



Protohistoric cairns and tower tombs in south-eastern Arabia (end of the 4th-beginning of the 3rd millennium BCE)

Olivia Munoz

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Megaliths of the World

Volume I



edited by

Luc LAPORTE, Jean-Marc LARGE

Laurent NESPOULOUS, Chris SCARRE, Tara STEIMER-HERBET

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Megaliths of the World

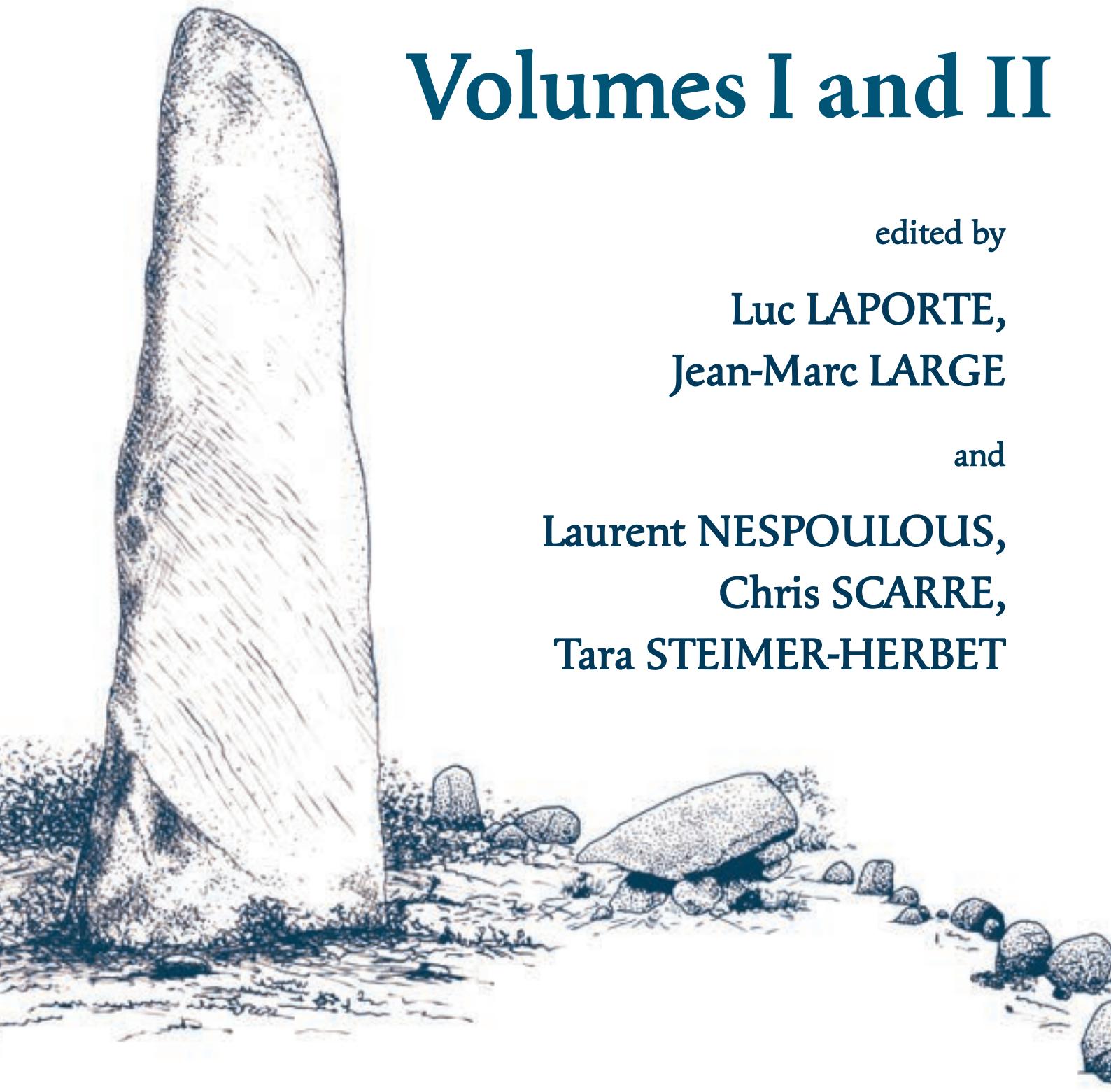
Volumes I and II

edited by

Luc LAPORTE,
Jean-Marc LARGE

and

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During the preparation of this publication we learned of the death of Alain Gallay, Emeritus Professor at the University of Geneva, who has made such a major contribution to the discipline. His participation in the international conference on The Megaliths of the World, and his membership of the Steering Committee, was a great honour for us. The whole of the editorial team pay tribute to him.

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Protohistoric cairns and tower tombs in South-Eastern Arabia (end of the 4th - beginning of the 3rd millennium BCE)

Abstract: This article presents a synthesis of current knowledge regarding tower-tombs or Hafit-type tombs. Thousands are found within the Oman Peninsula, within the southeastern Arabian Peninsula, and they are usually associated with the beginning of the Bronze Age (the end of the 4th to the beginning of the 3rd millennium BCE). This apparently large-scale funerary phenomenon is contextualized, and the history of discovery and the orientation of current research are discussed. Finally, the chronocultural timeline is presented, before the traits that characterize these funerary monuments are described. Throughout this article, the available data on locations and use-time of the necropolises, tomb architecture, funerary practices, and the biological data of the individuals deposited within them, are accompanied by a reminder of the challenges and perspectives nourishing current research on this topic.

Keywords: *Oman Peninsula, Arabia, Hafit-type tombs, tower-tombs, cairns, Early Bronze Age*

1. Introduction

1.1 A large-scale megalithic phenomenon...

Still visible in their thousands in the modern landscape, the Hafit-type tombs – named after the site where they were first discovered – are emblematic monuments of the Early Bronze Age of southeastern Arabia, and of the Oman Peninsula (currently the territory of the United Arab Emirates and the Sultanate of Oman), and this earned the sites of Al-Ayn and Bat a place on the UNESCO World Heritage list. Also termed ‘cairns’, ‘beehive tombs’ or ‘tower tombs’ according to their morpho-

logy, these drystone constructions in the shape of truncated cones or igloos are generally set on elevated areas within the landscape and grouped in necropolises that can include over a hundred tombs (Fig. 1). Considered as markers of resources and territories, they bear witness to a true anthropopization of the landscape: they punctuate all areas frequented by human groups within an immense territory.

While they present great variations in morphology and architecture, their aspect and funerary function links them to a large-scale megalithic phenomenon that characterized the entire Arabian Peninsula



Fig. 1 – Example of tombs from Eastern Arabia: a. Shir (Oman); b, c. Al-Ayn (Oman); d. Ra's al-Jinz (Oman); e. Shiyā (Oman); f. Shifyah (Saudi Arabia) [Photos: Anonymous (a-d); O. Munoz (e-f)].

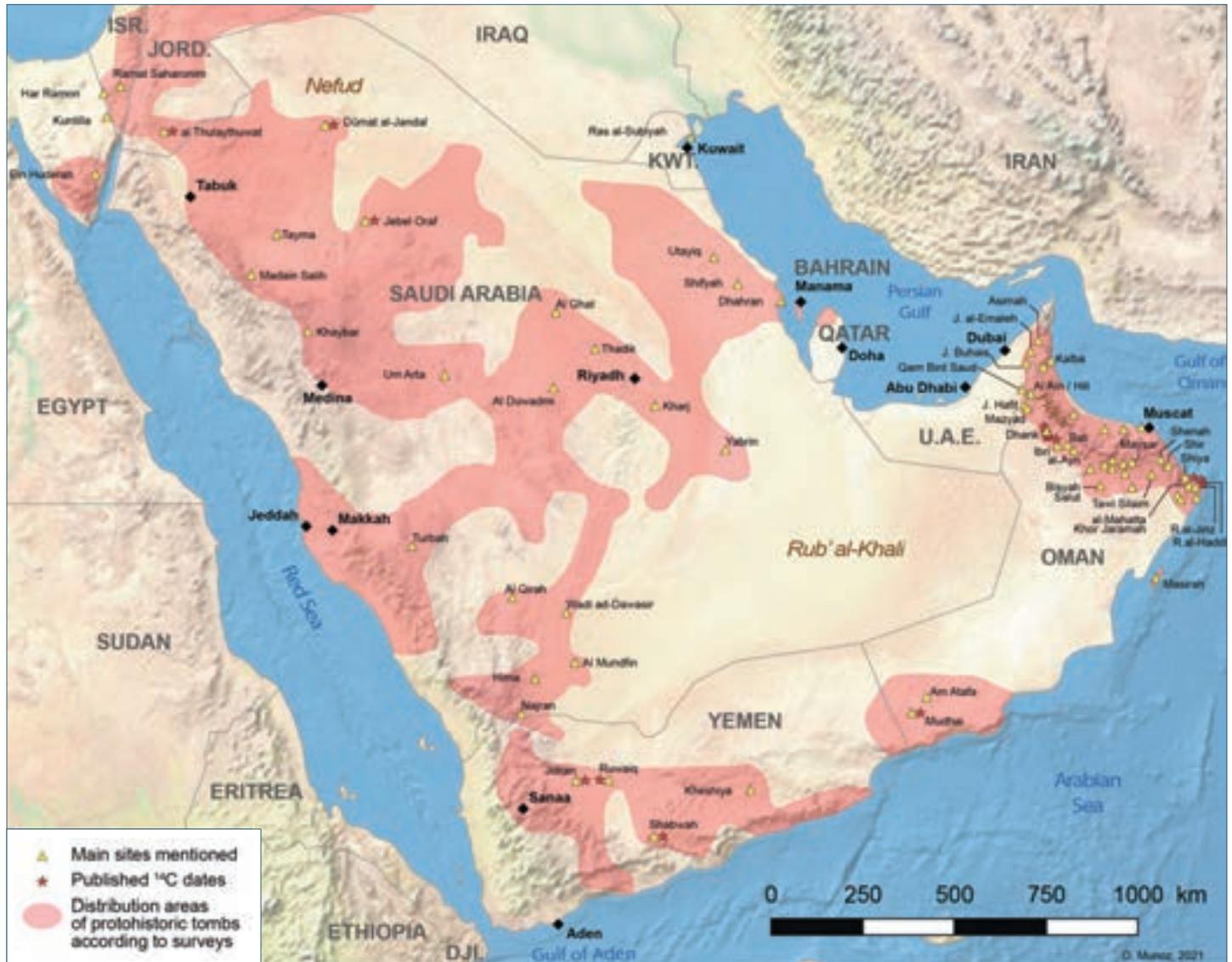


Fig. 2 – Distribution map of tower-tombs and cairns within the Arabian Peninsula and its margins, localization of the principal sites mentioned in the text and tombs dated through radiocarbon analysis (Data compiled from Munoz 2014: fig. 2.3; Chevalier 2017: fig. 2; Deadman 2017: fig. 9.11, A1).

during protohistory (Fig. 2). Indeed, hundreds of thousands of similar monuments can be found in the Sinai Peninsula and the Negev (*nawamis*: Bar-Yosef 1977; Haiman 1992; Saidel 2017); southern Jordan (Abu-Azizeh *et al.* 2014); Kuwait (tumuli: Rutkowski *et al.* 2015); Saudi Arabia (cairns: Adams *et al.* 1977; Hashim 1996; Chevalier 2016; Munoz *et al.* 2020); Oman (cairns, beehive tombs, tower-tombs, Hafit tombs, tumuli: al-Jahwari 2013; Böhme 2011; Cleuziou 2002b; de Cardi *et al.* 1976; Williams & Gregorička 2020; Yule & Weisgerber 1998); and all the way to Yemen (*dirm* tombs, turret tombs, cairns: de Maigret 1990; Braemer *et al.* 2001; Steimer-

Herbet 2004; Steimer-Herbet *et al.* 2006). They are sometimes associated with raised stone alignments ('trains') or other structures made of piled stones (rock piles).

To the north and south of the Arabian Peninsula, these stone tombs replace or accompany other forms of monumental architecture, all bearing witness to a growing imprint of human groups on their environment, as well as to an intense marking of the territory during the middle Holocene (Neolithic and Bronze Age). Indeed, a great variety of megalithic structures have been inventoried in areas comprising groups of tombs. These include trapezoid

or rectangular platforms (McCorriston *et al.* 2012; 2014; Munoz *et al.* 2020), stelae and raised stone circles, dolmens (Zarins 1979; Steimer-Herbet 2011), and impressive stone alignments reaching hundreds of metres and adopting various forms (gates, mustatils, pendants, bulls-eyes, and tapered structures; for examples see Zarins *et al.* 1979; Kennedy 2011, 2017; Groucott *et al.* 2020). These arrangements are usually interpreted as sanctuaries, cenotaphs, or ceremonial meeting places associated with funerary or ritual practices.

1.2 ... Over the long-term

The chronological amplitude of this funerary phenomenon and its large-scale diffusion (over a territory over three million km²), the rarity of absolute dating and of standardized excavations, coupled with a regional fragmentation of research, makes it difficult to establish a global evolutive synthesis that accounts for all local variants. Recent research, however, indicates that their appearance is relatively precocious – since some tombs are dated to the end of the 6th millennium BCE – and that their use endures,

albeit in an intermittent manner, until at least the 1st millennium BCE (Figs. 3 and 4, and see below).

Three cairns explored in southern Jordan, in the Al-Thulaythuwat area, were radiocarbon dated to the end of the 6th through to the beginning of the 5th millennium BCE (Abu-Azizeh *et al.* 2014). To the south of the Nefud desert, near Jebel Oraf, similar tombs have been dated to the middle Neolithic, and linked to the first pastoralist nomads occupying the region (Guagnin *et al.* 2020). In the Dūmat al-Jandal region, in the north of Saudi Arabia, a series of radiocarbon dates for the use of the cairns indicate a timeframe from the 5th to the 1st millennium BCE (Munoz *et al.* 2020).

To the east of the Arabian Peninsula, in the Oman Peninsula, tower tombs are traditionally attributed to the Early Bronze Age (Hafit period, 3200–2700 BCE), marking the end of the humid period of the Holocene and the emergence of copper exploitation, the development of oasis agriculture, and an intensification of intra- and interregional exchanges (Cleuziou & Tosi 2007; Magee 2014; Bortolini & Munoz 2015). Nonetheless, recent

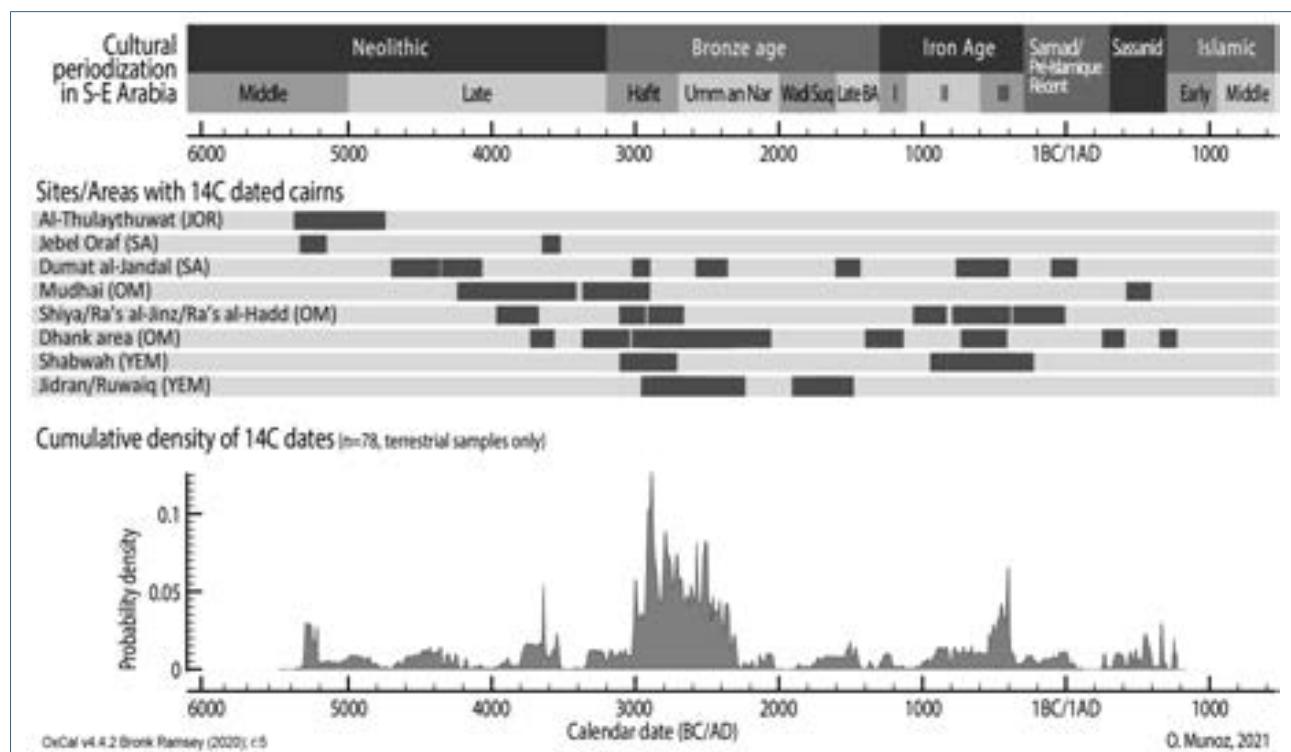


Fig. 3 – Chronological distribution according to regional attribution of tower tombs and cairns dated through radiocarbon analysis and cumulated density of ¹⁴C dates (n=78, terrestrial samples only).

research shows that the systematic chronological attribution of these tombs to the Early Bronze Age during prospection must be relativized and nuanced. Compiling the absolute dates obtained from the Dhofar tombs (Mudhai: Williams *et al.* 2014), in the piedmont of the Jebel Hajar (Dhank region: Williams & Gregorička 2020), or the coast of the Sea of Oman (Shiyā, Ra's al-Hadd and Ra's al-Jinz: this article) indicate that monumental stone tombs have been erected since the Late Neolithic and used until the 1st millennium BCE. The use of the funerary structures is particularly intense at the beginning of the 3rd millennium, during the Hafit period, with another increase at the end of the Iron Age (between 600 and 300 BCE) (Fig. 3). This late re-use of the tombs during the Iron Age is attested through stratigraphic observations (Muñoz *et al.* 2017) or, more frequently, through the presence of Iron Age artefacts in reemployed tombs (Schreiber & Häser 2004; Döpper 2014; al-Jahwari 2016; Madsen 2018: 223).

In Yemen, available absolute dates suggest a construction phase at the beginning of the Bronze Age, continuing through the 2nd millennium BCE, and a re-use phase during the Iron Age (Braemer *et al.* 2001; Crassard *et al.* 2010) (Fig. 3).

An overview is now presented, summarizing the research conducted within the Oman Peninsula (i.e., in the United Arab Emirates and the Sultanate of Oman), where these tombs have been a focus for numerous researchers; this will provide an opportunity to discuss the various approaches used. I will then describe in more detail the monuments known in southeastern Arabia as ‘Hafit tombs’, which supposedly mark the beginning of the Bronze Age (around 3200–2700 BCE). A review of tomb distribution, architectural variability, and associated artefacts, as well as funerary and bio-anthropological data yielded from human remains, all provide axes of reflection through which to analyse this funerary phenomenon. Throughout this synthesis, I will draw out the challenges facing current research and highlight approaches still to be developed.

2. Pioneering research and current orientation

2.1 First explorations in *terra incognita*

In the southeast of the Arabian Peninsula, the first archaeological research was initiated in the 1950s by a Danish team led by Geoffrey Bibby. It focused first on the island of Bahrain, with the exploration of tumulus-like monuments typical of the island (Bibby 1969). Bibby aimed to identify the lands of ‘Dilmun’ and of ‘Magan’ mentioned in late 3rd millennium BCE Mesopotamian texts as purveyors of copper and diorite. The publication of *Looking for Dilmun* (Bibby 1969), which synthesizes his discoveries in a romanticized manner, raised the interest of orientalists for a region that had, until then, been ignored. The mention of Mesopotamian potteries and of soft stone vases from Iran meant that the southern coast of the Persian Gulf could be integrated into the Mesopotamian and Iranian complex, providing the first elements of a relative chronology.

Later, several research teams explored particular sites such as Umm an-Nar, Jebel Hafit, Hili, Bat, Maysar and Ra's al-Jinz. These yielded the first construction elements for a chrono-cultural sequence and for the definition of local material cultures (Frifelt 1968, 1970, 1975a–b, 1991, 2002; de Cardi 1975; de Cardi *et al.* 1976, 1977; Tosi 1976; Cleuziou & Costantini 1980; Weisgerber 1980, 1981, 1983, 1984; Cleuziou 1989; Cleuziou & Tosi 2000a; see also Tosi 1989 for a history of early research). This pioneering research focused primarily on the Bronze Age (3rd millennium BCE), which witnessed the appearance of numerous innovations. These first studies described the emergence of the first oases, the establishment of exchange networks at various scales, and the conditions within which copper was exploited.

At the same time, the discovery of the monumental stone tombs that were present across the entire territory, and easily identifiable thanks to the absence of vegetation, drew the interest of many researchers. In 1962, a Danish archaeological team led by K. Thorvildsen undertook the first scientific excavations of this kind of tomb in the Jebel Hafit, near al Ain (Abu Dhabi), and these were then continued in an intermittent manner until 1971 (Frifelt 1970, 1975a–b; Madsen 2008: 15–22). The

Megaliths of the World - Part VI: Megaliths from Caucasus to the Arabic Peninsula

Country	Site/Acronyme/Structure/#individual/Lab#	Sample	Age 14C BP	calBC/AD, 2σ	Reference
Jordan	Al-Thulaythuwat/TH.311#A/P784/AA85549	Human apatite	6250±57	-5360	-5040 Abu-Azizeh <i>et al.</i> 2014, p. 167
	Al-Thulaythuwat/TH.309#E/P783/AA85548	Human apatite	6067±54	-5210	-4800 Abu-Azizeh <i>et al.</i> 2014, p. 167
	Al-Thulaythuwat/TH.240#E/Pa2488	Human apatite	6010±70	-5205	-4720 Abu-Azizeh <i>et al.</i> 2014, p. 167
Saudi Arabia	Dumat al-Jandal/DJ/T_L2201/SacA-44357	Human apatite	5735±30	-4685	-4495 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_1089/SacA-44370	Human apatite	5645±30	-4545	-4365 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_L2206/SacA-44358	Human apatite	5545±30	-4450	-4340 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_1086/SacA-44367	Human apatite	5385±30	-4335	-4060 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_1091/SacA-44378	Human apatite	4310±30	-3015	-2880 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_1087/SacA-44368	Human apatite	3960±30	-2575	-2345 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_1088/SacA-44369	Human apatite	3235±30	-1605	-1425 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_L2207/SacA-44359	Human apatite	2470±30	-770	-420 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_1090/SacA-44371	Human apatite	2390±30	-725	-390 Munoz <i>et al.</i> 2020
	Dumat al-Jandal/DJ/T_L2204_SU2910/UBA-33306	Charcoal	2026±32	-110	80 Munoz <i>et al.</i> 2020
	Jebel Oraf/ORF132A/Double cairn/UGAMS 44682	Marine shell	**7900±30	-6185	-5875 Guagnin <i>et al.</i> 2020
	Jebel Oraf/ORF125B/Cairn/UGAMS 36030	Human apatite	6270±25	-5320	-5130 Guagnin <i>et al.</i> 2020
	Jebel Oraf/ORF108/Cairn A/UGAMS 44684	Human apatite	4780±25	-3640	-3520 Guagnin <i>et al.</i> 2020
Oman (Interior)	Abu Silah/S021-001,#C/UGAMS 20175	Human apatite	4330±25	-3015	-2895 Williams, Gregoricka 2019
	Abu Silah/S021-001,#F/UGAMS 20177	Human apatite	4140±25	-2875	-2585 Williams, Gregoricka 2019
	Abu Silah/S021-001,#D/UGAMS 20176	Human apatite	4130±25	-2870	-2580 Williams, Gregoricka 2019
	Abu Silah/S021-001,#B/UGAMS 20174	Human apatite	4070±25	-2850	-2490 Williams, Gregoricka 2019
	Abu Silah/S021-001,#A/UGAMS 14211	Human apatite	1330±20	650	775 Williams, Gregoricka 2019
	Al Aflaj/S020-001,#A/UGAMS 20178	Human apatite	6280±25	-5315	-5210 Williams, Gregoricka 2019
	Al Aflaj/S020-002,#A/UGAMS 20182	Human apatite	3920±20	-2475	-2305 Williams, Gregoricka 2019
	Al Aflaj/S020-002,#B/UGAMS 20183	Human apatite	3910±25	-2470	-2295 Williams, Gregoricka 2019
	Al Khubayb/S002-001,#B/UGAMS 11159	Human apatite	4490±25	-3350	-3090 Williams, Gregoricka 2013
	Al Khubayb/S007-001, locus 003/UGAMS 11161	Charcoal	4230±25	-2910	-2700 Williams, Gregoricka 2013
	Al Khubayb/S007-003,#C/UGAMS 11158	Human apatite	4170±25	-2885	-2635 Williams, Gregoricka 2013
	Al Khubayb/S002-001,#C/UGAMS 11156	Human apatite	4110±30	-2870	-2570 Williams, Gregoricka 2013
	Al Khubayb/S007-167/UGAMS 17150	Charcoal	4130±25	-2870	-2580 Williams, Gregoricka 2019
	Al Khubayb/S007-057,#D/UGAMS 14213	Human apatite	4050±25	-2835	-2470 Williams, Gregoricka 2020
	Al Khubayb/S007-011,#A/UGAMS 17148	Human apatite	4045±25	-2665	-2470 Williams, Gregoricka 2020
	Al Khubayb/S007-167,#A/UGAMS 17151	Human apatite	4040±25	-2630	-2470 Williams, Gregoricka 2020
	Al Khubayb/S007-003, Locus 004/UGAMS 11160	Charcoal	4030±25	-2625	-2470 Williams, Gregoricka 2013
	Al Khubayb/S007-012,#A/UGAMS 17149	Human apatite	4030±25	-2625	-2470 Williams, Gregoricka 2020
	Al Khubayb/S007-057,#A/UGAMS 14212	Charcoal	4030±20	-2620	-2470 Williams, Gregoricka 2019
	Al Khubayb/S007-169,#A/UGAMS 17152	Human apatite	3900±25	-2470	-2295 Williams, Gregoricka 2019
	Al Khubayb/S002-001,#A/UGAMS 11157	Human apatite	1710±25	250	415 Williams, Gregoricka 2013
	Al Khatma/S002-082,#A/UGAMS 20197	Human apatite	4250±25	-2915	-2705 Williams, Gregoricka 2019
	Al Khatma/S002-046,#A/UGAMS 20190	Human apatite	4170±25	-2885	-2635 Williams, Gregoricka 2019
	Al Khatma/S002-049,#A/UGAMS 20191	Human apatite	4160±25	-2880	-2630 Williams, Gregoricka 2019
	Al Khatma/S002-050,#A/UGAMS 20192	Human apatite	4130±25	-2870	-2580 Williams, Gregoricka 2019
	Al Khatma/S002-058,#A/UGAMS 20195	Human apatite	3910±30	-2470	-2295 Williams, Gregoricka 2019
	Al Khatma/S002-052,#A/UGAMS 20193	Human apatite	3870±25	-2465	-2205 Williams, Gregoricka 2019
	Al Khatma/S002-059,#A/UGAMS 20196	Human apatite	3710±20	-2200	-2030 Williams, Gregoricka 2019
	Al Khatma/S002-053,#A/UGAMS 20194	Human apatite	2410±20	-720	-400 Williams, Gregoricka 2019
	Dank region/Necropolis 6/S022-012,#A/UGAMS 20198	Human apatite	4850±25	-3705	-3530 Williams, Gregoricka 2019
	Dank region/Necropolis 6/S022-048,#A/UGAMS 20199	Human apatite	3010±25	-1385	-1125 Williams, Gregoricka 2019

Fig. 4 – ^{14}C dates from cairns and tower tombs within the Arabian Peninsula.

Country	Site/Acronyme/Structure/#individual/Lab#	Sample	Age 14C BP	calBC/AD, 2σ	Reference
Oman (Interior)	Mudhai/D001-001,#A/?	Human apatite	4980±140	-4215 -3375	Williams <i>et al.</i> 2014
	Mudhai/D001-001,#C&E/?	Human apatite	4452±42	-3340 -2930	Williams <i>et al.</i> 2014
	Mudhai/D001-001,#B/?	Human apatite	4315±43	-3085 -2875	Williams <i>et al.</i> 2014
	Mudhai/D001-004,#A/?	Human apatite	1533±36	430 605	Williams <i>et al.</i> 2014
	Mudhai/D001-005,#A/?	Human apatite	1533±36	430 605	Williams <i>et al.</i> 2014
Oman (coast)	Ra's al-Hadd/HD-7/T6/SacA-11378	Human apatite	*4730±30	-3635 -2390	Munoz, cet article
	Ra's al-Hadd/HD-7/T4/SacA-11381	Human apatite	*4485±30	-3345 -2065	Munoz, cet article
	Ra's al-Hadd/HD-7/T5/SacA-11374	Human apatite	*4100±30	-2865 -1555	Munoz, cet article
	Ra's al-Hadd/HD-7/T5/SacA-11373	Human apatite	*4045±30	-2835 -1500	Munoz, cet article
	Ra's al-Hadd/HD-9/T6, US423/BM-3098	Charcoal	2780±50	-1050 -815	Ambers, Bowman 1999, p. 191
	Ra's al-Hadd/HD-9/T49, US408/BM-3097	Charcoal	2470±45	-770 -415	Ambers, Bowman 1999, p. 191
	Ra's al-Jinz/RJ-6/T2#2789, (M3infG);AA-90262/P-977	Human enamel	*4487±43	-3360 -2050	Munoz, cet article
	Ra's al-Jinz/RJ-6/T3,molaire/AA-90265/P-980	Human enamel	*4499±42	-3360 -2065	Munoz, cet article
	Ra's al-Jinz/RJ-6/T5#2788, (M3infG);AA-90263/P-978	Human enamel	*4401±53	-3335 -1915	Munoz, cet article
	Ra's al-Jinz/RJ-6/T6/Beta-526839	Charcoal	4180±30	-2890 -2635	Munoz, cet article
	Shiya/SHI/T5/Beta-470767	Charcoal	4990±30	-3940 -3650	Munoz, cet article
	Shiya/SHI/T4/Beta-526837	Charcoal	4940±30	-3780 -3645	Munoz, cet article
	Shiya/SHI/T3#B/SacA-47069	Human apatite	*4620±30	-3515 -2235	Munoz, cet article
	Shiya/SHI/T6/Beta-470768	Charcoal	4480±30	-3345 -3030	Munoz, cet article
	Shiya/SHI/T1/SacA-47062	Human apatite	*4415±30	-3320 -1965	Munoz, cet article
	Shiya/SHI/T2/SacA-47064	Human apatite	*4355±30	-3085 -1895	Munoz, cet article
	Shiya/SHI/T2/SacA-47063	Charcoal	4350±30	-3080 -2895	Munoz, cet article
	Shiya/SHI/T3/SacA-47065	Charcoal	4350±30	-3080 -2895	Munoz, cet article
	Shiya/SHI/T3#A/SacA-47068	Human apatite	*2295±30	-410 620	Munoz, cet article
Yemen	Jidran/T81-1/Pa-2034	Charcoal	4280±80	-3315 -2580	Braemer <i>et al.</i> 2001
	Jidran/T105/Pa-2036	Human apatite	4220±40	-2910 -2665	Braemer <i>et al.</i> 2001
	Jidran/T102#3/Pa-2026	Human apatite	4175±40	-2890 -2630	Braemer <i>et al.</i> 2001
	Jidran/T106#10/Pa-2037	Human apatite	4045±60	-2870 -2455	Braemer <i>et al.</i> 2001
	Jidran/T103#4/Pa-2023	Human apatite	3960±80	-2850 -2200	Braemer <i>et al.</i> 2001
	Jidran/T 109#19/Pa-2038	Human apatite	3400±60	-1880 -1530	Braemer <i>et al.</i> 2001
	Jidran/T104/Pa-2028	Human apatite	3325±60	-1750 -1450	Braemer <i>et al.</i> 2001
	Ruwaiq/T101/Pa-1886	Human apatite	4235±50	-2925 -2630	Braemer <i>et al.</i> 2001
	Ruwaiq/T2/Pa-1898	Human apatite	4210±60	-2920 -2580	Braemer <i>et al.</i> 2001
	Ruwaiq/T1/Pa-1900	Human apatite	4200±50	-2905 -2630	Braemer <i>et al.</i> 2001
	Shabwah gov./YLNG 10/T5#1/?	Human apatite	4310±40	-3075 -2875	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T5#2/?	Human collagene	4225±35	-2910 -2670	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T7#7/?	Human collagene	2710±35	-920 -805	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T7#6/?	Human collagene	2555±35	-805 -545	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T6#5/?	Human collagene	2390±30	-725 -390	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T6#3/?	Human collagene	2370±30	-545 -385	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T6#4/?	Human collagene	2340±30	-520 -360	Crassard <i>et al.</i> 2010
	Shabwah gov./YLNG 10/T7#8/?	Human collagene	2250±30	-395 -200	Crassard <i>et al.</i> 2010

Fig. 4 (suite) – ^{14}C dates from cairns and tower tombs within the Arabian Peninsula.

^{14}C dates on charcoal sample are calibrated with 2σ age ranges, with Oxcal 4.4, Curve IntCal20 (Reimer *et al.* 2020) ; * Human apatite with possible marine diet: calibrated 2σ age ranges are calculated with Oxcal 4.4, Curve Marine20 (Heaton *et al.* 2020), according to a 0-100% proportion of marine resources in the diet, taking into account the local marine reservoir effect ($\Delta R=210 \pm 15$; Saliège *et al.* 2005) ; ** Marine Shell, calibrated with Oxcal 4.4, CurveMarine20 (Heaton *et al.* 2020), Local Marine Delta $R=210 \pm 15$ (Saliège *et al.* 2005).

artefacts they contained and the evolution of their architectural form made them excellent references to establish a chronological sequence (Frifelt 1975a-b; Tosi 1976; Cleuziou 2002a). During the first excavations of these monuments, Frifelt noticed the presence of Mesopotamian pottery of the Jemdet Nasr type (Frifelt 1970: 378), allowing the attribution of the Jebel Hafit tombs to the end of the 4th to the beginning of the 3rd millennium BCE, although an external origin was confirmed by petrochemical analyses in later studies (Méry & Schneider 1996: 93).

These tombs represent a particularly important source of information, since there are few settlement sites for the Early Bronze Age. Indeed, the human groups occupying the peninsula invested only sparsely in domestic architecture, and only at later dates. This is in stark contrast to their funerary monuments, which constitute territorial markers during the Neolithic and *a fortiori* during the Bronze Age. They were built to be visible and to endure (Méry & Charpentier 2009; Bortolini & Munoz 2015).

Ultimately, the history of research on these tombs reflects that of archaeological research in the wider area (see Munoz 2014: 23-32). The fact that these tombs seem to appear at the end of the 4th millennium with no precedent, at a time when contact with other regions can be identified, led archaeologists to search for an external influence to explain the emergence of new funerary practices. The presence in the tombs of imported ceramics from Mesopotamia supported this idea (see for example Fig. 8: R). During Caspers (1971) proposed that these were the tombs of merchants or settlers who relocated to the area in order to trade in copper. It did not appear strange, at this stage, that the tombs had no parallels in the regions from which they supposedly originated.

2.2 Paradigms and current challenges

From 2000 onwards, new possibilities offered by satellite imagery and Geographic Information Systems reoriented research towards the spatial distribution of the tombs at a regional scale. Tomb cartography revealed occupied territories and the resources that were potentially exploited, creating new perspectives from which to explore questions relating to the

subsistence modes of the human groups and to the emergence of the first oasis systems (Cleuziou 2002b; Giraud & Cleuziou 2009; Giraud 2010; Deadman 2012, 2017; al-Jahwari 2013, 2015; Deadman & al-Jahwari 2016). Computer systems have also been used to statistically analyse tomb morphology and artefacts in order to understand their structural evolution (Bortolini 2012, 2014, 2019), and to detect formal differences within a necropolis that could reveal social hierarchy (Deadman *et al.* 2015). This last work echoes the first classifications designed to identify traces of the social organization of the groups in relation to other data linked to the few known settlements, based on formal characteristics of the tombs and their geographical distribution (Cleuziou 2002a, 2007; Cleuziou & Munoz 2007).

Over 60 years after their discovery, we can estimate that more than 200 tombs have been excavated in the United Arab Emirates and the Sultanate of Oman (Fig. 5), however, few of these excavations have been published in detail. As underlined by Benton (2006: 40), until recently, the few existing publications mostly mention the artefacts found within the monuments. Indeed, the first excavations aimed to establish a relative chronology for the region, (until then unclear), and for which material culture was undefined. With the exception of a few rare monographs published over 30 years after excavations (Cleuziou *et al.* 2011; Madsen 2018), only a few articles, Master's theses and unpublished field reports include precise data relating to the excavated tombs (Santini 1992; Salvatori 2001; Williams & Gregorička 2013, 2019, 2020; Munoz 2014; Munoz *et al.* 2017).

3. Hafit tombs in the Oman Peninsula: state of the research

3.1 The chronocultural context: reminder

Archaeological research conducted over the past few decades has brought to light the major steps in the evolution of the populations occupying southeastern Arabia during the Holocene, at a time where climate became more arid and closer to that of the present day (Cleuziou & Tosi 2007). Within this territory, bordered by the desert and the sea, Late Neolithic (*ca.* 4500-3200 BCE) society relied upon animal

husbandry where water was available inland and, to a lesser extent, on the hunting of wild animals (Uerpmann *et al.* 2008). On the coastlines however, where settlements were often built near to wadi openings or mangroves (Biagi 1988, 2004; Biagi & Maggi 1990; Berger *et al.* 2005, 2013, 2020), research indicates an intense exploitation of marine, lagoon, and mangrove resources associated with husbandry (Uerpmann 2003; Uerpmann & Uerpmann 2003; Zazzo *et al.* 2014; Munoz 2017).

The first oasis-based agricultural systems, based on the date palm, supposedly appear during the Hafit period (around 3200-2700 BCE) which marks the beginning of the Early Bronze Age. These then intensify during the Umm an-Nar period (around 2700-2000 BCE) (Cleuziou & Costantini 1980; Tengberg 2012; al-Jahwari 2009; Munoz 2017). Some researchers, however, estimate that oasis agriculture is only fully formed from the second half of the 3rd millennium onwards.

Ancient populations exploited a large variety of resources, focusing on favourable areas, moving seasonally, and exchanging materials with groups in other regions (Tosi 1975). This original and successful adaptation, in the context of the aridification of the climate of the recent Holocene, is well attested by the socio-economical transformations marking the transition towards the Early Bronze Age. The spatial distribution of human occupation (territorial expansion inland) as well as the structure and architecture of the settlements (emergence of permanent villages made of raw bricks and great circular ‘towers’) all bear witness to these processes (Azzarà 2009; Cable & Thornton 2012).

Moreover, numerous innovations attest to artisanal specialization with a large-scale production (copper exploitation and metallurgy, ceramic production, soft stonework, enhanced sailing and fishing techniques, etc.). These were part of an intensification and diversification of exchange networks at multiple scales (local, intra- and interregional) (Potts 1993; Cleuziou & Méry 2002; Méry 2000; Frenz *et al.* 2016; Méry *et al.* 2017), occurring while the state societies of the surrounding regions (Mesopotamia, Iran, Indus, Egypt) expanded both politically and economically throughout the Near and Middle East.

Finally, we can observe modifications in the funerary practices indicating important social changes that point to an increasingly complex society. During the Neolithic period, the tombs were pits, sometimes covered with stone slabs, and were placed close to settlements. During the Hafit period, these evolved into collective tombs in the shape of towers or igloos, built of stone. During the Umm an-Nar period, monumental circular and compartmentalized tombs were built capable of containing hundreds of individuals (Cleuziou & Munoz 2007; Méry & Charpentier 2009; Bortolini & Munoz 2015; Munoz 2019).

4. Implementation, development, and use over time of the necropolises

From the beginning of research in this area, the specific location of the necropolises of Hafit-type towers have focused the attention of researchers (Cleuziou 1997, 2002b), and GIS allowed the characterization of these choices (Giraud & Cleuziou 2009; Deadman 2012, for a more recent synthesis see Deadman 2017: 73-79). Initially, the presence of Hafit tower tombs near to axes of travel used as commercial networks led Frifelt to propose that the merchants travelling along those routes were also the builders of the tombs (Frifelt 1970; Gentelle & Frifelt 1989: 124-125). More recently, in his analysis of tomb distribution of oriental Ja’alan, Cleuziou introduced the notion that some of the great necropolises would be associated with settlements whilst smaller examples would mark the territory in terms of resources (fishing or well areas), with isolated tombs delimiting frontier zones or passage points (Cleuziou 2002b).

The Hafit tombs are indeed often grouped within necropolises comprising several dozen monuments and, more rarely, they are isolated. In the territories of the Sultanate of Oman and the United Arab Emirates, their number has been estimated to be more than 100 000 (Cleuziou 2002b: 21; Cleuziou & Tosi 2007: 107), although a more recent estimation suggests that the number of well-preserved monuments is around half of this (Deadman 2017: 148). The largest necropolises can include several hundred monuments, for example, in the Jebel Haqlah with over 900 tombs (al-Tikriti 1981), in the

Dhank region with over 700 monuments (Williams & Gregorička 2020), in the Wadi Andam with close to 3000 tombs (Deadman 2012), and at the coastal site of Shiyā with about 400 tombs (Munoz *et al.* 2017) (**Fig. 5**).

In many ways, these tombs mark a rupture with the previous period. Tombs are no longer strictly associated with settlements as they were during the Late Neolithic. Often built on elevated ground, on ridges, slopes, or rocky outcrops, they probably played a role as territorial markers (Cleuziou 2002b; Cleuziou & Munoz 2007: 298-299). At the top of mountain ridges, they overlook areas exploited

for their natural resources. They are found on the catchment slopes of wadis, especially those south of the Hajar mountain chain, the Wadi Silaim to the southeast, and at Ra's al-Khaimah to the north, where they probably marked the presence of settlements, of water holes necessary for oasis agriculture, and of grazing areas (Cleuziou 2002b; Giraud 2009; Deadman & al-Jawhari 2016; Deadman 2017). In the piedmonts of Jebel Hajar, they also seem to be linked to possible copper mines, the early exploitation of which is dated to the Hafit period (Deadman 2017: 170-172). On the Oman coastline, they occupy the rocky outcrops overlooking favourable fishing areas (sea or lagoons) (Giraud *et*

Country	Site	N tombs identified (survey)	N tombs excavated	Team	Reference
Oman	Al-Ayn	19	2	Univ. of Tübingen	Döpper & Schmidt 2014
Oman	al-Mahatta (MHT-4/5)	53	2	Joint Hadd Project (JHP)	Cleuziou & Tosi 2000b; 2002c
Oman	Asimah		1	Dept of Antiquities & Museums, Ra's al-Khaimah	Vogt 1994: 36-37
Oman	Bat		2	Danish team	Frifelt 1975b
Oman	Bisya		1	Al Hajar Project	Orchard & Orchard 2007
Oman	Dhank region (Abu Silah, al Aflaj, al Khu	700	21	SoBo American Team	William & Gregoricka 2013, 2019, 2020
Oman	Ghoryeen		1	Sultan Qaboos Univ. (SQU)	al-Jawhari 2010
Oman	Ibri		1	Danish team	Frifelt 1975b
Oman	Khor Jaramah (KJ-97/98/99)	225	2	JHP	Cleuziou & Tosi 2002; Cleuziou 2002b
Oman	Maysar		5	Deutsches Bergbau Museum	Weisgerber 1980, 1981
Oman	Mudhai		3	SoBo American Team	Williams <i>et al.</i> 2014
Oman	Ra's al-Hadd (HD-10/7.3)	22	11	JHP	Salvatori 2001; Cleuziou & Tosi 2000b; Munoz 2019
Oman	Ra's al-Jinz (RJ-6/27/31/12/-43)	106	13	JHP	Santini 1992; Cleuziou & Tosi 2000b
Oman	Ra's al-Khabbah (KHB-26/114)	200	1	JHP	Cleuziou & Tosi 2000b; Cleuziou 2002b
Oman	Salut		2	Italian Mission to Oman	Degli Espositi & Philipps 2012
Oman	Shenah	325	8	SQU	al-Belushi & ElMahi 2009
Oman	Shir-Jaylah	58	3	Deutsches Bergbau Museum	Yule & Weisgerber 1998
Oman	Shiya	400	7	French Mission to Shiya	Munoz <i>et al.</i> 2017
Oman	Tawi Silaim		4	British Expedition	de Cardi <i>et al.</i> 1979
UAE	Buraimi		2	Amateurs	During-Caspers 1971
UAE	J. al-Emalah	4	3	Univ. of Sidney	Benton & Potts 1994
UAE	J. Buhais		7	Sharjah Museum	Jasim 2003, 2006, 2012
UAE	J. Dhanna		1	Dept of Antiquities, Al-Ain	Vogt <i>et al.</i> 1989
UAE	Jebel Hafit	163	80	Danish team / French Expedition Iraqi/Emirati team	Frifelt 1970 ; Madsen 2018; Cleuziou <i>et al.</i> 2011; al-Tikriti 1981
UAE	Kalba		3	Eddisford & Phillips	Eddisford & Phillips 2009
UAE	Mazyad	317	19	Danish team	al-Tikriti 1981; Frifelt 1975b; al-Noeimi n.d. (cited by Cleuziou, <i>et al.</i> 2011: 9)
UAE	Qarn Bint Saud	45	13	Danish team / Dept of Antiquities,	Frifelt 1970; al-Tikriti 1981
UAE	Ra's al-Aysh		1	Dept of Antiquities, Al-Ain	Vogt <i>et al.</i> 1989
Total		2637	219		

Fig. 5 – Number of Hafit-type tombs identified and excavated by site or region, in the United Arab Emirates and in Oman (the number of tombs identified do not reflect the reality, since only sites where tombs have been excavated are indicated) (Data compiled from syntheses by Benton 2006; Munoz 2014; Deadman 2017).

al. 2005; Cleuziou & Munoz 2007; Giraud 2009). Finally, some isolated monuments marked key routeways or boundaries between territories (Cleuziou 2002b). The tombs would therefore have been a way to visibly mark an area exploited by a particular group, for the benefit of enemies, competitors or rivals), legitimizing their claim through the presence of their ‘ancestors’ (Cleuziou 2002b). Identity was perhaps also indicated, as we will see below, through specific architectural traits.

The use over time of the tombs indicates an intense occupation of inland areas, other traces of which are rather sporadic for the Late Neolithic period. Except for some desertic or inaccessible areas, the entire territory seems to have been exploited. The tombs mark the presence of human communities and are indicative of an unprecedented anthropization of the territory.

It is difficult to estimate the time frame within which necropolises were used, or their spatial evolution. The picture now presented is only a snapshot of something that took centuries to be established, with numerous alterations that we cannot quantify. Due to their permanence in the landscape for 5000 years, tombs may have been subjected to pillage, reconstruction, or reuse, for funerary or other purposes. This makes it difficult for archaeologists to integrate them into a detailed chronology or to comprehend their evolution (al-Jahwari 2016). While artefacts may reveal a sequence of deposits over the long term, the same cannot be said for human remains. To date, less than 100 radiocarbon dates have been published for all the tower tombs and cairns of the Arabian Peninsula (Fig. 4). This number might appear high, but it is very low compared to the number of tombs excavated or identified (Fig. 5). No radiocarbon dates are available for the tombs excavated in the United Arab Emirates, and only two areas of northern Oman have recently benefitted from radiocarbon dating (Dhank area and Shiyā / Ra’s al-Hadd / Ra’s al-Jinz area). This lack of direct dating evidence is explained by the cost involved and, more importantly, by the lack of suitable organic material. When present, human bones are almost always devoid of collagen, which degrades due to the arid climate. Only recently has this obstacle been overcome; new technological progress make it possible to date the mineral component of bones (bioapatite), yielding

good results in arid contexts (Zazzo & Saliège 2011; Munoz 2014; Munoz *et al.* 2020; Williams & Gregorička 2020). In coastal areas, however, the dating of human remains poses one more difficulty. Coastal populations most likely consumed marine resources, subject to the marine reservoir effect, which artificially ages radiocarbon dates (Saliège *et al.* 2005; Zazzo & Munoz 2013). To calibrate ^{14}C dates obtained on human bones from these areas, it is necessary to know not only the extent of the local marine reservoir effect – which varies over time – but also to estimate the proportion of marine resources in the diets of individuals. Considering the unknown variables, we must calibrate ^{14}C dates obtained from human remains from coastal complexes by assuming 0–100% of marine input in the diet, which considerably reduces the accuracy of the calibrated date (up to 1400 years in error range, see Fig. 4).

In syntheses of the information available from sites where several tombs have been excavated, observations diverge. For Jebel Hafit, Madsen (2018: 237) estimates that, considering the artefacts and the low architectural variability, the necropolis was used for no more than a few centuries. In contrast, at al Khubayb, in al Kuthma (Dhank region) and at Shiyā (Sur area), where ^{14}C dates were acquired, it appears the oldest tombs precede the most recent by 600–1000 years, excluding secondary reuse after a period of abandonment (see Fig. 4). At Shiyā, recent excavations (Munoz *et al.* 2017) have demonstrated that the oldest tombs (Tombs 4 and 5), which are also the most rudimentary, are built on the most visible ridges of the terrace whilst the most recent and better constructed examples (Tombs 1, 2, 6 and 7) are located at lower elevations (Fig. 6). This trend needs to be verified since it is not systematic, as attested by Tomb 3, contemporary with Tomb 2 but located on the higher terrace and relatively well constructed.

4.1 Architecture: a great formal variability

The appearance of Hafit-type tombs constitutes a true break with previous architectures. These circular monuments are built of stone and present an elevation in the shape of truncated conic towers or igloos. All include a single funeral chamber, surrounded by a wall made of two to five slabs and



Fig. 6 – Tomb locations at Shiyā (Oman) and architectural variability of the tombs excavated (Photos: O. Muñoz).

covered by a corbelled vault. Their diameters vary from 3-8 m for the most imposing. While most tombs are currently ruined and preserved only to a height of 0.5-3 m, some perfectly preserved monuments can reach 7.5 m, as is the case at Shir (Yule & Weisgerber 1998 ; **Fig. 1a**). The surface area of the chamber varies between 1.5 and 2.5 m², is circular in shape, although sometimes ellipsoid or somewhat quadrangular (**Fig. 6**). The chamber floor is sometimes layed with irregular or unworked rock slabs.

When the chamber access is visible, it consists of an opening, the shape of which can vary (rectangular, trapezoidal, or triangular); its design (e.g., with or without a lintel, a threshold, or a corridor) can differ depending on the material employed. Some tombs, however, have yielded no identifiable openings, suggesting they might have been accessed through the cover. This was probably the case at Shiyā and at Ra's al-Hadd HD-7, and at Shenah (ST-2; al-Belushi & elMahi 2009: 34). Some tombs seem to have been definitively sealed by the addition of a wall across the whole or a part of the upper part of the monument, obstructing the accessway, as is the case at Jebel Hafit (Tomb 1319; Madsen 2018: 203), at Bat (Tomb 6603; Böhme 2011: 29) and at al-Ayn (Tomb 6; Döpper & Schmidt 2014: 222).

These tombs therefore differ entirely from what is known for the Neolithic period, and required an important investment and previously unseen technical knowledge. Domestic architecture for the period includes rectangular buildings made of raw bricks and more temporary structures made of perishable materials (Azzarà 2009, 2013). Tombs differ from these not only by their circular plan but also in the use of stone. These differences could be linked to the availability and nature of materials close to the location of the structures (funerary and domestic), but it is very probable that the durable nature of stone was a key factor in its use in tomb construction; these monuments were definitely made to last.

According to available publications, the majority of the tombs are made of drystone, with non-squared rubble, and roughly put together. The construction material was locally acquired in the rocky outcrops on the summits where the monuments are located. In many cases, although not carefully prepared, the

rocks constituting the wall seem to have been chosen according to their shape to ensure maximum stability in their final placement.

While the choice of raw material seems opportunistic in most cases, at some sites such as Bat (Böhme 2011, 2012) and Ra's al-Hadd HD-7 (Munoz 2014: 217) it appears that the blocks of the external cladding were transported over a long distance (around 10 km). At Bat, Böhme (2011: 25) suggests the presence of mortar between some blocks. Some tombs seem to have been given particular attention, especially with regard to their external claddings, which have been renovated (Yule & Weisgerber 1998; Böhme 2011). On this topic, we must also mention the recurring presence of stone tools (hammerstones) near some tombs, leading us to think they might have been used to retouch the stone blocks (Munoz 2014: 230). A similar situation was observed near tombs from the Umm an-Nar period at Hili (Gagnaison *et al.* 2004: 101).

Despite the apparent homogeneity of the structures, we observe some variety, but it is not easy to determine which elements result from technical constraints (accessible raw materials and construction techniques), from cultural and regional choices, and/or from temporal evolution. There have been recent attempts at a typo-chronological classification of several monumental ensembles, suggesting an overall chronological evolution tending towards a gradual increase in structural complexity during the Early Bronze Age (Gagnaison *et al.* 2004; Bortolini 2012, 2014, 2019; Potts 2012; Williams & Gregorička 2019). As underlined by Böhme (2011: 24), however, the regional diversity of the raw material available for tomb building probably led to various architectural solutions being adopted in different localities and, by consequence, to tomb variability. It is therefore necessary to explore this formal variability in specific geographical areas. Moreover, studies at a local scale show that monuments of varying types could co-exist (see for example: Williams & Gregorička 2020), confirming that other criteria, some difficult to perceive (technical know-how, communal belonging, social status), could have played a role. As a rule, as far as Hafit-type tombs are concerned, the main problem with existing typo-chronological classifications is that they are not based on a rigorous analysis of construction techniques, nor on tangible datings.

Only one study has focused on the construction techniques, with an experimental reconstruction yielding important information on building time, technical constraints, know-how, and the resources necessary for construction (Böhme 2011, 2012). A recent study conducted in the Dhank region of Oman by Williams & Gregorička (2020) distinguished between various architectural types (tumulus, Hafit-type tomb, tower tomb, Umm an-Nar-type tomb) recognized within a single necropolis. It is a rare example of a published study based on absolute dating, in addition to our own at Shiyā.

To conclude, the appearance of Hafit-type tombs constitutes a clear rupture with the previous period from an architectural standpoint. Their construction requires a technical know-how, planning, and a consistent (probably a collective) investment (Muñoz 2015, 2019). While these constructions follow a common model for the whole Oman Peninsula, the morphological variability documented raises further questions regarding regional particularities and chronological evolution. This is valid both within the Hafit period and in relation to the later architectural type of the Umm an-Nar period (Frifelt 1975a: 67-69; de Cardi *et al.* 1976; Vogt 1985; Yule & Weisgerber 1998; Bortolini 2012; Potts 2012; Williams & Gregorička 2019).

4.2 Recruitment, funerary practices, associated artefacts

The study of funerary practices associated with these tombs is limited by the poor preservation of the

human remains within them. Several factors can be held responsible: the mode of deposition (no burying), the arid climate of the region (rapid mineralization of skeletal remains), and various interventions following the original placement of the deceased (voluntary manipulation linked to tomb management, pillage, tomb destruction for material re-use, or later re-use with a funerary or other intention). As such, anthropological studies are scarce, and except for recent excavations, have almost always been conducted *a posteriori* (for example: Martin in Benton & Potts 1994; Muñoz 2011, 2014). Detailed data on human bones within their context is rare. There is therefore very little information upon which to build a detailed and sufficiently representative portrait of either funerary practices or biological data.

Of 219 excavated and documented tombs, only 130 have yielded human remains. For over a third ($n=53$), only a few fragments are mentioned, some of which belong to ulterior deposits (Fig. 7). At most, we can suppose that at least one individual was deposited. For the 66 tombs for which a MNI (even provisory) is available, 25 contain at least one individual, 38 contain two to six, and 10 tombs contain more than seven and up to 29. The latter group is exclusively represented by tombs of Ra's al-Jinz RJ-6 (Santini 1992; Muñoz 2014) and of Ra's al-Hadd HD-10 (Salvatori 2001), as well as one tomb from al-Buhais which was subjected to later re-use (BHS 89: Jasim 2012: 270, 314). Within these collective ensembles, we can observe the presence of children, men, and women. This evokes the

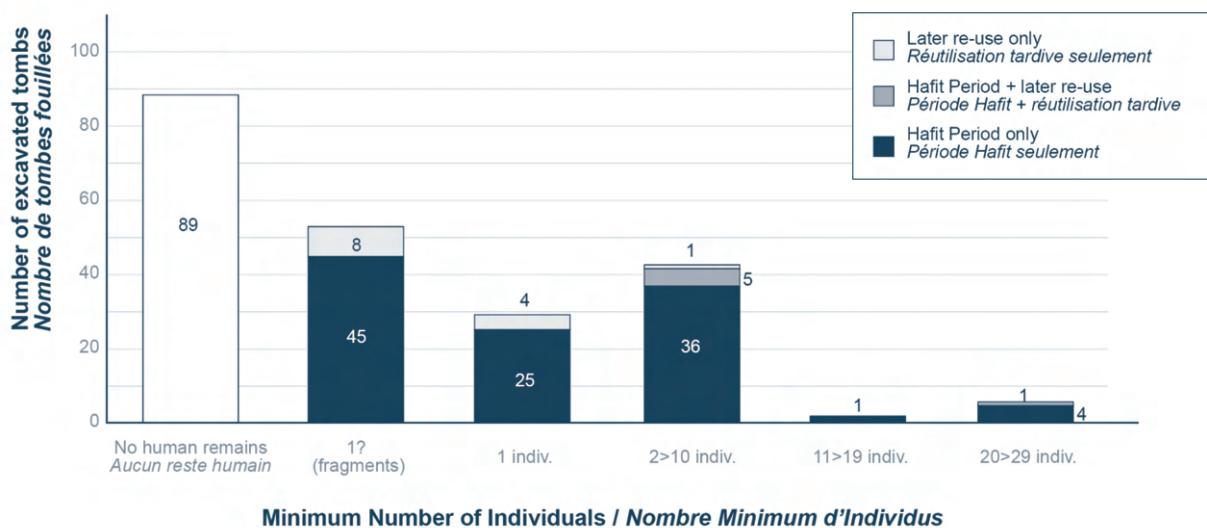


Fig. 7 – Minimum Number of Individuals (MNI) in Hafit-type tombs excavated within the Oman Peninsula (n=207).

possibility of tombs uniting various members of nuclear or extended families (Cleuziou & Munoz 2007; Williams & Gregorička 2013; Magee 2014) despite no biological or genetical analysis yielding any kinship links so far.

Tombs RJ-6 and HD-10, which each contain two to three dozen individuals, constitute exceptional examples which could be linked to intense frequenting of coastal settlements located nearby, and to the small number of constructed tombs present (less than 20) compared to other sites. When the period of use – up to several centuries – is added, the data currently available indicates that, for some tombs, the collective character of the monument was materialized more in the intention of the builders than in the reality of the deposits made within them. Of course, the poor preservation of remains within these tombs might bias our perceptions. Whichever the case, the disparity in the number of individuals

within tombs where the MNI is known – from a single individual to as many as 30 – show that the effort invested in tomb construction did not depend on ‘needs’ but rather responded to an ideology shared over an immense territory.

Within the funerary chamber, the bodies are not buried but rather deposited within a free space. The deceased are laid on one side, in a crouched position. There is no preferential orientation, and some may have been wrapped in a flexible container (Madsen 2018), as is documented for the Neolithic period (Munoz 2014). In the most densely occupied tombs of Ra’s al-Hadd and Ra’s al-Jinz, the deposition of new deceased individuals required the rearrangements and manipulations of the previously deposited remains (Munoz 2015, 2019).

The deceased are sometimes accompanied by ornaments (pearl necklaces or bracelets made of stone and shells), copper artefacts and imported



Fig. 8 – Examples of artefacts found in Hafit-type tombs at Ra’s al-Hadd HD-7, Shiyā and Jebel Hafit: soft stone beads (A, C, H, I, J), enstatite beads (B), shell beads (C-G), copper (K) and mother-of-pearl rings (L), perforated shell (M) and mother-of-pearl (N) plaques, curved (O-P) and gorge (Q) hooks made of copper alloy, pottery vessel with polychrome painting (R). [Credits: O. Munoz (A-Q), Madsen 2018, fig. 36a (R)].

ceramics (Fig. 8). These can reveal intra-regional contacts: we find marine shell objects in the inlands and copper artefacts on the coasts, which leads us to think that exchanges were valorized. In parallel, products issued from interregional exchanges are also integrated into the funerary sphere. As was previously suggested, small jars from Mesopotamia (Jemdet Nasr type) attest to recurring exchanges with this distant region, but also to their specific use within funerary contexts, since such items are apparently absent from contemporary settlement sites (Cleuziou *et al.* 2011; Madsen 2018). During the same period, the pottery found in non-funerary contexts (such as those found at Hili 8, period I), are locally made but imitate southeastern Iranian ceramics and those of the Pakistani southwest, a manifestation of technological transfer from that region towards the peninsula (Méry 2000).

5. Conclusion and perspectives

Fifty years after their discovery, Hafit-type tombs are still at the heart of the research conducted in the southeast of the Arabian Peninsula. The first explorations – within a *terra incognita* – answered the need to establish a chronology, to catalogue and to classify these monuments, the importance of which was already perceptible, in order to lay down the foundations of an archaeology of the societies of Eastern Arabia. Over the past ten years, a new investigative phase has started, with a renewal of research perspectives made possible in parts by new technologies (satellite images, GIS analysis, 3D recording, AMS dating), but also by disciplines bringing a different perspective on the tombs and their builders within their geographical, social and economic contexts through geoarchaeology, funerary archaeology, archaeometry, and statistics.

Among discussions animating current research, questions on subsistence and group mobility (pastoral nomads vs. sedentary farmers) are predominant. A future challenge will be to extract information on diet and group mobility through the analysis of the human bones found in the tombs (biological anthropology and geochemistry), with samples that would be well defined chronologically through absolute dating (e.g., Gregorička 2013; Zazzo *et al.* 2014; Munoz 2017). The other frequently discussed question is that of the structural variability of the

tombs, which can be related to technical constraints and available raw materials, cultural and regional preferences, to social factors, or to a chronological evolution. Systematic absolute dating associated with architectural studies that take account of local geographical specificities will allow us to better comprehend the factors operating within this architectural variability. This type of approach might also contribute to a better understanding of the technological know-how and the degree of specialization necessary to build the funerary monuments. From this, it might be possible to explore the socio-political context within which these tombs existed. A detailed analysis of the artefacts contained within the tombs could also be exploited towards this goal and may yield indications of the dynamics of the multiscale exchanges taking place at the beginning of the Bronze Age. Finally, while limited by the poor preservation of human remains, biological anthropology and palaeogenetics could provide clues to the diffusion of this phenomenon and evaluate kinship links within individual monuments or within an entire necropolis.

In conclusion, I would remind the reader that in the Arabian Peninsula, despite legislation being in place concerning heritage protection, urban expansion has intensified in the last few years. This development is exacerbated by mass tourism and has already led to the destruction of numerous tombs. Preventive archaeology programmes take place regularly, and we hope for those to be multiplied, just as we hope that the data produced by this research is published and disseminated to international standards.

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Bibliography

Abrams 1984 : ABRAMS (E. M.), Replicative Experimentation in Late Classic Copan, Honduras: Implications for Ancient Economic Specialization, *Journal of New World Archaeology*, 6 (2), 1984, p. 39-48.

Abu-Azizeh 2010 : ABU-AZIZEH (W.), *Occupation et mise en valeur des périphéries désertiques du Proche-Orient au Chalcolithique-Bronze ancien : le cas de la région de al-Thulaythuwat dans le sud de la Jordanie*. Versailles-Saint-Quentin-en-Yvelines : Thèse de doctorat en Histoire et Archéologie, 2010.

Abu-Azizeh *et al.* 2014 : ABU-AZIZEH (W.), ABUDANAH (F.), TWAISSI (S.), AL-SALAMEEN (A.), Variability within consistency: Cairns and funerary practices of the Late Neolithic/Early Chalcolithic in Al-Thulaythuwat Area, *Southern Jordan, Levant*, 46 (2), 2014, p. 161-185.

Acemoğlu & Robinson 2009 : ACEMOĞLU (D.), ROBINSON (J.), Foundations of Societal Inequality, *Science*, 326 (5953), 2009, p. 678-679.

Adams *et al.* 1977 : ADAMS (R.), PARR (P. J.), IBRAHIM (M.), MUGHANNUM (A. S.), Saudi Arabian archaeological reconnaissance - 1976. Preliminary report on the first phase of the comprehensive archaeological survey program, *Atlatl*, 1, 1977, p. 21-40.

Agre 2005a : AGRE (D.), Archaeological excavations of a dolmen and a tumulus from the Early Iron Age on the land of the village of Belevren, Sredets municipality. In : *Archaeological discoveries and excavations in 2004*. Sofia, 2005, p. 129-132.

Agre 2005b : AGRE (D.), Family Graves from the Territory of Central Stranja (I millennium BC - IV AD). In : *The lands of Bulgaria. Cradle of the Thracian culture*. Sofia, 2005, Vol. II, p. 104-109.

Agre 2008 : AGRE (D.), Archaeological excavations of a dolmen in Tsarvandakovi kashli locality near the village of Belevren, Sredets municipality. In : *Archaeological discoveries and excavations in 2007*. Sofia, 2008, p. 156-159.

Agre & Dichev 2006 : AGRE (D.), DICHEV (D.), Exploration of a dolmen and two tumuli on the land of the

village of Belevren, Sredets municipality. In : *Archaeological discoveries and excavations in 2005*. Sofia, 2006, p. 64-66.

Akhundov & Narimanov 1996 : AKHUNDOV (T.), NARIMANOV (I.), Neue Forschungen zur Mittleren Bronzezeit in Azerbaidžan, *Georgica*, 19, 1996, p. 42-57.

Akman 1997 : AKMAN (M.), Megalitforschung in Thrakien, *Istambuler Mitteilungen*, 47, 1997, p. 151-170.

Aladzhov 1997 : ALADZHOV (D.), *Settlements, monuments, finds from the region of Haskovo*. Haskovo, 1997.

Al-Belushi & elMahi 2009 : AL-BELUSHI (M. A. K.), ELMAHI (A. T.), Archaeological investigations in Shenah, Sultanate of Oman, *Proceedings of the Seminar for Arabian Studies*, 39, 2009, p. 31-41.

Al-Jahwari 2009 : AL-JAHWARI (N. S.), The agricultural basis of Umm an-Nar society in the northern Oman peninsula (2500-2000 BC), *Arabian archaeology and epigraphy*, 20, 2009, p. 122-133.

Al-Jahwari 2010 : AL-JAHWARI (N. S.), Cairn burials in the Oman Peninsula: the problem of dating Hafit period tombs (end of 4th-early 3rd millennium BC) (Arabic), *Journal of Oman Studies*, 16, 2010, p. 93-112.

Al-Jahwari 2013 : AL-JAHWARI (N. S.), The Early Bronze Age Funerary Archaeological Landscape of Western Ja'alan: Results of three Seasons of Investigation, *Arabian archaeology and epigraphy*, 24 (2), 2013, p. 151-173.

Al-Jahwari 2015 : AL-JAHWARI (N. S.), The Hafit period in the Oman Peninsula: cultural and economic changes. In : *Proceedings of the Symposium: The Archaeological Heritage of Oman*, Unesco, Paris (September 7th, 2012). Muscat: Ministry of Heritage and Culture of the Sultanate of Oman, UNESCO, 2015, p. 81-94.

Al-Jahwari 2016 : AL-JAHWARI (N. S.), Cairn Burials in the Oman Peninsula: the Problem of Dating Hafit Period Tombs (End of 4th-Early 3rd millennium BC), *The Journal of Oman Studies*, 16, 2016, p. 103-121.

Al-Shorman 2010 : AL-SHORMAN (A.), Testing the function of Early Bronze Age I dolmens: a GIS investigation, *Near Eastern Archaeology*, 73 (1), 2010, p. 46-49.

- Al-Tikriti 1981 : AL-TIKRITI (W. Y.), *Reconsideration of the Late Fourth and Third Millennium BC in the Arabian Gulf, with Special Reference to the United Arab Emirates*. Cambridge: University of Cambridge, 1981.
- Alvaro & Palumbi 2014 : ALVARO (C.), PALUMBI (G.), New 'pastoral landscapes' of the early third millennium BC in the Malatya plain. The case of Gelinciktepe. In : BIELIŃSKI (P.), GAWLIKOWSKI (M.), KOLIŃSKI (R.), ŁAWECKA (D.), SOŁTYSIAK (A.), WYGNAŃSKA (Z.) (eds), *Proceedings of the 8th International Congress on the Archaeology of the Ancient Near East*. Wiesbaden: Harrassowitz Verlag, 2, 2014, p. 607-618.
- Ambers & Bowman 1999 : AMBERS (J.), BOWMAN (S.), Radiocarbon measurements from the British Museum: datelist, *Archaeometry*, XXV (41), 1999, p. 185-195.
- Anthony 2007 : ANTHONY (D.), *The Horse, the Wheel, the Language: How Bronze-Age Riders from the Eurasian Steppes Shaped the Modern World*. Princeton: Princeton University Press, 2007.
- Asouti & Fuller 2012 : ASOUTI (E.), FULLER (D. Q.), From foraging to farming in the southern Levant: the development of Epipalaeolithic and Pre-pottery Neolithic plant management strategies, *Vegetation History and Archaeobotany*, 21, 2012, p. 149-162.
- Atakuman 2008 : ATAKUMAN (Ç.), Cradle or crucible: Anatolia and archaeology in the early years of the Turkish Republic (1923-1938), *Journal of Social Archaeology*, 8 (2), 2008, p. 214-235.
- Aurenche 1981 : AURENCHÉ (O.), *La maison orientale. L'architecture du Proche-Orient ancien des origines au milieu du IV^e millénaire av. J.-C.* Paris : Geuthner, 1981.
- Avner 1982 : AVNER (U.), *Cult Sites of the Fourth and Third Millennia B.C.E. in the Negev and Sinai*. Jerusalem: Ninth Archaeological Conference in Israel (Abstracts of lectures, 14), 1982 (Hébreu).
- Azzarà 2009 : AZZARÀ (V. M.), Domestic architecture at the Early Bronze Age sites HD-6 and RJ-2 (Ja'alan, Sultanate of Oman), *Proceedings of the Seminars for Arabian Studies*, 39, 2009, p. 1-16.
- Azzarà 2013 : AZZARÀ (V. M.), Architecture and building techniques at the early Bronze Age site of Ra's al-Hadd HD-6, Sultanate of Oman, *Proceedings of the Seminar for Arabian Studies*, 43, 2013, p. 11-26.
- Bahat 1992 : BAHAT (D.), Dolmens in Palestine. In : KEMPINSKI (A.), REICH (R.) (eds), *The Architecture of Ancient Israel: From the Prehistoric to the Persian Periods*. Jerusalem: Israel Exploration Society, p. 91-93.
- Bahrani 1998 : BAHRANI (Z.), Conjuring Mesopotamia: imaginative geography and a world past. In : MESKELL (L.) (ed.), *Archaeology under Fire: Nationalism, politics and heritage in the Eastern Mediterranean and Middle East*. Londres & New York: Routledge, 1998, p. 159-174.
- Baird et al. 2016 : BAIRD (D.), FAIRBAIRN (A.), MARTIN (L.), The animate house, the institutionalization of the household in Neolithic central Anatolia, *World Archaeology*, 49 (5), 2016, p. 124.
- Baird et al. 2018 : BAIRD (D.), FAIRBAIRN (A.), JENKINS (E.), MARTIN (L.), MIDDLETON (C.), PEARSON (J.), ASOUTI (E.), EDWARDS (Y.), KABUKCU (C.), MUSTAFAOĞLU (G.), RUSSELL (N.), BAR-YOSEF (O.), JACOBSEN (G.), WU (X.), BAKER (A.), ELLIOTT (S.), Agricultural origins on the Anatolian plateau, *Proceedings of the National Academy of Sciences*, 115 (14), 2018, p. E3077-E3086.
- Balkanski 1978 : BALKANSKI (I.), *Krumovgrad - Archaeological monuments*. Sofia, 1978.
- Banning 2011 : BANNING (E. B.), So Fair a House: Göbekli Tepe and the Identification of Temples in the Pre-Pottery Neolithic of the Near East, *Current Anthropology*, 52 (5), 2011, p. 619-640.
- Bar-Yosef 1977 : BAR-YOSEF (O.), The Nawamis near "Ein Huderah", *Israel Exploration Journal*, 27, 1977, p. 65-88.
- Bar-Yosef 2014 : BAR-YOSEF (O.), Was Göbekli Tepe Culture a chiefdom that failed? In : FINLAYSON (B.), MAKAREWICZ (C.) (eds), *Settlement, Survey, and Stone: essays on Near Eastern prehistory in honour of Gary Rollefson*. Berlin: ex oriente, 2014, p. 159-168.
- Bar-Yosef et al. 1977 : BAR-YOSEF (O.), BELFER (A.), GOREN (A.), SMITH (P.), The nawamis near 'Ein Huderah, *Israel Exploration Journal*, 27, 1977, p. 65-88.
- Bar-Yosef et al. 1983 : BAR-YOSEF (O.), HERSHKOVITZ (A.), ARBEL (G.), GOREN (A.), The orientation of Nawamis entrances in Southern Sinai: expression of Religious Belief and Seasonality, *Tel Aviv*, 10, 1983, p. 52-60.
- Baudouin 1916 : BAUDOUIN (M.), Les cupules de la table du dolmen de la Court du Breuil, au Bernard (Vendée), *Bulletins et Mémoires de la Société d'anthropologie de Paris*, VI^e Série, 7 (1), 1916, p. 2-16.
- Begemann et al. 2008 : BEGEMANN (F.), HAERINCK (E.), OVERLAET (B.), SCHMITT-STRECKER (S.), TALLON (F.), An Archaeo-Metallurgical study of the Early and Middle Bronze Age in Luristan, Iran, *Iranica Antiqua*, XLIII, 2008 (doi:10.2143/IA.43.0.2024041).
- Belinskij et al. 2017 : BELINSKIJ (A.), HANSEN (S.), REINHOLD (S.), The Great Kurgan from Nalčik. A Preliminary Report, *Subartu*, XXXVIII, 2017, p. 13-32.
- Bell 1840 : BELL (J.), *Journal of a Residence in Circassia During the Years 1837, 1838, 1839*. London: Edward Moxon, Dover Street, 1840.

Bibliography

- Benjamin 2000 : BENJAMIN (W.), L'Œuvre d'art à l'époque de sa reproductibilité technique. In : *Œuvres III*. Paris : Gallimard, 2000, p. 269-316.
- Bentley & Perry 2008 : BENTLEY (G. R.), PERRY (V. J.), Dental analyses of the Bab edh-Dhra human remains. In : ORTNER (D. J.), FROHLICH (B.) (eds), *The Early Bronze Age I Tombs and Burials of Bab edh-Dhra, Jordan*. Lanham, MD: AltaMira Press, 2008, p. 281-296.
- Benton 2006 : BENTON (J.), *Burial Practices of the third millennium BC in the Oman peninsula: A Reconsideration*. Sydney: PhD Dissertation, University of Sydney, 2006.
- Benton & Potts 1994 : BENTON (J.), POTTS (D. T.), *Jabal al-Emalah 1993/1994*. United Arab Emirates: Unpublished report. Sharjah, Department of Culture and Information, 1994.
- Benz *et al.* 2015 : BENZ (M.), DECKERS (K.), RÖSSNER (C.), ALEXANDROVSKIY (A.), PUSTOVOYTOV (K.), SCHEERES (M.), FECHER (M.), COŞKUN (A.), RIEHL (S.), ALT (K. W.), ÖZKAYA (V.), Prelude to village life. Environmental data and building traditions of the Epipalaeolithic settlement at Körtik Tepe, Southeastern Turkey, *Paléorient*, 41 (2), 2015, p. 930.
- Berger *et al.* 2005 : BERGER (J.-F.), CLEUZIOU (S.), DAVTIAN (G.), CATTANI (M.), CAVULLI (F.), CHARPENTIER (V.), CREMASCHI (M.), GIRAUD (J.), MARQUIS (P.), MARTIN (C.), MÉRY (S.), PLAZIAT (J.-C.), SALIÈGE (J.-F.), Évolution paléographique du Ja'alan (Oman) à l'Holocène moyen : impact sur l'évolution des paléomilieux littoraux et les stratégies d'adaptation des communautés humaines, *Paléorient*, 31 (1), 2005, p. 46-63.
- Berger *et al.* 2013 : BERGER (J.-F.), CHARPENTIER (V.), CRASSARD (R.), MARTIN (C.), DAVTIAN (G.), LÓPEZ-SÁEZ (J. A.), The dynamics of mangrove ecosystems, changes in sea level and the strategies of Neolithic settlements along the coast of Oman (6000-3000 cal BC), *Journal of Archaeological Science*, 40 (7), 2013, p. 3 087-3 104.
- Berger *et al.* 2020 : BERGER (J.-F.), BERGER-GUILBERT (R.), MARRAST (A.), MUÑOZ (O.), GUY (H.), BARRA (A.), LOPEZ-SAEZ (J. A.), PEREZ-DIAZ (S.), MASHKOUR (M.), DEBUE (K.), LEFÈVRE (C.), GOSELIN (M.), MOUGNE (C.), BRUGNAUX (G.), THORIN (S.), NISBET (R.), OBERLIN (C.), MERCIER (N.), DEPREUX (B.), PERRET (F.), BÉAREZ (P.), First contribution of the excavation and the chronostratigraphic study of Ruways 1 Neolithic shell midden (Oman), in terms of Neolithization, palaeoeconomy, social-environmental interactions and site formation processes, *Arabian archaeology and epigraphy*, 31 (1), 2020, p. 32-49.
- Betts 1988 : BETTS (A. V. G.), The Black Desert Survey. Prehistoric Sites and Subsistence Strategies in Eastern Jordan. In : GARRARD (A. N.), GEBEL (H. G. K.) (eds), *The Prehistory of Jordan: The State of Research in 1986*.
- Oxford: Archaeopress (BAR International Series, 396), 1988, p. 369-391.
- Bgazhnokov 2013 : BGAZHNOKOV (B.), Cup-marks from the Caucasian dolmens. In : BGAZHNOKOV (B.), ALEKSANDROVICH (V.) (eds), *Archaeology and ethnology of Northern Caucasus. Collection of scientific works in honor of the 75th anniversary of Ismail Magomedovich Chechenov*. Nal'chik, 2013, p. 7-32.
- Biagi 1988 : BIAGI (P.), Surveys along the Oman coast: Preliminary Report on the 1985-1988 Campaigns, *East and West*, 38, 1988, p. 271-291.
- Biagi 2004 : BIAGI (P.), Surveys along the Oman coast: A review of the prehistoric sites discovered between Dibab and Qalhat, *Adumatu*, 10, 2004, p. 29-50.
- Biagi & Maggi 1990 : BIAGI (P.), MAGGI (R.), Archaeological Surveys along the Oman Coast: Preliminary Results of Five Years of Research (1983-1987). In : TADDEI (M.), CALLIERI (P.) (eds), *South Asian Archaeology. Proceedings of the Ninth International Conference of the Association of South Asian Archaeologists in Western Europe*, held in the Fondazione Giorgio Cini, Island of San Giorgio Maggiore, Venice. Rome: Istituto Italiano per il Medio ed Estremo Oriente, 1990, p. 543-553.
- Bibby 1966 : BIBBY (G.), *Arabian Gulf Archaeology*. Kuml, 1966, p. 75-95.
- Bibby 1969 : BIBBY (G.), *Looking for Dilmun*. New York: Knopf, 1969.
- Binford 2001 : BINFORD (L. R.), *Constructing Frames of Reference: An Analytical Method for Archaeological Theory Building Using Ethnographic and Environmental Data Sets*. Berkeley & Los Angeles: University of California Press, 2, 2001.
- Böhme 2011 : BÖHME (M.), The Bat-Type. A Hafit period tomb construction in Oman, *Arabian archaeology and epigraphy*, 22, 2011, p. 23-31.
- Böhme 2012 : BÖHME (M.), The Recurring Monument. Records on Hafit and Umm an-Nar Period Tomb Architecture in the Oman Peninsula. In : FURHOLT (M.), HINZ (M.), MISCHKA (D.) (eds), *As time goes by? Monuments, Landscapes and the Temporal Perspective*. Proceedings of the International Workshop "Socio-Environmental Dynamics over the last 12,000 Years: The Creation of Landscapes II", Kiel (14th-18th March 2011). Bonn: Verlag Dr. Rudolf Habelt GmbH, 2012, Vol. 2, p. 85-93.
- Bonchev 1901 : BONCHEV (G.), Megalithic monuments from Sakar Mountain, *Collection of folklore, science and letters*, 18, 1901, p. 659-703.
- Bonstetten 1865 : BONSTETTEN (G. de), *Essai sur les Dolmens*. Genève : Imprimerie Jule-Guillaume Fick, 1865.
- Bontscheff 1897 : BONTSCHEFF (S.), Dolmen im südlichen Bulgarien, *Korrespondenz-Blatt der Deutschen Gesellschaft für Anthropologie*, 1897, p. 35-36.

Borchhardt & Wurster 1989 : BORCHHARDT (J.), WURSTER (W.), Megalit Graber in Lykien, *Jahrbuch des DAI*, 89, 1989, p. 513-538.

Bortolini 2012 : BORTOLINI (E.), The Early Bronze Age of the Oman Peninsula: from Chronology to Evolution. In : GIRAUD (J.), GERNEZ (G.) (dir.), *Aux marges de l'archéologie : ouvrage à la mémoire de S. Cleuziou*. Paris : De Boccard (Coll. Travaux de la Maison René-Ginouvès), 2012, p. 353-370.

Bortolini 2014 : BORTOLINI (E.), *An evolutionary and quantitative analysis of construction variation in prehistoric monumental burials of eastern Arabia*. London: PhD thesis, The Institute of Archaeology, UCL, 2014.

Bortolini 2019 : BORTOLINI (E.), A Trait-Based Analysis of Structural Evolution in Prehistoric Monumental Burials of Southeastern Arabia. In : WILLIAMS (K. D.), GREGORIČKA (L. A.) (eds), *Mortuary and Bioarchaeological Perspectives on Bronze Age Arabia*. Gainesville (FL): University of Florida Press, 2019, p. 141-160.

Bortolini & Munoz 2015 : BORTOLINI (E.), MUÑOZ (O.), Life and Death in Prehistoric Oman: Insights from Late Neolithic and Early Bronze Age Funerary Practices (4th-3rd mill. BC). In : *The Archaeological Heritage of Oman. Proceedings of the symposium held at UNESCO* (September, 7th 2012). Muscat: UNESCO, Ministry of Heritage and Culture, Sultanate of Oman, 2015, p. 61-80.

Botan 2019 : BOTAN (S. A.), *Hafit tombs in the Wadi al-Jizzi and Wadi Suq corridors. A spatial analysis of Early Bronze Age (3200-2500 BC) funerary structures in the Sultanate of Oman*. Leiden: MA thesis, University of Leiden, Faculty of Archaeology, 2019.

Bostancı 1952 : BOSTANCI (E. Y.), Gökirmak vadisinde prehistiuar araştırmaları yeni Paleolitik buluntular, *Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Dergisi*, 10, 1952, p. 137-142.

Boulestin 2016 : BOULESTIN (B.), Qu'est-ce que le mégalithisme ? In : JEUNESSE (C.), LE ROUX (P.), BOULESTIN (B.) (dir.), *Mégalithismes vivants et passés : approches croisées*. Oxford : Archaeopress Archaeology, 2016, p. 57-94.

Bourke 2008 : BOURKE (S. J.), The Chalcolithic Period. In : ADAMS (R. B.) (ed.), *Jordan: An Archaeological Reader*. London & Oakville: Equinox, 2008, p. 109-160.

Bradbury 2011 : BRADBURY (J.), *Landscapes of Burial? The Homs Basalt, Syria in the 4th-3rd Millennia BC*. Doctoral Thesis, Durham University, Available at Durham E-Theses, 2011 (<http://etheses.dur.ac.uk/725/>).

Braemer 2011 : BRAEMER (F.), Badia and Maamoura, the Jawlan/Hawran regions during the Bronze Age: landscapes and hypothetical territories, *Syria*, 88, 2011, p. 31-46.

Braemer et al. 2001 : BRAEMER (F.), STEIMER-HERBET (T.), BUCHET (L.), SALIÈGE (J.-F.), GUY (H.), Le Bronze

ancien du Ramlat as-Sabatayn (Yémen). Deux nécropoles de la première moitié du III^e millénaire à la bordure du désert : Jebel Jidran et Jebel Ruwaiq, *Paléorient*, 27 (1), 2001, p. 21-44.

Braemer et al. 2003 : BRAEMER (F.), CLEUZIOU (S.), STEIMER-HERBET (T.), Dolmen-like structures: some unusual funerary monuments in Yemen, *Proceeding Seminar of Arabian Studies*, 33, 2003, p. 169-182.

Braemer et al. 2004 : BRAEMER (F.), ÉCHALLIER (J.-C.), TARAQJI (A.) (dir.), *Khirbet al-Umbashi. Villages et camps de pasteurs dans le "Désert noir" (Syrie) à l'âge du Bronze*. Beyrouth : BAH, 171, 2004.

Cable 2012 : CABLE (C. M.), *A Multitude of Monuments: Finding and Defending Access to Ressources in Third Millennium BC Oman*. PhD Dissertation in Michigan State University, 2012.

Cable & Thornton 2012 : CABLE (C. M.), THORNTON (C. P.), Monumentality and the Third Millennium 'Towers' of the Oman Peninsula. In : ABRAHAM (S.), GUILLAPALLI (P.), RACZEK (T. P.), RIZVI (U. Z.) (eds), *Connections and Complexity, New Approaches to the Archaeology of South Asia*. Left Coast Press, 2012, p. 375-399.

Carrera Ramírez & Fábregas Valcarce 2003 : CARRERA RAMÍREZ (F.), FÁBREGAS VALCARCE (R.), The protection and management of the megalithic art of Galicia, Spain, *Conservation and Management of Archaeological Sites*, 6 (1), 2003, p. 23-27.

Carter et al. 2020 : CARTER (T.), MOIR (R.), WONG (T.), CAMPEAU (K.), MIYAKE (Y.), OSAMU (M.), Hunter-Fisher-gatherer river transportation: Insights from sourcing the obsidian of Hasankeyf Höyük, a pre-pottery Neolithic village on the Upper Tigris (SE Turkey), *Quaternary International*, 574, 2020, p. 27-42.

Cassen 2014 : CASSEN (S.), Sites de passage (2). Le modèle carnacois des pierres dressées à l'épreuve des steppes et des légendes. In : ROBIN (G.), D'ANNA (A.), SCHMITT (A.), BAILLY (M.) (dir.), *Fonctions, utilisations et représentations de l'espace dans les sépultures monumentales du Néolithique européen*. Actes du colloque international "Fonctions, utilisations et représentations de l'espace dans les sépultures monumentales du Néolithique européen", Aix-en-Provence (8-10 juin 2011). Aix-en-Provence : Presses Universitaires de Provence (Coll. Préhistoires de la Méditerranée), 2014, p. 343-362 (<http://journals.openedition.org/pm/1184>).

Cauvin 1978 : CAUVIN (J.), *Les premiers villages de Syrie-Palestine du IX^e au VII^e millénaire avant Jésus-Christ*. Lyon : Maison de l'Orient, 1978.

Cauvin 1997 : CAUVIN (J.), *Naissance des divinités. Naissance de l'agriculture. La Révolution des symboles au Néolithique*. Paris : Flammarion, 1997, 2^e édition revue et augmentée.

Bibliography

- Celik 2016 : ÇELIK (B.), A small-scale cult centre in Southeast Turkey: Harbetşuvan Tepesi, *Documenta Praehistorica*, 43, 2016, p. 421-428.
- Chantre 1882 : CHANTRE (E.), L'âge de la pierre et l'âge du bronze dans l'Asie occidentale, *Bulletin de la Société d'Anthropologie de Lyon*, 1/2, 1882, p. 206-217.
- Chantre 1885 : CHANTRE (E.), *Recherches anthropologiques dans le Caucase*. Paris : Ch. Reinwald ; Lyon : Henri Georg, I, 1885.
- Chechenov 1973 : CHECHENOV (I. M.), *Nalchikskaya podkurgannaya grobnitsa*. Nalchik: Elbrus, 1973.
- Chesson 2007 : CHESSON (M. S.), Remembering and forgetting in Early Bronze Age mortuary practices on the southeastern Dead Sea Plain, Jordan. In : *Performing Death: Social Analyses of Funerary Traditions in the Ancient Near East and Mediterranean*. Chicago: The Oriental Institute of the University of Chicago, 2007, p. 109-139.
- Chesson 2016 : CHESSON (M. S.), Risky business: a life full of obligations to the dead and the living on the Early Bronze Age southeastern Dead Sea Plain, Jordan. In : FLEISHER (J.), NORMAN (N.) (eds), *The Archaeology of Anxiety: The Materiality of Anxiousness, Worry, and Fear*. New York: Springer, 2016, p. 41-65.
- Chesson & Schaub 2007 : CHESSON (M. S.), SCHaub (R. T.), Death and dying on the Dead Sea Plain: Fifa, Khirbat al-Khanazir, and Bab adh-Dhita' cemeteries. In : LEVY (T. E.), DAVIAU (M.), YOUNKER (R. W.), SHAER (M.), *Crossing Jordan: North American Contributions to the Archaeology of Jordan*. London & Oakville: Equinox, 2007, p. 253-260.
- Chesson et al. 2005 : CHESSON (M. S.), MAKAREWITCZ (C.), KUIJT (I.), WHITING (C.), Results of the 1002 Kerak Plateau Survey, *BASOR*, 59, 2005, p. 1-62.
- Chevalier 2016 : CHEVALIER (A.), Les monuments funéraires protohistoriques d'Arabie centrale et occidentale : nouvelles perspectives de recherche combinant archéologie funéraire et analyse spatiale, *Routes de l'Orient*, Hors-Série 2, 2016, p. 39-51.
- Chevalier 2017 : CHEVALIER (A.), Les tombes protohistoriques d'Arabie Saoudite : bilan et nouvelles perspectives (1/2), *ArchéOrient - Le Blog*, 1^{er} décembre 2017 (<https://archeorient.hypotheses.org/7969>).
- Childe 1939 : CHILDE (V. G.), *The Dawn of European Civilization*. London: Keegan Paul, 1925, 3rd ed. rééd. 1939.
- Childe 1948 : CHILDE (G.), Megaliths, *Ancient India*, IV, 1947-1948, p. 4-13.
- Cleuziou 1989 : CLEUZIOU (S.), The chronology of protohistoric Oman as seen from Hili. In : COSTA (P. M.), TOSI (M.) (eds), *Oman Studies*. Rome: IsMEO, 1989, p. 47-78.
- Cleuziou 1996 : CLEUZIOU (S.), The Emergence of Oases and Towns in Eastern and Southern Arabia. In : AFANAS'EV (G.E.), CLEUZIOU (S.), LUKACS (J.R.), TOSI (M.) (eds), *The Prehistory of Asia and Oceania* (Colloquia 16). UISPP, Forlì (8-14/09/1996). Forlì: ABACO Edizioni, 1996, p. 159-165.
- Cleuziou 1997 : CLEUZIOU (S.), Construire et protéger son terroir : les oasis d'Oman à l'âge du Bronze. In : BURNOUF (J.), BRAVARD (J.-P.), CHOQUER (G.) (dir.), *La dynamique des paysages protohistoriques, antiques, médiévaux et modernes*. XVII^e rencontres d'Histoire et d'Archéologie d'Antibes. Antibes : ADPCA, 1997, p. 389-412.
- Cleuziou 1999 : CLEUZIOU (S.), Enjeux et perspectives de la recherche archéologique dans la péninsule arabique, de la fin de la Préhistoire à l'âge du Bronze, *Isimu*, 1, 1999, p. 43-61.
- Cleuziou 2002a : CLEUZIOU (S.), The Early Bronze Age of the Oman Peninsula from Chronology to the Dialectics of Tribe and State Formation. In : CLEUZIOU (S.), TOSI (M.), ZARINS (J.) (dir.), *Essays of the Late Prehistory of the Arabian Peninsula*. Rome: IsIAO (Serie Orientale Roma, XCIII), 2002, p. 191-236.
- Cleuziou 2002b : CLEUZIOU (S.), Présence et mise en scène des morts à l'usage des vivants dans les communautés préhistoriques : l'exemple de la péninsule d'Oman à l'Âge du Bronze ancien. In : MOLINOS (M.), ZIFFERERO (A.) (eds), *I primi popoli d'Europa*. Florence: All insegnà del Giglio, 2002, p. 17-31.
- Cleuziou 2005 : CLEUZIOU (S.), Pourquoi si tard ? nous avons pris un autre chemin. L'Arabie des chasseurs-cueilleurs de l'Holocène au début de l'Âge du Bronze. In : GUILAINE (J.) (dir.), *Aux marges des grands foyers du Néolithique. Périphéries débitrices au créatrices*? Paris : Errance, 2005, p. 123-148.
- Cleuziou 2007 : CLEUZIOU (S.), Evolution toward Complexity in a Coastal Desert Environment. The Early Bronze Age in the Ja'alan, Sultanate of Oman. In : KOHLER (T. A.), VAN DER LEEUW (S.) (eds), *The Model-Based Archaeology of Socionatural Systems*. Santa Fe: SAR press, 2007, p. 213-231.
- Cleuziou & Costantini 1980 : CLEUZIOU (S.), COSTANTINI (L.), Premiers éléments sur l'agriculture protohistorique de l'Arabie orientale, *Paléorient*, 6 (1), 1980, p. 245-251.
- Cleuziou & Méry 2002 : CLEUZIOU (S.), MÉRY (S.), In-between the great powers, the Bronze Age Oman peninsula. In : CLEUZIOU (S.), TOSI (M.), ZARINS (J.) (eds), *Essays on the Late prehistory of the Arabian peninsula*. Roma: IsIAO, 2002, p. 273-316.
- Cleuziou & Munoz 2007 : CLEUZIOU (S.), MUÑOZ (O.), Les morts en société : une interprétation des sépultures collectives d'Oman à l'Âge du Bronze. In : BARAY (L.), BRUN (P.), TESTART (A.) (dir.), *Pratiques funéraires et*

sociétés. *Nouvelles approches en archéologie et en anthropologie sociale*. Dijon : Presses Universitaires de Dijon, 2007, p. 293-317.

Cleuziou & Tosi 2000a: CLEUZIOU (S.), TOSI (M.), Ra's al-Jinz and the Prehistoric coastal cultures of the Ja'alan, *The Journal of Oman Studies*, 11, 2000, p. 19-74.

Cleuziou & Tosi 2000b : CLEUZIOU (S.), TOSI (M.), *A short preliminary report on the 13th excavation campaign of the Joint Hadd Project (dec. 1999-feb 2000)*. Muscat: Unpublished report, Ministry of Heritage and Culture, 2000.

Cleuziou & Tosi 2002 : CLEUZIOU (S.), TOSI (M.), *A short preliminary report on the 15th excavation campaign of the Joint Hadd Project (dec. 2001-feb 2002)*. Muscat: Unpublished report, Ministry of Heritage and Culture, 2002.

Cleuziou & Tosi 2007 : CLEUZIOU (S.), TOSI (M.), *In the Shadow of the Ancestors: The prehistoric foundations of the early Arabian civilization in Oman*. Muscat: Ministry of Heritage and Culture, 2007.

Cleuziou *et al.* 1988 : CLEUZIOU (S.), INIZAN (M.-L.), ROBIN (C.), *Premier rapport préliminaire sur la prospection des vallées nord du Wâdî al-Jawf (Wâdî Hirâb, Wâdî Sadbâ, Jabal al-Lawdh)*, République Arabe du Yémen. Paris, Rapport non publié, 1988.

Cleuziou *et al.* 2011 : CLEUZIOU (S.), MÉRY (S.), VOGT (B.), *Protohistoire de l'oasis d'Al-Aïn. Travaux de la Mission archéologique française à Abou Dhabi (Émirats Arabes Unis), Vol. 1, Les sépultures de l'âge du Bronze*. Maison de l'Archéologie René Ginouvès-Nanterre, Abu Dhabi Authority for Culture and Heritage ; Oxford: Archaeology (BAR International Series, 2227), 2011.

Collins *et al.* 2015 : COLLINS (S.), KOBS (C. M.), LUDDENI (M. C.), *The Tall al-Hammam Excavations. Volume One, An Introduction to Tall al-Hammam with Seven Seasons (2005-2011) of Ceramics and Eight Seasons (2005-2012) of Artifacts*. Winona Lake, IN: Eisenbrauns, 2015.

Conder 1889 : CONDER (C. R.), *The Survey of Eastern Palestine: Memoirs of the Topography, Orography, Hydrography, Archaeology, etc. Vol. I: The Adwân Country*. London: The Palestine Exploration Fund, 1889.

Coqueugniot 2004 : COQUEUGNIOT (É.), Les industries lithiques du Néolithique ancien entre Moyen Euphrate et Jezireh orientale : réflexions sur deux voies évolutives. In : AURENCHÉ (O.), LE MIÈRE (M.), SANLAVILLE (P.) (eds), *From the River to the Sea: The Palaeolithic and the Neolithic on the Euphrates and in the Northern Levant. Studies in honour of Lorraine Copeland*. Oxford: Archaeopress, 2004, p. 296-308.

Coqueugniot 2014 : COQUEUGNIOT (É.), Dja'de (Syrie) et les représentations symboliques au IX^e millénaire cal BC. In : MANEN (C.), PERRIN (T.), GUILAINE (J.) (dir.), *La transition néolithique en Méditerranée*. The Neolithic

transition in the Mediterranean. Paris : Errance, 2014, p. 91-108.

Crassard *et al.* 2010 : CRASSARD (R.), GUY (H.), SCHIETTECATTE (J.), HITGEN (H.), Reuse of tombs or cultural continuity? The case of tower-tombs in Shabwa governorate (Yemen). In : WEEKS (L.) (dir.), *Death and Burial in Arabia and Beyond*. Oxford: Archaeopress (BAR International Series, 2107), 2010, p. 173-177.

Dajani 1967 : DAJANI (R. W.), Excavations in Dolmens, *Annual of the Department of Antiquities of Jordan*, 12-13, 1967, p. 56-60.

Dan & Ceseratti 2020 : DAN (R.), CESERATTI (A.), Statue-Stela Complex, Iran, *Iran and the Caucasus*, 24, 2020, p. 347-357.

Daniel 1958 : DANIEL (G. E.), *The Megalith Builders of Western Europe*. London: Hutchinson, 1958.

Deadman 2012 : DEADMAN (W. M.), Defining the Early Bronze Age landscape: a remote sensing-based analysis of Hafit tomb distribution in Wadi Andam, Sultanate of Oman, *Arabian archaeology and epigraphy*, 23 (1), 2012, p. 26-34.

Deadman 2017 : DEADMAN (W. M.), *Early Bronze Age Society in Eastern Arabia: An Analysis of the Funerary Archaeology of the Hafit Period (3,200-2,500 BC) in the Northern Oman Peninsula with Special Reference to the Al-Batinah Region*. PhD thesis, Durham University, 2017.

Deadman & Al-Jahwari 2016 : DEADMAN (W. M.), AL-JAHWARI (N. S.), Hafit tombs in ash-Sharqiyah, Oman: Assessing the accuracy and precision of Google Earth remote-sensing survey and analysing their distribution in the landscape, *Arabian archaeology and epigraphy*, 27, 2016, p. 19-30.

Deadman *et al.* 2015 : DEADMAN (W. M.), KENNEDY (D.), AL-AIFI (K. N.), Hafit tombs and the development of Early Bronze Age social hierarchy in al-Batinah, Oman, *Proc Semin Arabian Stud*, 45, 2015, p. 49-56.

Debord 1967 : DEBORD (G.), *La société du spectacle*. Paris : Buchet-Chastel, 1967.

De Cardi 1975 : DE CARDI (B.), Archaeological survey in Northern Oman, 1972, *East & West*, 25 (1/2), 1975, p. 9-75.

De Cardi *et al.* 1976 : DE CARDI (B.), COLLIER (S.), DOE (D. B.), Excavations and survey in Oman, 1974-1975, *Journal of Oman Studies*, 2, 1976, p. 101-187.

De Cardi *et al.* 1977 : DE CARDI (B.), DOE (D. B.), ROSKAMS (S. P.), Excavation and survey in the Sharqiyah, Oman, 1976, *Journal of Oman Studies*, 3, 1977, p. 17-33.

Bibliography

- De Cardi *et al.* 1979 : DE CARDI (B.), BELL (R. D.), STARLING (N. J.), Excavations at Tawi Silaim and Tawi Sa'id in the Sharqiya, 1978, *Journal of Oman Studies*, 5, 1979.
- Déchelette 1908 : DÉCHELETTE (J.), *Manuel d'archéologie préhistorique, celtique et gallo-romaine. 1, Archéologie préhistorique*. Paris, 1908.
- Degli Esposti & Phillips 2012 : DEGLI ESPOSTI (M.), PHILLIPS (C.), Iron Age impact on a Bronze Age archaeological landscape: results from the Italian Mission to Oman excavations at Salūt, Sultanate of Oman, *Proceedings of the Seminar for Arabian Studies*, 42, 2012, p. 87-100.
- Delev 1982a : DELEV (P.), The monuments. Problems of the Thracian megalithic monuments. In : FOL (A.) (ed.), *Thracian monuments, 3, The Megaliths in Thrace*, 2. Sofia, 1982, p. 398-431.
- Delev 1982b : DELEV (P.), The monuments. Sakar Mountain and the Eastern Rhodope Mountains. In : FOL (A.) (ed.), *Thracian monuments, 3, The Megaliths in Thrace*, 2. Sofia, 1982, p. 137-263.
- Delev 1984 : DELEV (P.), Megalithic Thracian Tombs in South-Eastern Bulgaria, *Anatolica*, 11, 1984, p. 17-45.
- De Maigret 1990 : DE MAIGRET (A.), *The Bronze Age culture of Hawlan at-Tiyal and al-Hadda (Republic of Yemen)*. Rome: IsMEO, 1990.
- De Maigret 1996 : DE MAIGRET (A.), New Evidence from the Yemenite "Turret Graves" for the Problem of the Emergence of the South Arabian States. In : READE (J.) (ed.), *The Indian Ocean in Antiquity*. London: Routledge, 1996, p. 321-337.
- Demoule 2020 : DEMOULE (J.-P.), *Aux origines, l'archéologie. Une science au cœur des grands débats de notre temps*. Paris : La Découverte (Coll. Cahiers Libres), 2020.
- De Vreeze 2010 : DE VREEZE (M.), *Social Structures in Stone: The Damiyah Dolmen Field and its Regional Relevance with Special Focus on the Early Bronze Age*. Leiden: Master's thesis, Faculty of Archaeology, Leiden University, 2010.
- Dichev 2005 : DICHEV (D.), *Some architectural characteristics of the dolmens in Bulgaria. The lands of Bulgaria. Cradle of the Thracian culture*. Sofia, 2005, Vol. II, p. 100-103.
- Dichev 2008 : DICHEV (D.), *Dolmen No. 2 on the land of the village of Golyam Dervent, Elhovo municipality. Archaeological discoveries and excavations in 2007*. Sofia, 2008, p. 155-156.
- Dietrich *et al.* 2019 : DIETRICH (L.), MEISTER (J.), DIETRICH (O.), NOTROFF (J.), KIEP (J.), HEEB (J.), BEUGER (A.), SCHÜTT (B.), Cereal processing at Early Neolithic Göbekli Tepe, southeastern Turkey. *PLoS ONE*, 14 (5), 2019.
- Dietrich *et al.* 2020 : DIETRICH (L.), GÖTTING-MARTIN (E.), HERTZOG (J.), SCHMITT-KOPPLIN (P.), McGOVERN (P.), HALL (G.R.), PETERSEN (W.G.), ZARNKOW (M.), HUTZLER (M.), JACOB (F.), ULLMAN (C.), NOTROFF (J.), ULBRICH (M.), FLÖTER (E.), HEEB (J.), MEISTER (J.), DIETRICH (O.), Investigating the function of Pre-Pottery Neolithic stone troughs from Göbekli Tepe: An integrated approach, *Journal of Archaeological Science, Reports* 34, 2020, p. 102-618.
- Dietrich *et al.* 2012 : DIETRICH (O.), HEUN (M.), NOTROFF (J.), SCHMIDT (K.), ZARNKOW (M.), The role of cult and feasting in the emergence of Neolithic communities. New evidence from Göbekli Tepe, southeastern Turkey, *Antiquity*, 86 (33), 2012, p. 674-695.
- Dietrich *et al.* 2013 : DIETRICH (O.), KÖKSAL-SCHMIDT (C.), NOTROFF (J.), SCHMIDT (K.), Establishing a Radiocarbon Sequence for Göbekli Tepe. State of Research and New Data, *Neo-Lithics*, 13 (1), 2013, p. 36-41.
- Dietrich *et al.* 2016 : DIETRICH (O.), NOTROFF (J.), CLARE (L.), HÜBNER (C.), KÖKSAL-SCHMIDT (C.), SCHMIDT (K.), Göbekli Tepe, Anlage H. Ein Vorbericht beim Ausgrabungsstand von 2014, *Anatolian Metal*, 7, 2016, p. 53-69.
- Döpper 2014 : DÖPPER (S.), On the reuse of Early Bronze Age Tombs. The German excavations at Bat and Al-Ayn, Sultanate of Oman. In : *Proceedings of the 8th International Congress on the Archaeology of the Ancient Near East*, Warsaw (30 April - 4 May 2012). Warsaw: University of Warsaw, 2014, p. 57-69.
- Döpper & Schmidt 2014 : DÖPPER (S.), SCHMIDT (C.), German Expedition to Bat and Al-Ayn, Sultanate of Oman: The 2010 to 2013 seasons, *The Journal of Oman Studies*, 18, 2014, p. 187-231.
- Dubis & Dabrowski 2002 : DUBIS (E.), DABROWSKI (B.), Field K: the dolmen and other features on the south slopes of Tall al-'Umayri. In : HERR (L. G.), CLARK (D. R.), GERATY (L. T.), YOUNKER (R. W.), LABIANCA (Ø. S.), *Madaba Plains Project 5: The 1994 Season at Tall al-'Umayri and Subsequent Studies*. Berrien Springs, MI: Andrews University, 2002, p. 171-177.
- During Caspers 1971 : DURING CASPERS (E. C. L.), New archaeological evidence for maritime trade in the Persian Gulf during the late protoliterate period, *East & West*, 21 (1/2), 1971, p. 21-55.
- Eddisford & Phillips 2009 : EDDISFORD (D.), PHILLIPS (C. S.), Kalba in the third millennium (Emirate of Sharjah, UAE), *Proceedings of the Seminar for Arabian Studies*, 39, 2009, p. 111-124.
- Epstein 1985 : EPSTEIN (C.), Dolmens excavated in the Golan, *Atiqot*, 17, 1985, p. 20-58.

Erdoğu 2003 : ERDOĞU (R.), A major new megalithic complex in Europe, *Antiquity Project Gallery*, 77 (297), 2003 (<http://www.antiquity.ac.uk/projgall/erdogu297/>).

Erdoğu 2005 : ERDOĞU (R.), *Megalithic monuments of Turkish Thrace*. Durham: Unpublished M. Phil thesis, University of Durham, 2005 (<http://etheses.dur.ac.uk/3931/>).

Erdoğu *et al.* 2002 : ERDOĞU (B.), ERDOĞU (R.), CHAPMAN (J.), Kırıkköy: the largest megalithic complex in Turkish Thrace, *Antaeus*, 25, 2002, p. 547-569.

Felitsyn 1904 : FELITSYN (E. D.), Zapadnokavkazskie dol'meny, *Materialy po arkheologii Kavkaza*, 9, 1904, p. 1-86.

Fernandez-Tresguerres 2011 : FERNANDEZ-TRESGUERRES (J.), Pierres dressées dans la région de Mutawwaq (Jordanie). In : STEIMER-HERBET (T.) (dir.), *Pierres levées, stèles anthropomorphes et dolmens. Aspects cultuels des 4^e et 3^e millénaires av. J.-C. en Arabie et au Levant*. Actes du colloque international à l'Université de Amman en juin 2007. Oxford: co-édition MOM ; British Archaeological Report, 2011, p. 113-122.

Fernández-Tresguerres Velasco *et al.* 1992 : FERNÁNDEZ-TRESGUERRES VELASCO (J.), JUNCEDA QUINTANA (F.), MENENDEZ FERNANDEZ (M.), Jebel Mutawwaq: los inicios de la Edad del Bronce en la zona de Wadi Zarqa (Jordania), *Treballs d'Arqueologia*, 2, 1992, p. 127-143.

Finlayson 2014 : FINLAYSON (B.), Houses of the Holy: The Evolution of Ritual Buildings. In : FINLAYSON (B.), MAKAREWICZ (C.) (eds), *Settlement, Survey and Stone. Essays on Near Eastern Prehistory in Honour of Gary Rollefson*. Berlin: ex oriente, 2014, p. 133-143.

Forssander 1933 : FORSSANDER (J. E.), *Die schwedische Bootaxtkultur und ihre kontinentaleuropäischen Voraussetzungen*. Lund: Borelius, 1933.

Fraser 2015 : FRASER (J. A.), *Dolmens in the Levant*. Sydney: PhD thesis, submitted at the University of Sydney, 2015.

Fraser 2018 : FRASER (J. A.), *Dolmens in the Levant. Palestine Exploration Fund Annual XIV*. London: Routledge, 2018.

Freikman 2012 : FREIKMAN (M.), A Near Eastern megalithic monument in context, *Journal for Ancient Studies*, 3, 2012, p. 143-147.

Frenez *et al.* 2016 : FRENEZ (D.), DEGLI ESPOSTI (M.), MÉRY (S.), KENOYER (J. M.), Bronze Age Salût (ST1) and the Indus Civilization: recent discoveries and new insights on regional interaction, *Proceedings of the Seminar for Arabian Studies*, 46, 2016, p. 107-124.

Frifelt 1968 : FRIFELT (K.), Arkæologiske undersøgelser på Oman halvøen (Archaeological investigations in the Oman peninsula), *Kulm*, 18, 1968, p. 159-175.

Frifelt 1970 : FRIFELT (K.), Jamdat Nasr Fund fra Oman, *Kuml*, 1970, p. 55-58.

Frifelt 1975a : FRIFELT (K.), A possible link between the Jemdet Nasr and the Umm an-Nar graves of Oman, *Journal of Oman Studies*, 1, 1975, p. 57-80.

Frifelt 1975b : FRIFELT (K.), On prehistoric settlement and chronology of the Oman Peninsula, *East & West*, 25 (34), 1975, p. 359-424.

Frifelt 1991 : FRIFELT (K.), *The Island of Umm an-Nar. 1. Third millennium graves. Jutland Archaeological society Publications*. Aarhus: Jutland Archaeological Society Publications, 1991.

Frifelt 2002 : FRIFELT (K.), Bat, a center in third millennium Oman. In : CLEUZIOU (S.), TOSI (M.), ZARINS (J.) (eds), *Essays on the late prehistory of the Arabian Peninsula*. Roma: IsIAO, 2002, p. 101-110.

Fuller *et al.* 2011 : FULLER (D. Q.), WILLCOX (G.), ALLABY (R. G.), Cultivation and domestication had multiple origins: arguments against the core area hypothesis for the origins of agriculture in the Near East, *World Archaeology*, 43 (4), 2011, p. 628-652.

Gagnaison *et al.* 2004 : GAGNAISON (C.), BARRIER (P.), MÉRY (S.), ALTIKRITI (W. Y.), Extractions de calcaires éocènes à l'Âge du Bronze et architecture funéraire à Hili (Émirat d'Abou Dhabi), *Revue d'Archéométrie*, 28, 2004, p. 97-108.

Galili *et al.* 2013 : GALILI (E.), KOLSKA HORWITZ (L.), ESHED (V.), ROSEN (B.), HERSHKOVITZ (I.), Submerged prehistoric settlements off the Mediterranean coast of Israel, *Skyllis*, 13, 2013, p. 181-204.

Garba *et al.* 2020 : GARBA (R.), DEMJAN (P.), SVETLIK (I.), DRESLEROVA (D.), The new radiocarbon dataset for tilith monuments of Southeastern Arabia, *Radiocarbon*, 2019, p. 1-11.

García & Rachad 1989 : GARCÍA (M. A.), RACHAD (M.), Découverte d'art rupestre au Yémen, *Archéologia*, 252, 1989, p. 32-36.

Gebel 2013 : GEBEL (H. G. K.), Arabia's fifth-millennium BCE pastoral well cultures: hypotheses on the origins of oasis life, *Proceedings of the Seminar for Arabian Studies*, 43, 2013, p. 111-126.

Gebel 2016 : GEBEL (H. G. K.), The socio-hydraulic foundations of oasis life in NWArabia: the 5th millennium BCE shepherd environs of Rajajil, Rasif and Qulban Beni Murra. In : LUCIANI (M.) (ed.), *The archaeology of North Arabia: oases and landscapes*. Proceedings of the International Congress held at the University of Vienna (5-8 December, 2013). Vienna: Austrian Academy of Sciences, 2016, p. 79-114.

Bibliography

- Gentelle & Frifelt 1989 : GENTELLE (P.), FRIFELT (K.), About the distribution of third millennium graves and settlements in the Ibri area of Oman. In : COSTA (P. M.), TOSI (M.) (eds), *Oman Studies: Papers on the Archaeology and History of Oman*. Rome: ISMEO, 1989, p. 119-126.
- Geyer & Besançon 1996 : GEYER (B.), BESANÇON (J.), Environnement et occupation du sol dans la vallée de l'Euphrate syrien durant le Néolithique et le Chalcolithique, *Paléorient*, 22 (2), 1996, p. 515.
- Gibbins 2008 : GIBBINS (S. J.), *Valley, Highlands and Steppe: Processes of Settlement Intensification in Northern Jordan during the Early Bronze I-III*. Sydney: Unpublished PhD thesis, The University of Sydney, 2008.
- Gilead 1968 : GILEAD (D.), Burial customs and the dolmen problem, *Palestine Exploration Quarterly*, 100, 1968, p. 16-26.
- Gilbert *et al.* 2012 : GILBERT (A.), BOBOKHYAN (A.), HNILA (P.), Dragon Stones in Context. The Discovery of High-Altitude Burial Grounds with Sculpted Stelae in the Armenian Mountains, *Mitt. Dt. Orient Ges.*, 144, 2012, p. 93-132.
- Giraud 2007 : GIRAUD (J.), *Restitution d'un espace géographique ancien : la province du Ja'alan à l'Âge du Bronze (Sultanat d'Oman)*. Paris : Thèse de doctorat en Archéologie à Paris 1 Panthéon-La Sorbonne, 2007.
- Giraud 2009 : GIRAUD (J.), The evolution of settlement patterns in the eastern Oman from the Neolithic to the Early Bronze Age (6000-2000 BC), *Comptes Rendus Géoscience*, 341 (89), 2009, p. 739-749.
- Giraud 2010 : GIRAUD (J.), Early Bronze Age graves and graveyards in the eastern Ja'alan (Sultanate of Oman): an assessment of the social rules working in the funerary landscape. In : WEEKS (L.) (ed.), *Death and burial in Arabia and beyond: multidisciplinary perspectives*. Oxford: British Archaeological Reports, 2010, p. 71-84.
- Giraud 2012 : GIRAUD (J.), Les espaces du passé. L'exemple du Ja'alan à la période Haft. In : GIRAUD (J.), GERNEZ (G.), CASTEJA (V.) (dir.), *Aux marges de l'archéologie, Hommages à Serge Cleuziou*. Paris : De Boccard (Travaux de la Maison René-Ginouvès, 16), 2012, p. 133-154.
- Giraud & Cleuziou 2009 : GIRAUD (J.), CLEUZIOU (S.), Funerary landscape as part of the social landscape and its perceptions: 3000 Early Bronze Age burials in the eastern Ja'alan (Sultanate of Oman), *Proceedings of the Seminar for Arabian Studies*, 39, 2009, p. 167-184.
- Giraud *et al.* 2005 : GIRAUD (J.), BERGER (J. F.), DAVTIAN (G.), CLEUZIOU (S.), L'espace social des sociétés de l'Âge du Bronze au sultanat d'Oman (région du Ja'alan, III^e millénaire av. J.-C.). In : BERGER (J.-F.), BERTONCELLO (F.), BRAEMER (F.), DAVTIAN (G.), GAZENBEEK (M.) (dir.), *Temps et espaces de l'homme en société. Analyse et modèles spatiaux en archéologie*. XXV^e rencontres internationales d'archéologie et d'histoire d'Antibes. Antibes : APDCA, 2005, p. 305-314.
- Glueck 1951 : GLUECK (N.), Explorations in Eastern Palestine, IV, *The Annual of the American Schools of Oriental Research*, 25-28, 1951, p. 14-23.
- González-García 2015 : GONZÁLEZ-GARCÍA (A. C.), Carahunge: A Critical Assessment. In : RUGGLES (C.) (ed.), *Handbook of Archaeoastronomy and Ethnoastronomy*. New York: Springer, 2015, p. 1 453-1 460.
- Gourichon & Helmer 2008 : GOURICHON (L.), HELMER (D.), Étude zooarchéologique de Mureybet. In : IBAÑEZ (J. J.) (dir.), *Le site néolithique de Tell Mureybet*. Oxford : Archaeopress, 2008, p. 115-228.
- Graeber & Wengrow 2021 : GRAEBER (D.), WENGROW (D.), *The Dawn of Everything: A New History of Humanity*. Londres: Penguin, 2021.
- Greenberg 1992 : GREENBERG (R.), The Ramat ha-Nadiv tumulus field: preliminary report, *Israel Exploration Journal*, 42 (3-4), 1992, p. 129-152.
- Greenberg 2002 : GREENBERG (R.), *Early Urbanizations in the Levant: A Regional Narrative*. London & New York: Leicester University Press, 2002.
- Gregorička 2011 : GREGORIČKA (L. A.), *Mobility, Exchange and Tomb Membership in Bronze Age Arabia: A Biogeochemical Investigation*. PhD Dissertation, Department of Anthropology, The Ohio State University, 2011.
- Gregorička 2013 : GREGORIČKA (L. A.), Geographic Origins and Dietary Transitions During the Bronze Age in the Oman Peninsula, *American Journal of Physical Anthropology*, 152, 2013, p. 353-369.
- Groucutt *et al.* 2020 : GROUCUTT (H. S.), BREEZE (P. S.), GUAGNIN (M.), STEWART (M.), DRAKE (N.), SHIPTON (C.), ZAHRANI (B.), AL OMARFI (A.), ALSHAREKH (A. M.), PETRAGLIA (M. D.), Monumental landscapes of the Holocene humid period in Northern Arabia: the mustatil phenomenon, *The Holocene*, 30 (12), 2020, p. 1 767-1 779.
- Grupe & Peters 2008 : GRUPE (G.), PETERS (J.), Feeding humans and animals at Pre-Pottery Neolithic Nevalı Çori (SE-Anatolia) as evidenced by stable isotope analysis, *Travaux de la Maison de l'Orient et de la Méditerranée*, 49 (1), 2008, p. 197-217.
- Guagnin *et al.* 2020 : GUAGNIN (M.), BREEZE (P. S.), SHIPTON (C.), OTT (F.), STEWART (M.), MARTIN (L.), GRAHAM (L.), EL DOSSARY (S.), KINGWELL-BANHAM (E.), ZAHRANI (B.), AL OMARI (A.), ALSHAREKH (A. M.), PETRAGLIA (M. D.), The Holocene humid period in the Nefud Desert: Hunters and herders in the Jebel Oraf paleolake basin, Saudi Arabia, *Journal of Arid Environments*, 178 (4), 2020, p. 104-146.
- Guilaine 1994 : GUILAINE (J.), *La mer partagée, la Méditerranée avant l'écriture*. Paris : Hachette, 1994.

- H**adad 2014 : HADAD (R.), L'architecture d'un pouvoir sans prestige. Regards croisés à partir du Néolithique précéramique A et des Pueblos du Southwest. In : HURLET (F.), RIVOAL (I.), SIDÉRA (I.) (dir.), *Le prestige. Autour des formes de la différenciation sociale*. Paris : De Boccard, 2014, p. 207-220.
- Hadad 2018 : HADAD (R.), Une illusion du vraisemblable. Mise en scène taphonomique et prospective néolithique à Çatalhöyük, *Gradhiva*, 28, 2018, p. 112-141.
- Hadad 2019 : HADAD (R.), Ruin dynamics: Architectural destruction and the production of sedentary space at the dawn of the Neolithic revolution, *Journal of Social Archaeology*, 19 (1), 2019, p. 326.
- Hadad 2020 : HADAD (R.), Inactualités de la révolution néolithique. Rousseau, l'Anthropocène et les nouveaux riches de la préhistoire, *L'Homme*, 234-235, 2020, p. 291-317.
- Haerinck & Overlaet 2006 : HAERINCK (E.), OVERLAET (B.), *The Early Bronze Age at Bani Surmah. Luristan Excavation Documents VI*. Peeters/Leuven-Dudley (MA) : Acta Iranica, 43, 2006.
- Haiman 1992 : HAIMAN (M.), Cairn burials and cairn fields in the Negev, *Bulletin of the American School of Oriental Research*, 287, 1992, p. 25-48.
- Haklay & Gopher 2020 : HAKLAY (G.), GOPHER (A.), Geometry and Architectural Planning at Göbekli Tepe, Turkey, *Cambridge Archaeological Journal*, 30 (2), 2020, p. 343-357.
- Hansen 2010 : HANSEN (S.), Communication and exchange in the Northern Caucasus and Central Europe in the fourth millennium BC. In : HANSEN (S.), HAUPTMANN (A.), MOTZENBÄCKER (I.), PERNICKA (E.) (eds), *For Majkop bis Trialeti. Gewunnung und Verbreitung von Metallen und Obsidian in Kaukasien im 4.-2. Jt. v. Chr.* Bonn: Dr. Rudolf Habelt, 2010, p. 297-316.
- Hansen 2018 : HANSEN (S.), Elements for an Iconography of Bronze Age Graves in Europe, *Anatolian Metal, Eliten-Handwerk-Prestigegüter*, VIII, 2018, p. 281-293.
- Harari 2014 : HARARI (Y. N.), *Sapiens: A Brief History of Humankind*. Londres: Vintage Books, 2014.
- Harrison 1997 : HARRISON (T. P.), Shifting patterns of settlement in the highlands of central Jordan during the Early Bronze Age, *Bulletin of the American Schools of Oriental Research*, 306, 1997, p. 1-38.
- Harrison 2001 : HARRISON (T. P.), Early Bronze Age social organization as reflected in burial patterns from the southern Levant. In : WOLFF (S. R.) (ed.), *Studies in the Archaeology of Israel and Neighboring Lands in Memory of Douglas L. Esse*. Chicago & Atlanta: The Oriental Institute of the University of Chicago & The American Schools of Oriental Research, 2001, p. 215-236.
- Harrower 2008 : HARROWER (M. J.), Hydrology, Ideology and the Origins of Irrigation in Ancient Southwest Arabia, *Current Anthropology*, 49, 2008, p. 497-510.
- Hashim 1996 : HASHIM (S. A.), Typology, Evolutions and Developments of Funerary Structures in Saudi Arabian Antiquities, *Atlat*, 14, 1996, p. 102-128.
- Häusler 1994 : HÄUSLER (A.), Die Majkop-Kultur und Mitteleuropa, *Zeitschrift für Archäologie*, 28, 1994, p. 191-246.
- Hayden 2014 : HAYDEN (B.), *The Power of Feasts: From Prehistory to the Present*. Cambridge: Cambridge University Press, 2014.
- Hayden 2018 : HAYDEN (B.), *The Power of Ritual in Prehistory: Secret Societies and Origins of Social Complexity*. Cambridge: Cambridge University Press, 2018.
- Heaton *et al.* 2020 : HEATON (T. J.), KÖHLER (P.), BUTZIN (M.), BARD (E.), REIMER (R.W.), AUSTIN (W.E.N.), BRONK RAMSEY (C.), GROOTES (P. M.), HUGHEN (K. A.), KROMER (B.), REIMER (P. A.), ADKINS (J.), BURKE (A.), COOK (M.S.), OLSEN (J.), SKINNER (L.C.), Marine20 - The Marine Radiocarbon Age Calibration Curve (0-55,000 cal BP), *Radiocarbon*, 62 (4), 2020, p. 779-820.
- Hejebri Nobari *et al.* 2018 : HEJEBRI NOBARI (A.), KHANALI (H.), YILMAZ (A.), MOUSAVI KOUHPAR (S.), HAJIZADE BASTANI (S.), Analysis and Investigation of Effective Geographical and Socio-Cultural Variables on Formation and Development of Shahryeri, *Mdrsjrns*, 22 (1), 2018, p. 1-21.
- Helms 1981 : HELMS (S. W.), *Jawa Lost City of the Black Desert, Ithaca*. New-York: Cornell University, 1981.
- Helms 1987 : HELMS (S. W.), Jawa, Tell Um Hammad and the EB I/Late Chalcolithic landscape, *Levant*, 19, 1987, p. 49-81.
- Herr 2002 : HERR (L. G.), 5,000-year-old burials discovered in Jordan, *Near Eastern Archaeology*, 65 (4), 2002, p. 282-283.
- Hodder & Meskell 2011 : HODDER (I.), MESKELL (L.), A "Curious and Sometimes a Trifle Macabre Artistry": Some Aspects of Symbolism in Neolithic Turkey, *Current Anthropology*, 52 (2), 2011, p. 235-263.
- I**Iáñez 2008 : IBÁÑEZ (J. J.) (dir.), *Le site néolithique de Tell Mureybet (Syrie du Nord), en hommage à Jacques Cauvin*. Oxford : Archaeopress, 2008.
- Iliev 2007 : ILIEV (S.), Rescue archaeological excavations of two dolmens without tumulus in Eshmedzhika locality on the land of the village Oryahovo, Lyubimets municipality. In : *Archaeological discoveries and excavations in 2006*. Sofia, 2007, p. 128-130.

Bibliography

- Iliev 2008 : ILIEV (S.), Observations upon the constructional connections of the dolmens in Bulgaria. In : KOSTOV (R.), GAYDARSKA (B.), GUROVA (M.) (eds), *Geoarchaeology and Archaeominerology*. Sofia, 2008, p. 175-176.
- Iliev 2015 : ILIEV (S.), Rescue archaeological excavation of village from Early Iron Age and structures from Antiquity in Bayamlaka locality, village of Vaskovo, Lyubimets municipality. In : *Archaeological discoveries and excavations in 2014*. Sofia, 2015, p. 158-161.
- Iliev 2017 : ILIEV (S.), Places for the extraction of stone slabs for the dolmens in the area of Sakar Mountain. Preliminary research. In : POPOV (H.), TZVETKOVA (Y.) (eds), *KRATISTOS, Collection in honor of Prof. P. Delev*. Sofia, 2017, p. 269-289.
- Iliev & Tzvetkova 2009 : ILIEV (S.), TZVETKOVA (Y.), Archaeological field surveys on the territory of Lyubimets municipality. In : *Archaeological discoveries and excavations in 2008*. Sofia, 2009, p. 782-785.
- Ingraham & Summers 1979 : INGRAHAM (M.), SUMMERS (G.), Stelae and Settlements in the Meshkin Shahr Plain, North-Eastern Azerbaijan, Iran, *Archäologische Mitteilungen aus Iran*, 12, 1979, p. 67-101.
- Inizan & Rachad 2007 : INIZAN (M.-L.), RACHAD (M.), *Art rupestre et peuplements préhistoriques au Yémen*. Sanaa : CEFAS, 2007.
- Irby & Mangles 1852 : IRBY (C. L.), MANGLES (J.), *Travels in Egypt and Nubia, Syria and the Holy Land*. London: John Murray, 1852 [1844].
- Itahashi *et al.* 2017 : ITAHASHI (Y.), MIYAKE (Y.), MAEDA (O.), KONDO (O.), HONGO (H.), VAN NEER (W.), CHIKARAISHI (Y.), OHKOUCHI (N.), YONEDA (M.), Preference for fish in a Neolithic hunter-gatherer community of the upper Tigris, elucidated by amino acid? 15 N analysis, *Journal of Archaeological Science*, 82, 2017, p. 40-49.
- Jasim 2003 : JASIM (S. A.), Third Millennium Culture in the Emirate of Sharjah. In : POTTS (D. T.), AL NABOODAH (H.), HELLYER (P.) (eds), *Archaeology of the United Arab Emirates*. Proceeding of the First International Conference on the archaeology of the UAE. London: Trident Press, 2003, p. 86-99.
- Jasim 2006 : JASIM (S. A.), The archaeological sites of Jebel Buhais. In : UERPMANN (H.-P.), UERPMANN (M.), JASIM (S. A.) (eds), *The Archaeology of Jebel al-Buhais, Sharjah, United Arab Emirates, vol.: Funeral Monuments and Human Remains from Jebel al-Buhais*. Tübingen (The Archaeology of Jebel al-Buhais, Sharjah, United Arab Emirates), 2006, p. 13-63.
- Jasim 2012 : JASIM (S. A.), *The necropolis of Jebel al-Buhais*. Sharjah: Department of Culture & Information, 2012.
- Ji 1997 : JI (C-H. C.), The Chalcolithic and Early Bronze cemeteries near 'Iraq al-Amir and the preliminary report on salvage excavations, *Annual of the Department of Antiquities of Jordan*, 41, 1997, p. 49-69.
- Jockenhövel 1990 : JOCKENHÖVEL (A.), Fritzlar-Lohne und- Züschen: Megalithgräber und Höhensiedlung der Wartberggruppe. In : HERRMANN (F.R.), JOCKENHÖVEL (A.) (eds), *Die Vorgeschichte Hessens*. Stuttgart: Theiss, p. 373-377.
- Joussaume 1988 : JOUSSAUME (R.), *Dolmens for the Dead: Megalith-Building Throughout the World*. New York: Cornell University Press, 1988.
- Kabukcu *et al.* 2021 : KABUKCU (C.), ASOUTI (E.), PÖLLATH (N.), PETERS (J.), KARUL (N.), Pathways to plant domestication in Southeast Anatolia based on new data from aceramic Neolithic Gusir Höyük, *Scientific Reports*, 11 (1), 2021, p. 21-22.
- Kalantarian 2011 : KALANTARÍAN (I.), The Early Bronze Age complexes of Talin cemetery, *Studii de Preistorie*, 8, 2011, p. 123-138.
- Kansu 1938 : KANSU (Ş. A.), *Prehistorya Araştırmalarında Metodlar*. İstanbul: Kenan Basımevi ve Klişe Fabrikası, 1938.
- Kansu 1963 : KANSU (Ş. A.), Edirne'nin Lalapaşa-Büyünlü Dolmenler hakkında ilk not, *Türk Tarih Kurumu Belleten*, 27 (107), 1963, p. 491-493.
- Kansu 1964 : KANSU (Ş. A.), Doğu Anadolu'da Arpaçay (Çayci Köyü) Dolmenlerinden Galerili Bir Dolmen Hakkında (1 resim, 2 kroki ile birlike), *Türk Tarih Kurumu Belleten*, 28 (110), 1964, p. 327-329.
- Kansu 1969 : KANSU (Ş. A.), Edirne'de Bulunan Dolmenler ve Dikilitaşlar Hakkında Yeni Gözlemler, *Türk Tarih Kurumu Belleten*, 33 (132), 1969, p. 557-581.
- Kansu 1971 : KANSU (Ş. A.), Edirne'nin Lalapaşa Çevresindeki Kalkansöğüt, Vaysal, Karagöl Dolmenler, *Türk Tarih Kurumu Belleten*, 35 (137), 1971, p. 123-126.
- Karul 2020 : KARUL (N.), The beginning of the Neolithic in southeast Anatolia: Upper Tigris Basin, *Documenta Praehistorica*, 47, 2020, p. 76-95.
- Kennedy 2011 : KENNEDY (D.), The "Works of the Old Men" in Arabia: remote sensing in interior Arabia, *Journal of Archaeological Science*, 38 (12), 2011, p. 3185-3203.
- Kennedy 2017 : KENNEDY (D.), 'Gates': a new archaeological site type in Saudi Arabia, *Arabian archaeology and epigraphy*, 28 (2), 2017, p. 153-174.
- Kenyon 1957 : KENYON (K.), *Digging up Jericho*. Londres: Praeger; Ernest Benn, 1957.
- Kenyon 1981 : KENYON (K.), *Excavations at Jericho. Volume Three: The Architecture and Stratigraphy of*

the Tell. Londres: The British School of Archaeology in Jerusalem, 1981.

Kerner et al. 2017 : KERNER (S.), BARNES (R. H.), FLENDER (M.), RUBEN (I.), ANDERSON (A.), Landscape of Murayghat Project: 2014 season, *Annual of the Department of Antiquities of Jordan*, 58, 2017, p. 359-374.

Khalidi 2006 : KHALIDI (L.), *Settlement, Culture-Contact and Interaction along the Red Sea Coastal Plain, Yemen: The Tihamah cultural landscape in the late prehistoric period (3000-900 BC)*. Cambridge: Doctorat, Université de Cambridge, Royaume-Uni, 2006.

Khalidi 2008 : KHALIDI (L.), The late prehistoric standing stones of the Tihâma (Yemen): the domestication of space and the construction of human-landscape identity, *Revue des mondes musulmans et de la Méditerranée*, avril 2008, p. 121-122 (<http://journals.openedition.org/remmm/4723>).

Kinzel & Clare 2020 : KINZEL (M.), CLARE (L.), Monumental - compared to what? A perspective from Göbekli Tepe. In : GEBAUER (A. B.), SØRENSEN (L.), TEATHER (A.) (eds), *Monumentalising Life in the Neolithic: Narratives of Continuity and Change*. Oxford: Oxbow Books, 2020, p. 29-48.

Kirkbride 1969 : KIRKBRIDE (D.), Ancient Arabian ancestor idols. Parts I and II: The discovery of the sanctuary at Rizqeh, *Archaeology*, 22 (2-3), 1969, p. 116-121, 188-195.

Knitter et al. 2019 : KNITTER (D.), BRAUN (R.), CLARE (L.), NYKAMP (M.), SCHÜTT (B.), Göbekli Tepe: A Brief Description of the Environmental Development in the Surroundings of the UNESCO World Heritage Site, *Land*, 8 (4), 2019, p. 72.

Kochavi 1989 : KOCHAVI (M.), The Land of Geshur Project: Regional Archaeology of the Southern Golan (1987-1988 Seasons), *Israel Exploration Journal*, 39 (1-2), 1989, p. 1-17.

Kohl & Trifonov 2014 : KOHL (P.), TRIFONOV (V.), The Prehistory of the Caucasus: Internal developments and external interactions. In : RENFREW (C.), BAHN (P.) (eds), *The Cambridge World Prehistory*. Cambridge: Cambridge University Press, III (7), 2014, p. 1 571-1 595.

Kökten 1944 : KÖKTEN (İ. K.), Orta, doğu ve kuzey Anadolu'da yapılan tarih öncesi araştırmaları, *Belleten*, 8 (32), 1944, p. 659-680.

Kökten 1945 : KÖKTEN (İ. K.), Kuzey-Doğu Anadolu Prehistoryasında Bayburt Çevresinin Yeri, *Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Dergisi*, 3 (5), 1945, p. 465-505.

Kökten 1947 : KÖKTEN (İ. K.), 1945 yılında Türk Tarih Kurumu adına yapılan tarih öncesi araştırmaları, *Belleten*, 11 (43), 1947, p. 451-462.

Kökten 1951 : KÖKTEN (İ. K.), Kuzeybatı Anadolu'nun tarihöncesi hakkında yeni gözlemler, *Ankara Üniversitesi Dil ve Tarih-Coğrafya Fakültesi Dergisi*, 9 (3), 1951, p. 201-214.

Kökten 1960 : KÖKTEN (İ. K.), Anadolu Maraş vilayetinde tarihten dip tarihe gidiş, *Türk Arkeoloji Dergisi*, 10 (1), 1960, p. 42-51.

Kökten 1967 : KÖKTEN (İ. K.), *Karain Klavuzu*. Ankara: Milli Eğitim Bakanlığı Eski Eserler ve Müzeler Genel Müdürlüğü Yayınları, 1967.

Kolev et al. 2008 : KOLEV (D.), TSONEV (L.), GONZÁLES GARCÍA (A.), KOLEVA (V.), The orientation of dolmens in Bulgaria. In : KOSTOV (R.), GAYDARSKA (B.), GUROVA (M.) (eds), *Geoarchaeology and Archaeominerology*. Sofia, 2008, p. 169-174.

Köroğlu 2000 : KÖROĞLU (K.), Çıldır kurganları, The kurgans of Çıldır, *Arkeoloji ve Sanat*, 96, 2000, p. 2-11.

Kostov 2008 : KOSTOV (R.), Geological and mineralogical background of the megalithic and rock-cut sites in Bulgaria and some other European counties. In : KOSTOV (R.), GAYDARSKA (B.), GUROVA (M.) (eds), *Geoarchaeology and Archaeominerology*. Sofia, 2008, p. 163-168.

Kuijt 2015 : KUIJT (I.), The Neolithic refrigerator on a Friday night: How many people are coming to dinner and just what should I do with the slimy veggies in the back of the fridge?, *Environmental Archaeology*, 20 (4), 2015, p. 321-336.

Kuijt & Finlayson 2009 : KUIJT (I.), FINLAYSON (B.), Evidence for food storage and predomestication granaries 11,000 years ago in the Jordan Valley, *PNAS*, 106 (27), p. 10 966-10 970.

Kulikova & Trifonov 2001 : KULIKOVA (O.), TRIFONOV (V.), *How to protect dolmens - Cultural heritage of the ancient people in Western Caucasus. Dolmens, witness of ancient civilizations*. Krasnodar, 2001, p. 92-103.

Kulov 1993 : KULOV (G.), Dolmen necropolis near the village of Chernichevo, Krumovgrad region, *Bulletin des musées de la Bulgarie du Sud*, 18, 1993, p. 47-62.

Kurapköt 2012 : KURAPKAT (D.), A Roof under One's Feet: Early Neolithic Roof Constructions at Göbekli Tepe, Southeastern Turkey. In : CARVAIS (R.), GUILLERME (A.), NÈGRE (V.), SAKAROVITCH (J.) (eds), *Nuts & Bolts of Construction History. Culture, Technology and Society*. Paris : Picard, 2012, Vol. 3, p. 157-165.

Kyzlasov 1986 : KYZLASOV (L.R.), *Drevnejšaja Hakasija. Monografija*. M.: Izdatel'stvo Moskovskogo universiteta, 1986.

Labrusse 2019 : LABRUSSE (R.), *Préhistoire. L'envers du temps*. Paris : Hazan (Coll. Beaux-Arts), 2019.

Lang et al. 2013 : LANG (C.), PETERS (J.), PÖLLATH (N.), SCHMIDT (K.), GRUPE (G.), Gazelle behaviour and

Bibliography

- human presence at early Neolithic Göbekli Tepe, south-east Anatolia, *World Archaeology*, 45 (3), 2013, p. 410-429.
- Laporte 2010 : LAPORTE (L.), Restauration, reconstruction, appropriation : évolution des architectures mégalithiques dans l'Ouest de la France, entre passé et présent, *Munibe*, 32, 2010, p. 120-150.
- Laporte *et al.* 2011 : LAPORTE (L.), JALLOT (L.), SOHN (M.), Mégalithismes en France. Nouveaux acquis et nouvelles perspectives de recherche, *Gallia Préhistoire*, 53, 2011, p. 289-334.
- Lavrov 1960 : LAVROV (I.), The dolmens in the north-west Caucasus. Works of the Abkhazian Institute of Language, Literature and History, 31, 1960, p. 101-178.
- Le Brun 1986 : LE BRUN (A.), *Les châteaux de la subversion*. Paris : Gallimard, 1986.
- Letchenko 1931 : LETCHENKO (A. F.), Materiali do ornamentiki dol'meniv na pivnichno-zakhidnemu Kavkazi, *Antropologija*, IV, 1931.
- Lisitsian 1935 : LISITSIAN (D. S.), Khosun-Dash: a megalithic site at Sisian (Zangezur). In : *Papers in Honour of Acad. NY Marr*. Moscow - Leningrad: Academy of Sciences of USSR Press, 1935, p. 709-721.
- Luynes 1874 : LUYNES (H. T. P. de), *Voyage d'exploration à la Mer Morte, à Pétra et sur la rive gauche du Jourdain*. Paris : Arthus Bertrand, 1874.
- Lyonnet 2000 : LYONNET (B.), La Mésopotamie et le Caucase du Nord au IV^e et au début du III^e millénaire av. n. è. : leurs rapports et les problèmes chronologiques de la culture de Majkop. État de la question et nouvelles propositions. In : MARRO (C.), HAUPTMANN (H.) (dir.), *Chronologies des pays du Caucase et de L'Euphrate aux IV^e-III^e millénaires*. Istanbul : Institut Français d'Études Anatoliennes d'Istanbul ; Paris : De Boccard, 2000, p. 299-320.
- McCorriston 2011 : McCORRISTON (J.), Anthropomorphic stelae from ḥaḍramawt, Yemen. In : STEIMER-HERBET (T.) (dir.), *Pierres levées, stèles anthropomorphes et dolmens. Aspects cultuels des 4^e et 3^e millénaires av. J.-C. en Arabie et au Levant*. Actes du colloque international à l'Université de Amman (juin 2007). Co-édition MOM ; Oxford: Archaeopress (BAR International Series, 2317), 2011, p. 159-168.
- McCorriston *et al.* 2011 : McCORRISTON (J.), STEIMER-HERBET (T.), HARROWER (M.), WILLIAMS (K.), SALIÈGE (J.-E.), BIN 'AQIL (A.), Gazetteer of small-scale monuments in prehistoric Hadramawt, Yemen: a radiocarbon chronology from the RASA-AHSD Project research 1996-2008, *Arabian archaeology and epigraphy*, 22, 2011, p. 1-22.
- McCorriston *et al.* 2012 : McCORRISTON (J.), HARROWER (M.), MARTIN (L.), OCHES (E. A.), Cattle Cults of the Arabian Neolithic and Early Territorial Societies, *American Anthropologist*, 114 (1), 2012, p. 45-63.
- McCorriston *et al.* 2014 : McCORRISTON (J.), HARROWER (M.), STEIMER-HERBET (T.), WILLIAMS (K. W.), MATTHIEW (S.), AL-HADHARI (M.), AL-KATHIRI (M.), SALIÈGE (J.-F.), EVERHEART (J.), Monuments and Landscape of Mobile Pastoralists in Dhofar: the Arabian Human Social Dynamics (AHSD) Project, *Journal of Oman Studies*, 12, 2014, p. 117-143.
- Madsen 2018 : MADSEN (B.), *The Early Bronze Age Tombs of Jebel Hafit: Danish Archaeological Investigations in Abu Dhabi 1961-1971*. Abu Dhabi: Abu Dhabi Tourism & Culture Authority, UAE, 2018.
- Magee 2014 : MAGEE (P.), *The archaeology of prehistoric Arabia: adaptation and social formation from the Neolithic to the Iron age*. Cambridge: Cambridge University Press, 2014.
- Marigny 1821 : MARIGNY (T. de), *Voyage en Circassie fait en 1818*. Bruxelles, 1821.
- Markovin 1978 : MARKOVIN (V. I.), *Dol'meny Zapadnogo Kavkaza*. Moskva, 1978.
- Markovin 1994 : MARKOVIN (N.), The dolmens in the north-west Caucasus. In : KUSHNAREVA (K.), MARKOVIN (V.) (eds), *Archaeology. The Bronze age in Caucasus and Middle Asia*. Moscow, 1994, p. 226-253.
- Marr & Smirnov 1931 : MARR (N.), SMIRNOV (Y.), *Les Vishaps*. Leningrad, 1931.
- Méry 2000 : MÉRY (S.), *Les céramiques d'Oman et l'Asie moyenne. Une archéologie des échanges à l'âge du Bronze*. Paris : CNRS (Monographie du CRA, 23), 2000.
- Méry & Charpentier 2009 : MÉRY (S.), CHARPENTIER (V.), Rites funéraires du Néolithique et de l'âge du Bronze ancien en Arabie orientale. In : GUILAIN (J.) (dir.), *Sépultures et sociétés. Du Néolithique à l'Histoire*. Paris : Errance (Coll. des Hespérides), 2009, p. 11-40.
- Méry & Schneider 1996 : MÉRY (S.), SCHNEIDER (G.), Mesopotamian Pottery Wares in Arabia from the 5th to the 2nd millennium BC: A contribution of archaeometry to the economic history, *Proceedings of the Seminar for Arabian Studies*, 26, 1996, p. 79-96.
- Méry *et al.* 2017 : MÉRY (S.), DEGLI ESPOSTI (M.), FRENEZ (D.), KENOYER (J. M.), Indus potters in central Oman in the second half of the third millennium BC. First results of a technological and archaeometric study, *Proceedings of the Seminar for Arabian Studies*, 47, 2017, p. 163-183.
- Mikov 1933 : MIKOV (V.), *Predistoricheski selishta i nahodki v Bulgariya*. Sofia, 1933.
- Mikov 1936 : MIKOV (V.), Excavations in Sakar Mountain, *Annuaire du musée national de Sofia*, 6, 1936, p. 99-121.

Mikov 1955 : MIKOV (V.), The origin of the domed tombs in Thrace, *Bulletin de l'Institut archéologique bulgare*, 19, 1955, p. 15-48.

Minns 1913 : MINNS (E.), *Scythians and Greeks. A Survey of Ancient History and Archaeology on the North Coast of the Euxine from the Danube to the Caucasus*. Cambridge: University Press, 1913.

Mizrachi 1992 : MIZRACHI (Y.), *Rujm el-Hiri, Toward an understanding of a Bronze age megalithic monument in the Levant*. Cambridge: Harvard University Cambridge, Massachusetts, june 1992, Thèse non publiée.

Moetz & Çelik 2012 : MOETZ (F. K.), ÇELIK (B.), T-shaped pillars sites in the landscape around Urfa. In : MATTHEWS (R.), CURTIS (J.) (eds), *Proceedings of the 7th International Congress on the Archaeology of the Ancient Near East. Volume 1: Mega-cities & mega-Sites*. London (april 2010). Wiesbaden: Harrassowitz, 2012, p. 695-709.

Mohen 1990 : MOHEN (J.-P.), *The World of Megaliths*. New York, Oxford, Sydney: Facts on File, 1990.

Molist 2013 : MOLIST (M.) (dir.), *Tell Halula: un poblado de los primeros agricultores en el valle del Éufrates, Siria*. Barcelona: Ministerio de Educación, Cultura y Deporte, 2013.

Montpereux 1843 : MONTPEREUX (D. de), *Voyage autour du Caucase, chez les Tcherkesses et les Abkases, en Colchide, en Géorgie, en Arménie et en Crimée*. T. 5. Paris : Gide, 1843.

Moore *et al.* 2000 : MOORE (A. M. T.), HILLMAN (G.), LEGGE (A. J.) (eds), *Village on the Euphrates: From Foraging to Farming at Abu Hureyra*. Oxford: Oxford University Press, 2000.

Morgan 1889 : MORGAN (J. de), *Mission Scientifique au Caucase. Les Premiers Âges des Métaux*. Tome I. Paris : Ernest Leroux, 1889.

Morgan 1890 : MORGAN (J. de), Les nécropoles préhistoriques du nord de la Perse, *Revue Archéologique*, 3^e série, 16, 1890, p. 1-15.

Morrison *et al.* 2016 : MORRISON (K. D.), LYCETT (M. T.), TRIVEDI (M.), Megaliths and memory: excavations at Kadebakele and the megaliths of northern Karnataka. In : KLIMBURG-SALTER (D.) (ed.), *South Asian Archaeology 2010*. Vienna: University of Vienna, 2016.

Mortensen & Thuesen 1998 : MORTENSEN (P.), THUESEN (I.), The Prehistoric Periods. In : PICCIRILLO (M.), ALLIATA (E.) (eds), *Mount Nebo: New Archaeological Excavations 1967-1997*. Jerusalem: Studium Biblicum Franciscanum, 1998, p. 85-99.

Mortensen & Thuesen 2004 : MORTENSEN (P.), THUESEN (I.), Investigating “Conder’s Circle” at ‘Ayn Jadida near Mount Nebo’, *Studies in the History and Archaeology of Jordan*, 9, 2004, p. 451-457.

Moutsopoulos 1989 : MOUTSOPoulos (N.), Tournée au Rhodope du Sud et à Samothrace. In : BEST (J.), de VRIES (N.) (eds), *Thracians and Mycenaens*. Leiden-Sofia, 1989, p. 246-279.

Munoz 2011 : MUÑOZ (O.), Étude anthropologique des restes humains des cairns C2 et C3 du Jebel Hafit (1977). In : CLEUZIOU (S.), MÉRY (S.), VOGT (B.) (dir.), *Protohistoire de l'oasis d'al-Aïn. Travaux de la Mission archéologique française à Abou Dhabi (Émirats Arabes Unis)*, Vol. 1 : *Les sépultures de l'âge du Bronze*. Oxford : Archaeopress (BAR International Series, 2227), 2011, p. 218-224.

Munoz 2014 : MUÑOZ (O.), *Pratiques funéraires et paramètres biologiques dans la péninsule d’Oman du Néolithique à la fin de l’âge du Bronze ancien (V^e-III^e millénaires av. N.E.)*. Paris : Thèse de doctorat en Archéologie, Ethnologie, Préhistoire à Paris 1, Panthéon-La Sorbonne, 2014.

Munoz 2015 : MUÑOZ (O.), La “fabrique des ancêtres” : complexification sociale et gestion des sépultures collectives dans la péninsule d’Oman à la période Umm an-Nar. In : DELAPLACE (G.), VALENTIN (F.) (dir.), Mémoire, protocoles, monuments. Actes du 11^e colloque de la MAE (18-20 juin 2014). Paris : De Boccard (Coll. de la Maison de l’Archéologie et de l’Ethnologie René-Ginouvès), 2015, p. 255-265.

Munoz 2017 : MUÑOZ (O.), Transition to agriculture in South-Eastern Arabia: Insights from oral conditions, *American Journal of Physical Anthropology*, 164 (33), 2017, p. 702-719.

Munoz 2019 : MUÑOZ (O.), Promoting Group Identity and Equality by Merging the Dead: Increasing Complexity in Mortuary Practices from Late Neolithic to Early Bronze Age in the Oman Peninsula and its Social Implications. In : WILLIAMS (K. D.), GREGORIČKA (L. A.) (eds), *Life and Death in Ancient Arabia: Mortuary and Bioarchaeological Perspectives*. Gainesville: University of Florida Press, 2019, p. 21-40.

Munoz *et al.* 2017 : MUÑOZ (O.), AZZARÀ (V. M.), GISCARD (P.-H.), HAUTEFORT (R.), SAN BASILIO (F.), SAINT JALM (L.), First campaign of survey and excavations at Shiyā (Sūr, Sultanate of Oman), *Proceedings of the Seminar for Arabian Studies*, 47, 2017, p. 185-192.

Munoz *et al.* 2020 : MUÑOZ (O.), COTTY (M.), CHARLOUX (G.), BOUCHAUD (C.), MONCHOT (H.), MARQUAIRE (C.), ZAZZO (A.), CRASSARD (R.), BRUNET (O.), BOSCHLOOS (V.), AL MALKI (T.), Marking the sacral landscape of a north Arabian oasis: A sixth-millennium BC monumental stone platform and surrounding burials, *Antiquity*, 94 (375), 2020, p. 601-621.

Nayeem 2000 : NAYEEM (M. A.), *The rock art of Arabia*. Hyderabad Publishers, 2000.

Bibliography

Neef 2003 : NEEF (R.), Overlooking the Steppe-Forest: A Preliminary Report on the Botanical Remains from Early Neolithic Göbekli Tepe (Southeastern Turkey), *Neo-Lithics*, 3 (2), 2003, p. 13-16.

Nekhrizov 2000 : NEKHRIZOV (G.), A cromlech near Dolni Glavanak in the Eastern Rhodopes (preliminary communication). In : NIKOLOVA (L.) (ed.), *Technology, Style and Society. Contributions to the Innovations between the Alps and the Black Sea in Prehistory*. Oxford: Archaeopress (BAR International Series, 854), 2000, p. 319-324.

Nekhrizov 2005 : NEKHRIZOV (G.), Rescue excavations of dolmens near the village of Oryahovo, Lyubimets municipality. In : XXIV meetings of the museums of Southeastern Bulgaria, 1, 2005, p. 80-81.

Nekhrizov 2010 : NEKHRIZOV (G.), The Eastern Rhodope dolmens. Megalithic tombs in the catchment area of Byala River. In : GEORGIEVA (R.) (ed.), *Southeastern Bulgaria 2nd - 1st millennium BC*. Veliko Tarnovo, 2010, p. 85-95.

Nekhrizov 2015 : NEKHRIZOV (G.), Dolmens and Rock-cut monuments. In : VALEVA (J.), NANKOV (E.), GRANINGER (D.) (eds), *A Companion to Ancient Thrace*. Oxford: John Wiley & Sons Inc., 2015.

Nekhrizov & Agre 2015 : NEKHRIZOV (G.), AGRE (D.), Les premiers tombeaux de Thrace, *Dossiers d'Archéologie*, 368, 2015, p. 34-37.

Nekhrizov & Iliev 2006 : NEKHRIZOV (G.), ILIEV (S.), Rescue excavations of a tumulus with dolmens near the village of Vaskovo, Lyubimets municipality. In : *Archaeological discoveries and excavations in 2005*. Sofia, 2006, p. 142-143.

Nekhrizov & Iliev 2007 : NEKHRIZOV (G.), ILIEV (S.), Excavations of a dolmen necropolis in Bayamlaka locality near the village of Vaskovo, Lyubimets municipality. In : *Archaeological discoveries and excavations in 2006*. Sofia, 2007, p. 180-183.

Nekhrizov & Iliev 2008 : NEKHRIZOV (G.), ILIEV (S.), Exploration of a dolmen necropolis on the land of the village of Vaskovo, Lyubimets municipality. In : *Archaeological discoveries and excavations in 2007*. Sofia, 2008, p. 130-134.

Newton & Zarins 2000 : NEWTON (L. S.), ZARINS (J.), Aspects of Bronze Age art of southern Arabia: the pictorial landscape and its relation to economic and socio-political status, *Arabian Archaeology and Epigraphy*, 11, 2000, p. 154-179.

Nicolle & Braemer 2012 : NICOLLE (C.), BRAEMER (F.), Settlement networks in the southern Levant in the mid 4th millennium BC: sites with double-apsed houses in the Leja area of southern Syria during the EBA IA, *Levant*, 44 (1), 2012, p. 1-16.

Nicolle et al. 1999 : NICOLLE (C.), STEIMER (T.), HUMBERT (J.-B.), Al-Marajim, implantation rurale du III^e millénaire en Jordanie du Nord, *Annual of the Department of Antiquities of Jordan (ADAJ)*, XLIII, 1999, p. 91-98.

Nicolle et al. 2001 : NICOLLE (C.), STEIMER (T.), HUMBERT (J.-B.), Al-Marajim, implantation rurale du III^e millénaire en Jordanie du Nord, *Akkadica*, 121, 2001, p. 77-86.

Nikolaeva 1981 : NIKOLAEVA (N. A.), Vydenie kubanterskoj kul'tury ranne-i srednebronzovogo veka na Severnom Kavkaze. In : *Problemy archeologii Severnoj Osetii*. Ordionikidze, 1981, p. 98-109.

Nikolaeva & Safronov 1974 : NIKOLAEVA (N. A.), SAFRONOV (V. A.), Proiskhozhdenie dol'menov Severo-Zapadnogo Kavkaza. In : *Soobdcenija Nauc'no-metodi Eeskogo soveta po ochrane pamjatnikov kul'tury*. Moskva, 1974, 7, p. 175-194.

Nishiaki et al. 2013 : NISHIAKI (Y.), KASHIMA (K.), VERHOEVEN (M.) (eds), *Neolithic Archaeology in the Khabur Valley, Upper Mesopotamia and Beyond*. Berlin: ex oriente, 2013.

Notroff et al. 2014 : NOTROFF (J.), DIETRICH (O.), SCHMIDT (K.), Building Monuments, Creating Communities: Early Monumental Architecture at Pre-Pottery Neolithic Göbekli Tepe. In : OSBORNE (J. F.) (ed.), *Approaching Monumentality in Archaeology*. Buffalo (NY): State University of New York Press, 2014, p. 83-105.

Orchard 2008 : ORCHARD (J.), Early Religion in Ancient Arabia. In : OLIJDAM (E.), SPOOR (R. H.) (eds), *Intercultural relations between South and Southwest Asia. Studies in commemoration of E. C. L. DURING CASPERS (1934-1996)*. Oxford: Archaeopress (BAR International Series, 1826), 2008, p. 103-117.

Orchard & Orchard 2007 : ORCHARD (J. C.), ORCHARD (J. J.), The third millennium BC oasis settlements of Oman and the first evidence of their irrigation by aflaj from Bahla. In : *Proceedings of the International Symposium: Archaeology of the Arabian Peninsula through the ages (7th-9th May 2006)*. Muscat: Ministry of Heritage and Culture, 2007, p. 143-173.

Orthmann 1967 : ORTHMANN (W.), *Das Graberfeld bei Ilia*. Wiesbaden: Franz Steiner Verlag, 1967.

Ortner & Frohlich 2008 : ORTNER (D. J.), FROHLICH (B.), *The Early Bronze Age I Tombs and Burials of Bâb edh-Dhrâ, Jordan*. Lanham, MD: AltaMira Press, 2008.

Osten 1930 : OSTEN (H. van der), *Explorations in Hittite Asia Minor, 1929*. Chicago: University of Chicago Press (Oriental Institute Communications, 8), 1930.

Overlaet 2005 : OVERLAET (B.), The Chronology of the Iron Age in the Pusht-I-Kuh, Luristan, *Iranica Antiqua*, XL, 2005.

Özbaşaran et al. 2018 : ÖZBAŞARAN (M.), DURU (G.), STINER (M. C.) (eds), *The Early Settlement at Aşıklı Höyük. Essays in Honor of Ufuk Esin*. İstanbul: Ege Yayınları, 2018.

Özbek 2008 : ÖZBEK (O.), Menhirs in the graveyards: fact or fiction? A reconsideration of erected stone monuments of Gallipoli peninsula. In : ÖZBEK (O.) (ed.), *Funeral Rites, Rituals and Ceremonies from Prehistory to Antiquity*. Proceedings of the International Workshop "Troas and its Neighbours". İstanbul: Ege Yayınları, 2008, p. 83-96.

Özdoğan 1982 : ÖZDOĞAN (M.), Doğu Marmara ve Trakya araştırmaları, *Türk Arkeoloji Dergisi*, 26 (1), 1982, p. 37-62.

Özdoğan 1983 : ÖZDOĞAN (M.), Trakya'da tarihöncesi araştırmalarının bugünkü durumu ve bazı sorunlar, *Güney-Doğu Avrupa Araştırmaları Dergisi*, 10-11, 1983, p. 21-58.

Özdoğan 1998 : ÖZDOĞAN (M.), Early Iron Age in eastern Thrace and the megalithic monuments. In : TUNA (N.), AKTÜRE (Z.), LYNCH (M.) (eds), *Thracians and Phrygians: Problems of Parallelism*. Ankara: Middle East Technical University, 1998, p. 29-40.

Özdoğan 1999 : ÖZDOĞAN (M.), Anadolu'dan Avrupa'ya açılan kapı: Trakya, gerçekleşen çalışmalar ve bekleneler, *Arkeoloji ve Sanat*, 90, 1999, p. 2-28.

Özdoğan & Akman 1992 : ÖZDOĞAN (M.), AKMAN (M.), *1990 yılı Trakya ve Marmara bölgesi araştırmaları*. Araştırma Sonuçları Toplantısı, 9, Ankara: Ankara Üniversitesi Basimevi, 1992, p. 405-423.

Özfirat 2009 : ÖZFIRAT (A.), Excavation of the Bozkurt kurgan cemetery, 2007: first preliminary report, *Archäologische Mitteilungen aus Iran und Turan*, 41, 2009, p. 233-247.

Parr 1956 : PARR (P. J.), A cave at Arqub edh-Dhar, *Annual of the Department of Antiquities of Jordan*, 3, 1956, p. 16-73.

Paz 2003 : PAZ (Y.), *The Golan 'Enclosures' and the urbanization process in the Central and Southern Golan during the Early Bronze Age*. Tel Aviv: Unpublished PhD thesis, University of Tel Aviv (Hebrew with English abstract), 2003.

Paz 2005 : PAZ (Y.), The megalithic manifestation of the urban process at the Golan during the Early Bronze Age, *Mediterranean Archaeology and Archaeometry*, 5 (1), 2005, p. 4-14.

Peet 1912 : PEET (E.), *Rough Stone Monuments and Their Builders*. London, 1912.

Perlès 2011 : PERLÈS (C.), À l'aube du Néolithique : évolution ou révolution des symboles ?, *Paléorient*, 37 (1), 2011, p. 165-176.

Peters & Schmidt 2004 : PETERS (J.), SCHMIDT (K.), Animals in the symbolic world of Pre-Pottery Neolithic Göbekli Tepe, south-eastern Turkey: a preliminary assessment, *Anthropozoologica*, 39 (1), 2004, p. 179-218.

Peters et al. 2013 : PETERS (J.), BUITENHUIS (H.), GRUPE (G.), SCHMIDT (K.), PÖLLATH (N.), The Long and Winding Road: Ungulate Exploitation and Domestication in Early Neolithic Anatolia. In : COLLEDGE (S.), CONOLLY (J.), DOBNEY (K.), MANNING (K.), SHENNAN (S.) (eds), *The Origins and Spread of Domestic Animals in Southwest Asia and Europe*. Walnut Creek (CA): Left Coast Press, 2013, p. 83-114.

Philip 2008 : PHILIP (G.), The Early Bronze Age I-III. In : ADAMS (R. B.) (ed.), *Jordan: An Archaeological Reader*. London & Oakville: Equinox, 2008, p. 161-226.

Philip 2011 : PHILIP (G.), The later prehistory of the southern Levant: issues of practice and context. In : LOVELL (J.), ROWAN (Y. M.) (eds), *Culture, chronology and the chalcolithic: theory and transition*. Oxford: Council for British Research in the Levant, Oxbow Books (Levant Suppl., 9), 2011, p. 192-209.

Philip & Bradbury 2010 : PHILIP (G.), BRADBURY (J. N.), Pre-Classical activity in the basalt landscape of the Homs region, Syria: the development of "sub-optimal" zones in the Levant during the Chalcolithic and Early Bronze Age, *Levant*, 42 (2), 2010, p. 127-170.

Piesker 2014 : PIESKER (K.), Göbekli Tepe - Bauforschung in den Anlagen C und E in den Jahren 2010-2012, *Zeitschrift für Orient-Archäologie*, 7, 2014, p. 14-54.

Piller 2010 : PILLER (C.), Northern Iran in the Iron Age II and III: A Neighbour of Urartu? *Aramazd, Armenian Journal of Near Eastern Studies (AJNES)*, V (2), 2010, p. 53-75.

Pirenne 1990 : PIRENNE (J.), *Les témoins écrits de la région de Shabwa et l'histoire*. Paris : Institut Français du Proche-Orient (Bibliothèque archéologique et historique, 134), Librairie orientaliste Paul Geuthner, 1990.

Polcaro 2010 : POLCARO (A.), Jebel Mutawwaq dolmens: cult of ancestors in EB I Wadi az-Zarqa valley. In : MATTHIAE (P.), PINNOCK (E.), NIGRO (L.), MARCHETTI (N.) (eds), *Proceedings of the 6th International Congress on the Archaeology of the Ancient Near East. Vol. 2: Excavations, Surveys and Restorations*. Wiesbaden: Harrassowitz Verlag, 2010, p. 554-561.

Polcaro 2013 : POLCARO (A.), The stone and the landscape: the phenomenon of megalithic constructions in Jordan in the main historical context of the southern Levant at the beginning of the 3rd millennium BC. In : BOMBARDIERI (L.), D'AGOSTINO (A.), GUARDUCCI (G.), ORSI (V.), VALENTINI (S.) (eds), *SOMA 2012, Identity and Connectivity*. Proceedings of the 16th Symposium on Mediterranean Archaeology, Florence (1-3 March

Bibliography

- 2012). Oxford: Archaeopress (BAR International Series, 2581), 2013, p. 127-132.
- Polcaro 2019 : POLCARO (A.), The Jordan Valley and its eastern tributaries at the beginning of the Bronze Age: dolmen fields and settlements in the 4th millennium BC. In : GALLO (E.) (ed.), *Conceptualizing Urban Experiences: Tell es-Sultan and Tall al-Hammam. Early Bronze cities across the Jordan*. Rome: La Sapienza, Expedition to Palestine & Transjordan (ROSAPAT, 13), 2019, p. 47-60.
- Polcaro & Muniz 2018 : POLCARO (A.), MUNIZ (J. R.), Dolmen 534: a megalithic tomb of the Early Bronze Age II in Jebel al-Mutawwaq, Jordan. Preliminary results of the 2014 Spanish-Italian expedition in Area C South. In : SALISBURY (R. B.), HOFLMAYER (F.), BURGE (T.) (eds), *Proceedings of the 10th International Congress on the Archaeology of the Ancient Near East*. Wiesbaden: Harrassowitz Verlag, 2018, Vol. 2, p. 589-600.
- Polcaro et al. 2014 : POLCARO (A.), MUNIZ (J.), ALVAREZ (V.), MOGLIAZZA (S.), Dolmen 317 and its hidden burial: an Early Bronze Age I megalithic tomb from Jebel al-Mutawwaq (Jordan), *Bulletin of the American Schools for Oriental Research*, 372, 2014, p. 1-17.
- Pöllath et al. 2018 : PÖLLATH (N.), DIETRICH (O.), NOTROFF (J.), CLARE (L.), DIETRICH (L.), KÖKSALSCHMIDT (C.), SCHMIDT (K.), PETERS (J.), Almost a chest hit: An aurochs humerus with hunting lesion from Göbekli Tepe, south-eastern Turkey, and its implications, *Quaternary International*, 495, 2018, p. 30-48.
- Popov & Iliev 2005 : POPOV (H.), ILIEV (S.), Archaeological field surveys on the territory of Lyubimets municipality in 2004. In : *Archaeological discoveries and excavations in 2004*. Sofia, 2005, p. 72-74.
- Popov & Iliev 2007 : POPOV (H.), ILIEV (S.), Field surveys on the territory of Lyubimets municipality, *Proceedings of the Regional Museum of History*, 3, 2007, p. 46-54.
- Potts 1993 : POTTS (D. T.), Rethinking some Aspects of Trade in the Arabian Gulf, *World Archaeology*, 24 (3), 1993, p. 423-440.
- Potts 2012 : POTTS (D.), The Hafit-Umm an-Nar transition: evidence from Falaj al-Qaba'il and Jabal al-Emalah. In : GIRAUD-GERNEZ (J.), GERNEZ (G.) (dir.), *Aux marges de l'archéologie. Hommage à Serge Cleuziou*. Paris : De Boccard (Travaux de la maison René-Ginouvès), 2012, p. 371-377.
- Prag 1995 : PRAG (K.), The Dead Sea dolmens: death and the landscape. In : CAMPBELL (S.), GREEN (A.) (eds), *Archaeology of Death in the Ancient Near East*. Oxford: Oxbow Books, 1995, p. 75-84.
- Price & Brown 1985 : PRICE (T. D.), BROWN (J. A.) (eds), *Prehistoric Hunter-gatherers: The Emergence of Cultural Complexity*. Orlando: Academic Press, 1985.
- Przyluski 1937 : PRZYLUSKI (J.), Les monuments mégalithiques de Malatya, *Revue Archéologique*, 6 (6), 1937, p. 3-7.
- Reimer et al. 2020 : REIMER (P. J.), AUSTIN (W.E.N.), BARD (E.), BAYLISS (A.), BLACKWELL (P. G.), BRONK RAMSEY (C.), BUTZIN (M.), CHENG (H.), EDWARDS (R. L.), FRIEDRICH (M.), GROOTES (P. M.), GUILDERSON (T. P.), HAJDAS (I.), HEATON (T. J.), HOGG (A. G.), HUGHEN (K. A.), KROMER (B.), MANNING (S. W.), MUSCHELER (R.), ... TALAMO (S.), The IntCal20 Northern Hemisphere Radiocarbon Age Calibration Curve (0-55 Cal BP), *Radiocarbon*, 62 (4), 2020, p. 725-757.
- Rezepkin 1988 : REZEPKIN (A. D.), *Tipologiya megaliticheskikh grobnits Zapadnogo Kavkaza. Voprosy arkheologii Adigei*. Maikop, 1988, p. 156-163.
- Rezepkin 2000 : REZEPKIN (A. D.), *Das frühbronzezeitliche Gräberfeld von Klady und die Majkop-Kultur in Nordwestkaukasien*. Rahden/Westf.: Verlag Marie Leidorf GmbH, 2000.
- Rezepkin 2012 : REZEPKIN (A. D.), *Novosvobodnenskaya kultura*. Sankt-Peterburg: Nestor-Istoriya, 2012.
- Rollefson 1998 : ROLLEFSON (G. O.), 'Ain Ghazal (Jordan): ritual and ceremony III, *Paléorient*, 24 (1), 1998, p. 43-58.
- Rousseva 2000 : ROUSSEVA (M.), *Thracian Cult Architecture*. Jambol, 2000.
- Rutkowski et al. 2015 : RUTKOWSKI (L.), MAKOWSKI (M.), REICHE (A.), SOTTYSIAK (A.), WYGNANSKA (Z.), *Tumuli graves and other stone structures on the north coast of Kuwait bay (Al-Subiyah 2007-2012)*. Kuwait: Polish Center of Mediterranean Archaeology, University of Warsaw / National Council of Culture, Arts and Letters of the State of Kuwait, 2015.
- Safronov 1989 : SAFRONOV (V. A.), *Indoevropeiskie prarodini*. Gorkii, 1989.
- Saidel 2017 : SAIDEL (B. A.), An alternative date for the Nahal Mitnan Cairn Field in the Western Negev Highlands: Identifying an Early Timnian tumuli tradition in the Southern Levant, *Paléorient*, 43 (1), 2017, p. 125-140.
- Saliège et al. 2005 : SALIÈGE (J.-F.), LÉZINE (A.-M.), CLEUZIOU (S.), Estimation de l'effet réservoir ¹⁴C marin en mer d'Arabie, *Paléorient*, 31 (1), 2005, p. 64-69.
- Salvatori 2001 : SALVATORI (S.), Excavations at the funerary structures HD 10-3.1, 4.1, 4.2 and 2.1 at Ra's al-Hadd (Sultanate of Oman), *Rivista di Archeologia*, XXV, 2001, p. 67-83.
- Santini 1992 : SANTINI (G.), *Analisi dei caratteri dominanti per la definizione dei rituale nelle necropoli preistoriche e protostoriche della Penisola di Oman*:

dottorato di ricerca in archeologia. Napoli: Istituto Universitario Orientale, Universita di Napoli, 1992.

Sapin 1992 : SAPIN (J.), De l'occupation à l'utilisation de l'espace à l'aube de l'Âge du Bronze dans la région de Jérash et sa périphérie orientale, *Studies in the History and Archaeology of Jordan*, IV. Amman: Department of Antiquities of Jordan, 1992, p. 169-174.

Savage & Metzger 2002 : SAVAGE (S. H.), METZGER (M.), The 2001 field season of the Moab Archaeological Resource Survey, *Annual of the Department of Antiquities of Jordan*, 46, 2002, p. 217-236.

Scarre 2011 : SCARRE (C.), Monumentality. In : INSOLL (T.) (ed.), *Oxford Handbook of the Archaeology of Ritual and Religion*. Oxford: Oxford University Press, 2011, p. 9-23.

Scarre 2016 : SCARRE (C.), Accident or design? Chambers, cairns and funerary practices in Neolithic Western Europe. In : LAPORTE (L.), SCARRE (C.) (eds), *The Megalithic Architectures of Europe*. Oxford: Oxbow Books, 2016, p. 69-78.

Schachner 2001 : SCHACHNER (A.), Zur Bildkunst des 2. Jahrtausends v. Chr. zwischen Kaspischem Meer und Van-See am Beispiel einer Stele im Museum von Astara (Azerbaycan), *Archäologische Mitteilungen aus Iran und Turan*, 3, 2001, p. 115-142.

Schath *et al.* 2011 : SCHATH (K.), COLLINS (S.), al-JARRAH (H.), Excavation of an undisturbed demi-dolmen and insights from the al-Hammam megalithic field, 2011 season, *Annual of the Department of Antiquities of Jordan*, 55, 2011, p. 329-348.

Scheltema 2008 : SCHELTEMA (G.), *Megalithic Jordan, An Introduction and Field Guide*. Amman: American Center of Oriental Research (American Center of Oriental Research Occasional Publication, 6), 2008.

Schmidt 2005 : SCHMIDT (K.), "Ritual Centers" and the Neolithisation of Upper Mesopotamia, *Neo-Lithics*, 5 (2), 2005, p. 13-21.

Schmidt 2006 : SCHMIDT (K.), *Sie bauten die ersten Tempel. Das rätselhafte Heiligtum der Steinzeitjäger*. Munich: Deutscher Taschenbuch Verlag, 2006.

Schmidt 2010a : SCHMIDT (K.), Göbekli Tepe - the Stone Age Sanctuaries. New results of ongoing excavations with a special focus on sculptures and high reliefs, *Documenta Praehistorica*, 37, 2010, p. 239-256.

Schmidt 2010b : SCHMIDT (K.), Göbekli Tepe: der Tell als Erinnerungsort. In : HANSEN (S.) (Hrgs.), *Leben auf dem Tell als soziale Praxis*. Bonn: Dr. Rudolf Habelt, 2010, p. 13-24.

Schmidt 2015 : SCHMIDT (K.), *Le premier temple. Göbekli Tepe*. Paris : CNRS éditions, 2015.

Schnapp 2020 : SCHNAPP (A.), *Une histoire universelle des ruines*. Paris : Éd. du Seuil, 2020.

Schreiber & Häser 2004 : SCHREIBER (J.), HÄSER (J.), Archaeological survey at Ṭīwī and its hinterland (Central Oman), *Proceedings of the Seminar for Arabian Studies*, 34, 2004, p. 319-329.

Schumacher 1890 : SCHUMACHER (G.), *Northern 'Ajlun, "Within the Decapolis"*. London: Palestine Exploration Fund, 1890.

Sevin & Özfirat 2001 : SEVIN (V.), ÖZFIRAT (A.), Die Stelen aus Hakkâri: Steppennomaden in Vorderasien, *Istanbuler Mitteilungen*, Tübingen, 51, 2001, p. 11-26.

Shaked 1999 : SHAKED (I.), Qiryat Shemona, Giv'at Shehumi, *Hadashot Arkheologiyot*, 109, 1999, p. 4-5.

Sharon *et al.* 2017 : SHARON (G.), BARASH (A.), EISENBERG-DEGEN (D.), GROSMAN (L.), ORON (M.), BERGER (U.), Monumental megalithic burial and rock art tell a new story about the Levant Intermediate Bronze 'Dark Ages', *PLoS ONE*, 12 (3), 2017, e0172969 (<https://doi.org/10.1371/journal.pone.0172969>).

Sherratt 1980 : SHERRATT (A.), Water, Soil and Seasonality in Early Cereal Cultivation, *World Archaeology*, 11 (3), 1980, p. 313-330.

Sherratt 1994 : SHERRATT (A.), The transformation of early agrarian Europe: the later Neolithic and Copper Ages 4500-2500 BC. In : CUNLIFFE (B.) (ed.), *The Oxford Illustrated Prehistory of Europe*. Oxford: Oxford University Press, 1994, p. 167-201.

Škorpil 1925 : ŠKORPIL (K.), *Megalithic monuments and tumuli, 1 (Antiquities in the Black sea region)*. Sofia, 1925.

Škorpil & Škorpil 1888 : ŠKORPIL (H.), ŠKORPIL (K.), *Monuments in Bulgaria. Thrace*. Sofia, 1888.

Škorpil & Škorpil 1896 : ŠKORPIL (H.), ŠKORPIL (K.), *Primitive people in Bulgaria*. Plovdiv: Hristo G. Danov, 1896.

Société préhistorique française 1929 : Société préhistorique française, *Manuel de recherches préhistoriques*. Paris : Alfred Costes (2nd edition), 1929.

Solovyov 1960 : SOLOVYOV (L. N.), Burials in the dolmen culture of Abkhazia and the adjacent part of the Adler region, *Works of the Abkhazian Institute of Language, Literature and History*, 31, 1960, p. 69-100.

Spitsyn 1903 : SPITSYN (A. A.), *Medny vek v Verkhinem Povolzh'e. Zapiski otdeleniya russkoi I slavyanskoi arkheologii Imperatorskogo Russkogo arkheologicheskogo obschestva*. Sankt-Peterburg, 1903, T.V. #1.

Steadman 1994 : STEADMAN (S.), Prehistoric sites on the Cilician coastal plain: Chalcolithic and Early Bronze Age pottery from the 1991 Bilkent University Survey, *Anatolian Studies*, 44, 1994, p. 85-103.

Bibliography

- Steimer 1998 : STEIMER (T.), *Prospection dans la région de Saada dans le cadre de la mission française Jawf-Hadramawt. République Arabe du Yémen*. Paris : Rapport non publié, 1998.
- Steimer 1999 : STEIMER (T.), Jabal Ruwaik, Megaliths in Yemen, *Proceeding of the Seminar for Arabian Studies*, 29, 1999, p. 179-182.
- Steimer 2001 : STEIMER (T.), Results of the excavation in Jabal Jidran (February 1999), *Proceeding of the Seminar for Arabian Studies*, 31, 2001, p. 221-226.
- Steimer-Herbet 2001 : STEIMER-HERBET (T.), *Les tombes en blocs mégalithiques et en maçonnerie de pierres sèches dans le Levant et la Péninsule arabique aux IV^e et III^e millénaires av. J.-C.* Paris : Thèse de l'Université de Paris I, Panthéon-Sorbonne (non publiée), 2001.
- Steimer-Herbet 2003 : STEIMER-HERBET (T.), *Prospection des tombes tours de la région de Wadis Zannah-Wamm-Dibba à Fujeira, Mission française dans l'Émirat de Fujeira, dirigée par S. Méry (CNRS, Nanterre)*. Rapport non publié, 2003.
- Steimer-Herbet 2004 : STEIMER-HERBET (T.), *Classification des sépultures à superstructure lithique dans le Levant et l'Arabie occidentale (IV^e-III^e millénaires av. J.-C.)*. Oxford : Archaeopress (BAR International Series, 1246), 2004.
- Steimer-Herbet 2005 : STEIMER-HERBET (T.), *Prospection de la région de Irbid en collaboration avec l'université de Irbid*. Rapport non publié, 2005.
- Steimer-Herbet 2006 : STEIMER-HERBET (T.), Chraya : une nécropole de dolmens dans le Léja (Syrie du Sud), *Orient express*, 2006, p. 53-56.
- Steimer-Herbet 2008 : STEIMER-HERBET (T.), A menhir-type statue at Rawk from the 4th millennium B.C. (Wadi 'Idim, Yemen), *ADUMATU*, 17, 2008, p. 43-44.
- Steimer-Herbet 2011 : STEIMER-HERBET (T.), Les tombes tours du Harra syrien : étude préliminaire d'un paysage désertique à l'aide des scènes satellitaires à haute définition, *Syria*, 88, 2011, p. 111-121.
- Steimer-Herbet 2013 : STEIMER-HERBET (T.), Dolmen and tower tombs. In : ABABSA (M.) (ed.), *Atlas of Jordan: History, Territories and Society*. Beyrouth: Institut Français du Proche-Orient, 2013, p. 119-121.
- Steimer-Herbet 2018 : STEIMER-HERBET (T.), *Indonesian Megaliths, a forgotten cultural heritage*. Oxford: Archaeopress ; Laboratoire d'archéologie préhistorique UNIGE, 2018.
- Steimer-Herbet 2019 : STEIMER-HERBET (T.), Recension: Fraser J. A. 2018. Dolmens in the Levant, *Paléorient*, 45 (2), 2019, p. 258-261.
- Steimer-Herbet 2020 : STEIMER-HERBET (T.), Rawk: Statues-menhirs and anthropomorphic statues of Ancient Wadi Idim. In : McCORRISTON (J.), HARROWER (M. J.) (eds), *A Landscape History of Hadramawt*. Yemen: RASA Project Report. UCLA Cotsen Institute of Archaeology Press Monuments Archaeologia Series, 2020.
- Steimer-Herbet & Besse 2017 : STEIMER-HERBET (T.), BESSE (M.), Qarassa, vestiges d'une société à mégalithes dans le Leja en Syrie du Sud, entre 3600 et 3000 avant J.-C., *Paléorient*, 43 (2), 2017, p. 91-113.
- Steimer-Herbet & Besse 2020 : STEIMER-HERBET (T.), BESSE (M.), Les tombes tours d'Arabie du 4^e au 3^e millénaire av. J.-C. : une architecture mégalithique standardisée pour des sociétés égalitaires ? In : COUSSEAU (F.), LAPORTE (L.) (eds), *Pre and Protohistoric Stone Architectures. Comparisons of the social and technical contexts associated to their building*. Actes du XVIII^e congrès de l'UISPP, Paris (4-9 juin 2018), Oxford: Archaeopress, 2020, p. 95-118.
- Steimer-Herbet & Criaud 2008 : STEIMER-HERBET (T.), CRIAUD (H.), Funerary monuments of agro-pastoral populations of the Leja (southern Syria). In : CORDOBA (J. M.), MOLIST (M.), CARMEN PEREZ (M.), RUBIO (I.), MARTINEZ (S.), *Proceedings of the 5th International Congress on the Archaeology of the Ancient Near East*, Madrid (April 3-8 2006). Madrid: UA Ediciones, 2008, p. 221-234.
- Steimer-Herbet & Zuobee 2014 : STEIMER-HERBET (T.), ZUOBEE (A.), Megalithic tombs in 'Ain Dakar (East Jaulan): survey report, *Akkadica*, 135, 2014, p. 197-212.
- Steimer-Herbet et al. 2006 : STEIMER-HERBET (T.), DAVTIAN (G.), BRAEMER (F.), Pastoralists'tombs and settlements patterns in Wadi Wash'ah during the Bronze Age (Hadramawt, Yemen), *Proceedings of the Seminar for Arabian Studies*, 36, 2006, p. 257-265.
- Steimer-Herbet et al. 2007 : STEIMER-HERBET (T.), SAGORY (T.), LAVIGNE (O.), AS-SAQQAF (A.), Sanctuaire ouvert du IV^e millénaire avant l'ère chrétienne (Wâdî 'Idim), *Chroniques yéménites*, 14, 2007, p. 1-8.
- Steimer-Herbet et al. 2018 : STEIMER-HERBET (T.), COUSSEAU (F.), PORRA-KUTENI (V.), HAÏDAR-BOUSTANI (M.), CAMINADA (A.), BESSE (M.), Ancêtres et serpents dans les dolmens de Menjez (Akkar, Liban). Étude préliminaire d'une cohabitation singulière, vers 3500 avant notre ère, *Bulletin d'Archéologie et d'Architecture Libanaises*, 18, 2018, p. 389-396.
- Steimer-Herbet et al. 2019 : STEIMER-HERBET (T.), COUSSEAU (F.), PORRA-KUTENI (V.), HAÏDAR-BOUSTANI (M.), BESSE (M.), Monuments mégalithiques de Menjez (Akkar) : études des architectures et gravures. Campagne 2018, *Bulletin d'Archéologie et d'Architecture Libanaises*, 19, 2019, p. 229-258.
- Steimer-Herbet et al. 2020 : STEIMER-HERBET (T.), COUSSEAU (F.), HAÏDAR-BOUSTANI (M.), PORRA-

- KUTENI (V.), BESSE (M.), Megalithic art in the Levantine Rift Valley: the case of the Menjez dolmens in Akkar (Northern Lebanon), *Akkadica*, 141, 2020, p. 1-24.
- Stékélis 1961 : STÉKÉLIS (M.), *La Necropolis Megalítica de Ala-Safat, Transjordania*. Barcelona: Instituto de Prehistoria y Arqueología (Monografias, I), 1961.
- Stépanoff 2018 : STÉPANOFF (C.), Les hommes préhistoriques n'ont jamais été modernes, *L'Homme*, 227-228, 2018, p. 123-152.
- Stepansky 2005 : STEPANSKY (Y.), The megalithic culture of the Corazim Plateau, eastern Galilee, Israel: New evidence for a chronological and social framework, *Mediterranean Archaeology and Archaeometry*, 5 (1), 2005, p. 39-50.
- Stordeur 2015 : STORDEUR (D.), *Le village de Jerf el Ahmar (Syrie, 9500-8700 av. J.-C.). L'architecture, miroir d'une société complexe*. Paris : CNRS Éditions (coll. Alpha), 2015.
- Stronach & Royce 1981 : STRONACH (D.), ROYCE (W.), Standing Stones in the Atrek Region: The Ḥalat Nabī Cemetery, *Iran*, 19, 1981, p. 147-150.
- Struve 1955 : STRUVE (K. W.), *Die Einzelgrabkultur in Schleswig-Holstein*. Neumünster: Karl Wachholz Verlag, 1955.
- Swauger 1966 : SWAUGER (J. L.), Dolmen studies in Palestine, *The Biblical Archaeologist*, 29 (4), 1966, p. 105-114.
- Tallgren 1911 : TALLGREN (A. M.), *Die Kupfer und Bronzezeit in Nord und Ostrussland*. Helsinki: Suomen Muinaismuistoyhdistyksen Aikakauskirja, 1911.
- Tallgren 1933 : TALLGREN (A. M.), Dolmens of North Caucasia, *Antiquity*, VII (26), 1933, p. 190-202.
- Tallgren 1934 : TALLGREN (A. M.), Sur les monuments mégalithiques du Caucase occidental, *Eurasia Septentrionalis Antiqua*, IX, 1934, p. 1-45.
- Telegin & Mallory 1994 : TELEGIN (D. Y.), MALLORY (J. P.), *The Anthropomorphic Stelae of the Ukraine: The Early Iconography of the Indo-Europeans*. Washington: Institute for the Study of man (Journal of Indo-European Studies Monograph, 11), 1994.
- Tengberg 2012 : TENGBERG (M.), Beginnings and early history of date palm garden cultivation in the Middle East, *Journal of Arid Environments*, 86, 2012, p. 139-147.
- Teshev 1986 : TESHEV (M. K.), Grobnitsa Psebe: pamyatnik Maikopskoi kulturi na Chernomorskem poberezhie, *Novoe v arkheologii Severnogo Kavkaza*, 1986, p. 52-57.
- Testart 1982 : TESTART (A.), *Les chasseurs-cueilleurs ou l'origine des inégalités*. Nanterre : Société d'Ethnographie, 1982.
- Testart 2012 : TESTART (A.), *Avant l'histoire. L'évolution des sociétés, de Lascaux à Carnac*. Paris : Gallimard, 2012.
- Thesiger 1996 : THESIGER (W.), *The Danakil Diary. Journey Through Abyssinia, 1930-34*. London: Harper Collins, 1996.
- Thracian monuments 1976 : *The Megaliths in Thrace*. Sofia: I. Venedikov, A. Fol (eds), 1976.
- Thracian monuments 1982 : *The Megaliths in Thrace 2*. Sofia: A. Fol (ed.), 1982.
- Thuesen 2004 : THUESEN (I.), Messages in stone: the megaliths of the Nebo region in Jordan. In : FOLSACH (K. von), THRANE (H.), THUESEN (I.) (eds), *From Handaxe to Khan: Essays Presented to Peder Mortensen on the Occasion of his 70th Birthday*. Aarhus: Aarhus University Press, 2004, p. 105-117.
- Tosi 1975 : TOSI (M.), Notes on the distribution and exploitation of natural resources in ancient Oman, *Journal of Oman Studies*, 1, 1975, p. 187-206.
- Tosi 1976 : TOSI (M.), The dating of the Umm an-Nar culture and a proposed sequence for Oman in the third millennium BC, *Journal of Oman Studies*, 2, 1976, p. 81-92.
- Tosi 1989 : TOSI (M.), Protohistoric archaeology in Oman: the first thirty years (1956-1985). In : COSTA (P. M.), TOSI (M.) (eds), *Oman Studies. Papers on the archaeology and history of Oman*. Istituto Italiano per il Medio ed Estremo Oriente (Serie Orientale Roma, LXIII), 1989, p. 135-161.
- Τριαντάφυλλος 1980-1981 : TPIANTAΦΥΛΛΟΣ (Δ.), Τα μεγαλιτικά μνημεία της Δυτικής Θράκης. Θρακικά χρονικά, 1980-1981, p. 35-69.
- Triandaphyllos 1983 : TRIANDAPHYLLOS (D.), Les monuments mégalithiques en Thrace occidentale, *Pulpudeva*, IV, 1983, p. 145-163.
- Trifonov 2009a : TRIFONOV (V.), Dolmens in the valley of Zhane River. In : MAKAROV (N. A.) (ed.), *Archaeological discoveries in 1991-2004 in European Russia*. Moscow, 2009, p. 115-128 (in Russian).
- Trifonov 2009b : TRIFONOV (V.), Image of “twins” on the Dzhubga dolmen. In : *Proceedings of the Fifth Kuban Archaeological Conference*, Krasnodar, 2009, p. 335-369 (in Russian).
- Trifonov 2015 : TRIFONOV (V.), Représentation, par similitude, de l'art mégalithique dans le Caucase occidental, en Crimée et en Europe occidentale. In : RODRIGUEZ (G.), MARCHESI (H.) (dir.), *Statues-menhirs et pierres levées du Néolithique à aujourd’hui*. Actes du 3^e colloque international sur la statuaire mégalithique, Saint-Pons-de-Thomières (12-16 septembre 2012). Montpellier : DRAC Languedoc-Roussillon, Groupe archéologique du Saint-Ponais, 2015, p. 81-88.

Bibliography

Trifonov et al. 2012 : TRIFONOV (V. A.), ZAYTSEVA (G. I.), PLICHT (J.), BUROVA (N. D.), BOGOMOLOV (E. S.), SEMENTSOV (A. A.), LOKHOVA (O. V.), The dolmen "Kolikho", Western Caucasus: isotopic investigation of funeral practice and human mobility, *Radiocarbon*, 54 (3-4), 2012, p. 761-769.

Trifonov et al. 2014 : TRIFONOV (V. A.), ZAYTSEVA (G. I.), PLICHT (J.), KRAINEVA (A. A.), SEMENTSOV (A. A.), KAZARNITSKY (A.), BUROVA (N. D.), RISHKO (S. A.), Shepsi, the oldest dolmen with the port-hole slab in the Western Caucasus, *Radiocarbon*, 56 (2), 2014, p. 743-752.

Trifonov et al. 2019 : TRIFONOV (V. A.), SHISHLINA (N. A.), HOMMEL (P.), New data on Maykop funerary constructions (lady cemetery, Northwestern Caucasus), *Brief Communications of the Institute of Archaeology*, 257, 2019, p. 35-47.

Trifonov et al. 2020 : TRIFONOV (V. A.), SHISHLINA (N. I.), LOBODA (A. J.), KHVOSTIKOV (V. A.), Haken mit Figürchen aus dem Dolmen der Maikop-Kultur der Frühbronzezeit, Zarskaja, Nordwestkaukasus: rituelle Nahrung, rituelles Festmahl, Bestattungsspiele. In : HANSEN (S.) (ed.), *Repräsentationen der Macht*. Kolloquien zur Vor und Frühgeschichte 25. Berlin Wiesbaden: Deutsches Archäologisches Institute, Eurasien-Abteilung, Harrassowitz Verlag, 2020, p. 123-134.

Tzonev & Kolev 2011 : TZONEV (L.), KOLEV (D.), The megalithic monuments in Bulgaria: state and exhibition, *Monuments, restoration, museums*, 1 (2), 2011, p. 65-75 (in Bulgarian).

Uerpmann 2003 : UERPMANN (M.), The Dark Millennium: Remarks on the Final Stone Age in the Emirates and Oman. In : POTTS (D. T.), AL NABOODA (H.), HELLYER (P.) (eds), *Archaeology of the United Arab Emirates*. London: Trident Press, 2003, p. 74-81.

Uerpmann & Uerpmann 2003 : UERPMANN (H.-P.), UERPMANN (M.), *Stone Age sites and their natural environment. The Capital Area of Northern Oman, Part III. Beihete zum Tübinger Atlas des Vorderen Orients Reihe A (Naturwissenschaften)*, Nr. 31/3. Wiesbaden: Dr. Ludwig Reichert Verlag, 2003.

Uerpmann et al. 2008 : UERPMANN (H.-P.), UERPMANN (M.), JASIM (S. A.), *The Archaeology of Jebel al-Buhais, Vol. 2: The Natural Environment of Jebel al-Buhais: Past and Present*. Tübingen: Kerns Verlag, 2008.

Uvarov 1876 : UVAROV (A. S.), Megaliticheskie pamiatniki v Rossii, *Drevnosti*, VI (3), 1876.

Uvarov 1878 : UVAROV (A. S.), Megaliticheskie pamiatniki v Rossii, *Drevnosti*, VII (3), 1878, p. 245-274.

Venedikov 1976a : VENEDIKOV (I.), Problems of the megalithic monuments in Thrace. In : VENEDIKOV (A.), FOL (A.) (eds), *Thracian monuments, 1, The Megaliths in Thrace*. Sofia, 1976, p. 31-36.

Venedikov 1976b : VENEDIKOV (I.), Thracian dolmens, dolmens in Caucasus and tombs in Asia Minor. In : VENEDIKOV (I.), FOL (A.) (eds), *Thracian monuments, 1, The Megaliths in Thrace*. Sofia, 1976, p. 77-82.

Venedikov & Aladzhov 1976 : VENEDIKOV (I.), ALADZHOV (D.), Dolmens as monuments of Thracian culture. In : VENEDIKOV (I.), FOL (A.) (eds), *Thracian monuments, 1, The Megaliths in Thrace*. Sofia, 1976, p. 52-76.

Veselovsky 1901 : VESELOVSKY (N. I.), Imperial Archaeological Commission Report 1898 (IAC Report). Saint-Petersburg, IAC, 1901, p. 2-11.

Vigne et al. 2017 : VIGNE (J.-D.), BRIOIS (F.), CUCCHI (T.), FRANEL (Y.), MYLONA (P.), TENBERGER (M.), TOUQUET (R.), WATTEZ (J.), WILLCOX (G.), ZAZZO (A.), GUILAINE (J.), Klimonas, a late PPNA hunter-cultivator village in Cyprus: new results. In : VIGNE (J.-D.), BRIOIS (F.), TENBERGER (M.) (dir.), *Nouvelles données sur les débuts du Néolithique à Chypre*. Paris : Société préhistorique française (Séances, 9), 2017, p. 21-45.

Vogt 1985 : VOGT (B.), *Zur Chronologie und Entwicklung der Gräber des späten 4.-2. Jtsd.v.Chr. auf der Halbinsel Oman: Zusammenfassung, Analyse und Würdigung publizierter wie auch unveröffentlichter Grabungsergebnisse*. Göttingen: Georg-August-Universität zu Göttingen, 1985.

Vogt 1994 : VOGT (B.), *Asimah: an account of two months rescue excavation in the mountains of Ra's al-Khaimah, United Arab Emirates*. Dubai: Shellmarkets Middle East, 1994.

Vogt 1997 : VOGT (B.), Préhistoire au Hadramawt. In : ROBIN (C.), VOGT (B.) (dir.), *Yémen, au pays de la reine de Saba*. Paris : Flammarion ; Institut du Monde Arabe, 1997, p. 30-33.

Vogt et al. 1989 : VOGT (B.), GOCKEL (W.), HOFBAUER (H.), AL-HAJ (A. A.), The coastal survey in the western province of Abu Dhabi, 1983, *Archaeology in the United Arab Emirates*, 5, 1989, p. 49-60.

Voronov 1979 : VORONOV (Y. N.), *Drevnosti Sochi i ego okrestnosti*. Krasnodar, 1979.

Weisgerber 1980 : WEISGERBER (G.), "...und Kupfer in Oman". Das Oman-Projekt des Deutschen Bergbau-Museums, *Der Anschnitt*, 32, 1980, p. 62-110.

Weisgerber 1981 : WEISGERBER (G.), Mehr als Kupfer in Oman-Ergebnisse der Expedition 1981, *Der Anschnitt*, 33, 1981, p. 174-263.

- Weisgerber 1983 : WEISGERBER (G.), Copper production during the third millennium BC in Oman and the question of Makan, *Journal of Oman Studies*, 6, 1983, p. 269-276.
- Weisgerber 1984 : WEISGERBER (G.), Makan and Meluhha: third millennium BC copper production in Oman and the evidence of contact with the Indus Valley. In : ALLCHIN (B.) (ed.), *South Asian Archaeology*. Cambridge: Cambridge University Press, 1984, p. 196-201.
- Wengrow 2010 : WENGROW (D.), *What makes civilization? The ancient Near East and the future of the West*. Oxford: Oxford University Press, 2010.
- Wengrow & Graeber 2015 : WENGROW (D.), GRAEBER (D.), Farewell to the “childhood of man”: ritual, seasonality, and the origins of inequality, *Journal of the Royal Anthropological Institute*, 21 (3), 2015, p. 597-619.
- Willcox et al. 2018 : WILLCOX (G.), FORNITE (S.), HERVEUX (L.), Early Holocene cultivation before domestication in northern Syria, *Vegetation History and Archaeobotany*, 17, 2018, p. 313-325.
- Williams & Gregorička 2013 : WILLIAMS (K. D.), GREGORIČKA (L. A.), The Social, Spatial, and Bioarchaeological Histories of Ancient Oman project: the mortuary landscape of Dhank, *Arabian archaeology and epigraphy*, 24 (2), 2013, p. 134-150.
- Williams & Gregorička 2019 : WILLIAMS (K. D.), GREGORIČKA (L. A.), The Hafit/Umm an-Nar Transition of the Third Millennium BC. Evidence from Architecture and Mortuary Ritual at Al Khubayb Necropolis. In : WILLIAMS (K. D.), GREGORIČKA (L. A.) (eds), *Mortuary and Bioarchaeological Perspectives on Bronze Age Arabia*. Gainesville (FL): Florida University Press, 2019.
- Williams & Gregorička 2020 : WILLIAMS (K. D.), GREGORIČKA (L. A.), New Evidence of Prehistoric Tomb Diversity in Dank, Oman, *Journal of Oman Studies*, 21, 2020, p. 102-127.
- Williams et al. 2014 : WILLIAMS (K. D.), STEIMER-HERBET (T.), GREGORIČKA (L. A.), SALIÈGE (J. F.), McCORRISTON (J.), Bioarchaeological Analyses of 3rd Millennium BC High Circular Tower Tombs from the Arabian Human Social Dynamics (AHSD) Project in Dhofar, Oman, *Journal of Oman Studies*, 18, 2014, p. 153-173.
- Yassine 1985 : YASSINE (K.), The dolmens: construction and dating reconsidered, *Bulletin of the American Schools of Oriental Research*, 259, 1985, p. 63-69.
- Yükmen 2000 : YÜKMEN (B.), 1998 yılı Adiyaman, Gaziantep, Hatay, Kars illeri yüzey araştırması. In : *Araştırma Sonuçları Toplantısı*. Ankara: Kültür Bakanlığı Milli Kütüphane Basımevi, 1, 2000, p. 293-300.
- Yükmen 2001 : YÜKMEN (B.), 1999 yılı Adiyaman, Kahramanmaraş, Hatay illeri yüzey araştırması. In : *Araştırma Sonuçları Toplantısı*. Ankara: Kültür Bakanlığı Milli Kütüphane Basımevi, 2, 2001, p. 151-156.
- Yükmen 2003 : YÜKMEN (B.), *Doğu ve Güneydoğu Anadolu Dolmenleri Işığında Anadolu Megalitleri*. İstanbul: Arkeoloji ve Sanat Yayınları, 2003.
- Yükmen Edens 2003 : YÜKMEN EDENS (B.), Hatay ve Kahramanmaraş illeri 2001 araştırması. In : *Araştırma Sonuçları Toplantısı*. Ankara: Kültür Bakanlığı DÖSİMM Basımevi, 2, 2003, p. 299-310.
- Yükmen Edens 2004 : YÜKMEN EDENS (B.), Adana, Şanlıurfa, Hatay illeri 2002 yılı megalitizm yüzey araştırması. In : *Araştırma Sonuçları Toplantısı*. Ankara: Kültür Bakanlığı DÖSİMM Basımevi, 2, 2004, p. 315-324.
- Yükmen Edens 2012 : YÜKMEN EDENS (B.), Dolmens of Hatay (southern Turkey) and their connections in Anatolia and the Levant, *Levant*, 44 (2), 2012, p. 186-204.
- Yükmen Edens 2018 : YÜKMEN EDENS (B.), “Erken Prehistorya ve Kilikya Bazalt Alanları” projesi 2016 yüzey araştırmaları sezonu. In : *Araştırma Sonuçları Toplantısı*. Bursa: Bursa Büyükşehir Belediyesi Matbaa, 35 (1), 2018, p. 225-246.
- Yükmen Edens 2019 : YÜKMEN EDENS (B.), ‘Erken Prehistorya ve Kilikya Bazalt Alanları’ projesi 2017 yüzey araştırmaları. In : *Araştırma Sonuçları Toplantısı*. Ankara: Kültür ve Turizm Bakanlığı, 36 (1), 2019, p. 297-326.
- Yule & Weisgerber 1998 : YULE (P.), WEISGERBER (G.), Prehistoric Tower Tombs at Shir/Jaylah, Sultanate of Oman, *Beiträge zur allgemeinen und vergleichenden Archäologie*, 18, 1998, p. 183-241.
- Zarins 1979 : ZARINS (J.), Rajajil: a unique arabian site from the fourth millennium BC, *Atlatl*, 3, 1979, p. 73-78.
- Zarins 1992 : ZARINS (J.), Archaeological and Chronological Problems within the Greater Southwest Asian Arid Zone, 8500-1850 BC. In : EHRICH (R. W.) (ed.), *Chronologies in Old World Archaeology*, Vol. I. Chicago/London: The University of Chicago Press, Third Edition, 1992, p. 42-62.
- Zarins et al. 1979 : ZARINS (J.), IBRAHIM (M.), POTTS (D. T.), EDENS (C.), Saudi Arabian archaeological reconnaissance 1978: the preliminary report on the third phase of the Comprehensive Archaeological Survey Program- The Central Province, *Atlatl*, 3, 1979, p. 9-42.
- Zazzo & Munoz 2013 : ZAZZO (A.), MUÑOZ (O.), Datation ¹⁴C et alimentation : une clé pour appréhender la mobilité des populations côtières de la Péninsule Arabique au Néolithique (¹⁴C dating and diet: a key to understanding the mobility of coastal population of the Arabian Peninsula during the Neolithic), *Annales de la Fondation Fyssen*, 27, 2013, p. 125-139.

Bibliography

Zazzo & Saliège 2011 : ZAZZO (A.), SALIÈGE (J.-F.), Radiocarbon dating of biologicalapatites: A review, *Palaeogeography, Palaeoclimatology, Palaeoecology*, 310, 2011, p. 52-61.

Zazzo et al. 2014 : ZAZZO (A.), MUÑOZ (O.), SALIÈGE (J.-F.), Diet and mobility in a late neolithic population of coastal Oman inferred from radiocarbon dating and stable isotope analysis, *American Journal of Physical Anthropology*, 153 (3), 2014, p. 353-364.

Zohar 1992 : ZOHAR (M.), Megalithic cemeteries in the Levant. In : BAR-YOSEF (O.), KHAZANOV (A.) (eds), *Pastoralism in the Levant: Archaeological Materials in Anthropological Perspectives*. Madison: Prehistory Press, p. 43-63.

Zohar 1993 : ZOHAR (M.), Dolmens. In : STERN (E.) (ed.), *The New Encyclopaedia of Archaeological Excavations in the Holy Land*. Jerusalem: The Israel Exploration Society & Carta, 1993, p. 352-356.

limité, s'embourbant dans des typologies de mégalithes mal définies qui ont obscurci plutôt que clarifié les limites entre les différentes traditions mégalithiques. En examinant en particulier les différentes approches des sépultures dolméniques, cet article décompose les hypothèses qui construisent le soi-disant "phénomène mégalithique" et suggère des approches taxonomiques et contextuelles alternatives qui pourraient nous conduire à de nouvelles bases théoriques.

Mots-clés : Dolmens, Âge du Bronze, Levant, pratiques funéraires, géologie

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p. 905-920 – Cairns et tombes tours protohistoriques en Arabie sud-orientale (fin 4^e - début 3^e millénaire avant l'ère commune) par Olivia MUÑOZ

Cet article propose une synthèse des connaissances sur les tombes tours ou tombes de type "Hafit", présentes par dizaines de milliers dans la péninsule d'Oman, au sud-est de la péninsule arabique, et qui sont communément attribuées au début de l'Âge du Bronze (fin 4^e - début du 3^e millénaire avant notre ère). Après une remise en contexte de ce qui apparaît être un phénomène funéraire de grande ampleur, l'histoire de la découverte de ces tombes et les orientations actuelles de la recherche sont brièvement exposées. Puis, le contexte chronoculturel de cette région est présenté avant l'exposé des traits qui caractérisent ces monuments funéraires. La présentation des données disponibles sur la localisation et la durée d'utilisation des nécropoles, l'architecture des tombes, les pratiques funéraires et les données biologiques des individus déposés au sein de ces sépultures est accompagnée, au fil du texte, d'un rappel des enjeux et perspectives qui nourrissent les recherches actuelles.

Mots-clés : Péninsule d'Oman, Arabie, tombes Hafit, tombes tours, cairns, Âge du Bronze ancien

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p. 921-934 – Le mégalithisme au Moyen-Orient par Tara STEIMER-HERBET

Il y a 7 000 ans le Moyen-Orient voient l'émergence de nouveaux rites funéraires. De la simple inhumation en pleine terre, jarres ou ossuaires, les sociétés qui peuplent les montagnes du Akkar, le plateau du Jaulan, la vallée du Jourdain, al'Ula et Khaybar, le Jawf, le Hadramawt et le Dhofar, pour ne citer que quelques régions particulièrement riches, ont choisi d'inhumer leurs morts à l'intérieur de tombeaux mégalithiques. Ces monuments connus sous le terme de dolmens ou de tombes tours sont des tombes monumentales en élévation formées d'une chambre de blocs mégalithiques plus ou moins régularisés qu'un tumulus peut recouvrir partiellement ou complètement. Les prospections systématiques récentes menées dans la région de Homs, dans le Leja, le Harra et à l'est de Jafr renouvellent l'image qu'on avait de la répartition des tombes mégalithiques dans le Levant. Jusque dans les années 2000, on pensait que les nécropoles de tombes mégalithiques se répartissaient sur une bande nord-sud qui suivait grossièrement le fossé du rift du milieu de la mer Morte jusqu'au niveau d'Alep, le long du Jourdain, du Litani et de l'Oronte. Or aujourd'hui, nous savons que les sociétés pratiquant le mégalithisme peuplaient des zones très différentes allant de régions boisées dans le Jaulan syrien à des zones très steppiques dans le désert du Sabatayn au Yémen. La condition de leur installation est la présence de ressources exploitables telles que des zones de pâturage, propices à la culture de l'olivier ou des figuiers, la présence de mines de silex, de lapis lazuli, d'obsidienne, de sel et bien entendu l'accès à de grandes dalles pour la construction de leurs tombeaux et parfois de leur habitat. Outre l'accès aux ressources, les sociétés à mégalithes semblent avoir privilégié les axes de communication favorisant les interactions commerciales avec les populations urbaines des côtes ou des grands

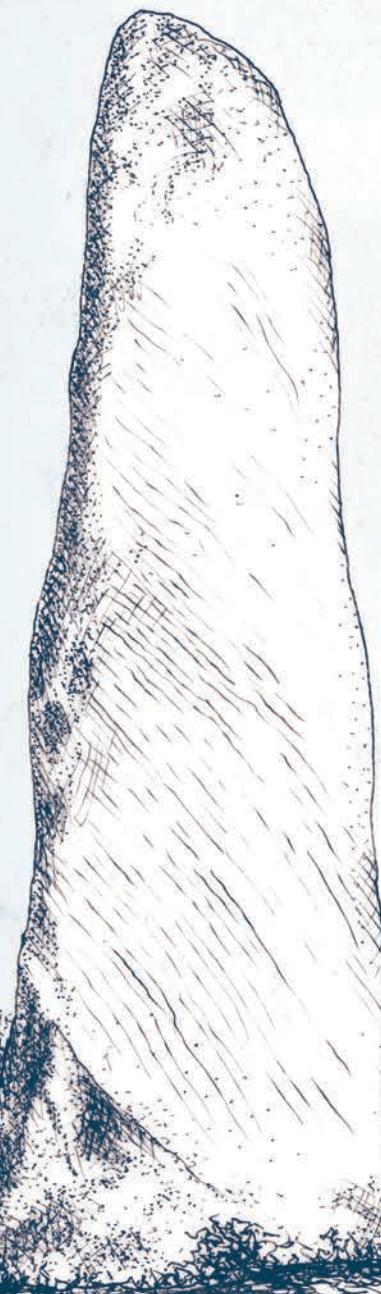
Megaliths of the World brings together the latest research on megalithic monuments throughout the world. Many of these sites are well known, others less familiar, yet equally deserving of close attention. Megalithic monuments in different regions of the world are far from being a single unified phenomenon, having varied chronologies, and diverse origins, but they all share a certain family resemblance through their common characteristic: the deployment of large stones. No fewer than 150 researchers have contributed 72 articles and inserts, providing a vital region-by region account of the megalithic monuments in their specialist areas, and the current state of knowledge.

The insights offered in these volumes emphasize the particular character and significance of these apparently inanimate stones. The use of such large blocks must surely have been an expression of power or prestige, yet the size and materiality of the stones themselves opens up new perspectives into the meaning and symbolism of these monuments, the places from which the blocks were derived, and the way they were manipulated and shaped.

Megaliths of the World takes the reader on a fascinating journey, offering new insights through encounters with megaliths and megalithic traditions that will often be new and unfamiliar. Highlighting salient themes, it provides a compendium of detailed information that will be vital to anyone interested in the phenomenon of megalithic monumentality.



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