer, P. 1965. *The Samburu : a study of gerontocracy in a nomadic tribe*. Berkeley: University of California Press.
- Spencer, P. 1973. *Nomads in alliance : symbiosis and growth among the Rendille and Samburu of Kenya*. Oxford: Oxford University Press.
- Steindorff, G. 1935. *Aniba*. Glückstadt und Hamburg: J.J. Augustin.
- Sternberg, T., Chatty, D. 2013. *Modern pastoralism and conservation : old problems, new challenges*. Cambridge: White Horse Press.
- Strecker, I. 1986. *The song of the Hamar herdsman. Celebration of the favourite ox of Southern Ethiopia*. edited by Ethnographic film, m., 45min, colour: Ethnographic film, 16 mm, 45 min, colour.
- Strecker, I. 2013. *Berimba's resistance : the life and times of a great Hamar spokesman*. As

- told by his son Aike Berinas. Vol. 12. Münster: LIT Verlag.
- Sutton, J.E. 1993. "The antecedents of the interlacustrine kingdoms", *The Journal of African History*, 34, 1: 33-64.
- Teichert, M. 1975. "Osteometrische Untersuchungen zur Berechnung der Widerristhöhe bei Schafen", in: Clason, A.T. ed. *Archaeozoological Studies*, 51-69.
- Testart, A. 2004. *La servitude volontaire, 2 vol.* Paris Errance.
- Thomson, J. 1887. *Through Masai land : a journey of exploration among the snowclad volcanic mountains and strange tribes of eastern equatorial Africa.* London: Sampson Low, Marston, Searle and Rivington.
- Titherington, G. 1927. "The Raik Dinka of Bahr el Ghazal Province", *Sudan Notes and Records*, 10: 159-209.
- Tornay, S. 1979a. "Armed conflicts in the Lower Omo Valley, 1970-1976. An analysis from within Nyangatom society in warfare among East African herders", in: Fukui, K. Turton, D. *Warfare among East African Herders*, Osaka: Senri Ethnological Studies Osaka: 97-116.
- Tornay, S. 1979b. "Génération, classes d'âges et superstructures : à propos de l'étude d'une ethnie du cercle Karimojong (Afrique Orientale)", *Production pastorale et société*: 307-327.
- Török, L. 2009. *Between Two Worlds: The Frontier Region between Ancient Nubia and Egypt 3700 BC - 500 AD.* Leiden: Koninklijke Brill.
- Turton, D. 2004. "Lip-plates and "the people who take photographs" : uneasy encounters between Mursi and tourists in southern Ethiopia", *Anthropology today*, 20, 3: 3-8.
- Usai, D. 2014. "Recent advances in understanding the Prehistory of Central Sudan", in: Anderson, J. R., Welsby D.A. (eds.). *The Fourth Cataract and Beyond. Proceeding of the 12th International Conference for Nubian Studies.* Leuven-Paris-Walpole: Peters: 31-44.
- Wendorf, F., Schild, R. 2001. *Holocene settlement of the Egyptian Sahara. Vol. 1: The archaeology of Nabta Playa*, New York : Kluwer Academic/Plenum Publishers.
- Westermann, D. 1912. *The Shilluk people, their language and folklore.* Philadelphia: Board of foreign missions of the United Presbyterian church of NA.
- Williams, M.A.J. 2012. "Geomorphology and Quaternary geology of the region between Wadi El-Arab and Kerma", *Kerma, Documents de la mission archéologique suisse au Soudan*, 4: 10-15.

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