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The Radiocarbon Dating of the Middle Bronze Age Monumental Building

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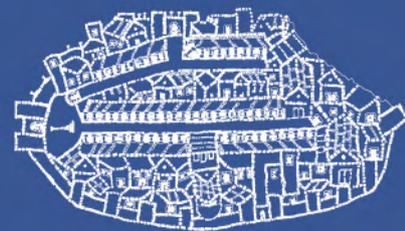
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**Abhandlungen des Deutschen
Palästina-Vereins**



Jens Kamlah and H el ene Sader (Editors)

ADPV 45,I

Tell el-Burak I **The Middle Bronze Age**

With Chapters Related to the Site
and to the Mamluk-Ottoman Periods



Harrassowitz

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des Deutschen Palästina-Vereins

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7.7. The Radiocarbon Dating of the Middle Bronze Age Monumental Building

By FELIX HÖFLMAYER, MICHAEL W. DEE,
and SIMONE RIEHL³⁶²

7.7.1. Introduction

For the Middle Bronze Age Monumental Building and the tomb attached to its outer façade, a substantial set of radiocarbon dates is available. Since the excavation started, samples for radiocarbon dating were collected, and, so far, more than 25 samples have been analyzed at the Leibniz-Labor für Altersbestimmung und Isotopenforschung in Kiel (data designated as KIA) and the Vienna Environmental Research Accelerator (data designated as VERA). Nineteen samples have been collected from the various phases of the Middle Bronze Age Monumental Building, one sample has been retrieved from the tomb attached to its outer façade, and four samples have been collected from the Late Bronze Age Retaining Structure above the Middle Bronze Age building (cf. Table 7.5). Unfortunately, it was not possible to focus only on single-year short-lived botanical specimens. In some cases, charcoal was collected as well, in order to determine at least a *terminus post quem* for the respective context. A first set of radiocarbon data was briefly discussed by KAMAL BADRESHANY and JENS KAMLAH in 2011³⁶³, and a more detailed report was published in 2016³⁶⁴. All calibration and modeling in this chapter was done using OxCal 4.2.4 against the INTCAL13 radiocarbon calibration curve interpolated to yearly intervals (Resolution = 1)³⁶⁵.

7.7.2. Radiocarbon Results

Nine samples were collected from the construction phase of the building (Phase 1a: KIA-42709, KIA-28158, VERA-5579, KIA-26683, KIA-44711, VERA-5580, KIA-28159, VERA-5578, and VERA-5576) (cf. Fig. 7.86 and Table 7.5). Six measurements were run on short-lived samples (VERA-5580, KIA-26683, KIA-42709, VERA-5579, VERA-5578, and VERA-5576), whereas KIA-28158, KIA-44711, and KIA-28159 were run on charcoal samples. Phase 1b is not represented by radiocarbon samples. Although three charcoal samples were retrieved from Phase

³⁶² Work on the radiocarbon sequence of *Tell el-Burak* was done in the framework of the project “Radiocarbon dating the Bronze Age of the southern Levant” funded by the Fritz-Thyssen-Foundation (Az.10.11.1.043) and the German Archaeological Institute from 2011 to 2013. Samples analyzed at the Vienna Environmental Research Accelerator were funded by SCIEM 2000 and the authors wish to thank MANFRED BIETAK and WALTER KUTSCHERA for financial support. Samples analyzed at the Leibniz-Labor für Altersbestimmung und Isotopenforschung Kiel were funded by the *Tell el-Burak* excavation project.

³⁶³ BADRESHANY/KAMLAH 2010–11, 94–96.

³⁶⁴ HÖFLMAYER *et al.* 2016a. Since submitting this paper and while preparing the final report, the stratigraphic attributions of two samples had to be changed. Both VERA-5578 (originally published as Phase 1b) and VERA-5576 (originally published as Phase 2b) now have to be regarded as belonging to Phase 1a. Although the overall results do not change considerably, this chapter is regarded as an update of HÖFLMAYER *et al.* 2016a.

³⁶⁵ BRONK RAMSEY 1995; 2001; 2009a; REIMER *et al.* 2013.

1c (partial collapse of the building) (KIA-44712, KIA-26684, and KIA-26685), two of them turned out to be intrusive and resulted in dates from the Iron Age and the Mamluk-Ottoman Period, so that only KIA-44712 has been considered for this chapter (for the results for KIA-26684 and KIA-26685, see below). Phase 2a (repairing phase) is represented by six measurements, four run on short-lived samples (VERA-5574, VERA-5572, VERA-5573, KIA-42708), and two on charcoal samples (KIA-28161, KIA-28160). Phase 2b (second occupational phase) is not represented by radiocarbon samples, and Phase 2c (abandonment of the Monumental Building) is only represented by a single short-lived sample, KIA-42710 for Phase 2c. From Phase 3 (burial outside the building), a single charcoal sample was retrieved (KIA-26686).

Four samples have been collected from the Late Bronze Age Retaining Structure above the Middle Bronze Age Monumental Building. Short-lived samples KIA-44714 and VERA-5577 come from the foundation trench (Retaining Structure [RS] Phase 1), short-lived sample VERA-5575 was collected from the ash layer under the stone debris of the Retaining Structure (RS Phase 2), and charcoal sample KIA-44713 comes from the stone debris of the structure proper (cf. Table 7.5).

The individual calibrations for the radiocarbon determinations provide a coherent picture for the Middle Bronze Age structure (Fig. 7.86). Most dates fall in between ca. 2000 and ca. 1800 B.C.E., while the single sample for Phase 3 falls to around 1700 B.C.E. Four samples are considerably older (KIA-42709, KIA-28158, KIA-44712, and KIA-42710). Several explanations can be put forward for these older dates. KIA-42709 was run on a short-lived sample, which was retrieved from mud-brick debris that probably contained older organic material that was used as temper for the mud-bricks³⁶⁶. KIA-28158 was run on unidentified charcoal and can only provide a *terminus post quem* for the respective context. KIA-44712 was also run on charcoal, explaining the older age, and KIA-42710, although run on short-lived material, again was retrieved from mud-brick debris and probably represents temper material. Two samples from Phase 1c proved to be intrusive, KIA-26684 and KIA-26685³⁶⁷, both run on olive pits. KIA-26684 dates to the early Iron Age and KIA-26685 to the Mamluk-Ottoman Period (Figs. 7.87 and 7.88). Regarding the Late Bronze Age Retaining Structure, the individual calibrations are less consistent (Fig. 7.89 and Table 7.6). While short-lived sample KIA-44714 from Phase 1 dates to ca. the second half of the 17th or the first half of the 16th cent. B.C.E. and is thus in line with samples from Phases 2 and 3, both measurements of the other short-lived sample from Phase 1 (VERA-5577 and VERA-5577_2) fall to the 13th and 12th cent. B.C.E. and thus prove the sample to be intrusive. Short-lived sample VERA-5575 from the ash layer under the stone debris (Phase 2) falls to the 15th cent. B.C.E. with a minor chance of falling to the late 14th cent. B.C.E., as does the charcoal sample from Phase 3 (stone debris of the Retaining Structure) KIA-44713. Based on the radiocarbon evidence from the Retaining Structure nothing more can be concluded than that the structure was most likely erected in the late Middle or early Late Bronze Age and stayed in use during the first half of the Late Bronze Age.

³⁶⁶ The mud-bricks, in which the carbonized organic material was used as temper, originally were part of walls from Phase 1a. Therefore, the ¹⁴C sample KIA-42709 is considered as belonging to Phase 1a.

³⁶⁷ Both samples were found above the stone pavement of **Room 7**, which was constructed in Phase 1a. The samples were found in a thin layer of sediment (Phase 1c) directly underneath remains of **House I**.

Laboratory references	Sample	Phase	Context	Material	¹⁴ C Determination (¹⁴ C years BP)	
					Date	± (σ)
KIA-42709	TB08-29/28-27	MB Phase 1a	Mud-brick debris, Room 11	Charred seeds (<i>Vicia ervilia</i>)	4131	32
KIA-28158	TB30/27-31a	MB Phase 1a	Foundation below plaster floor, Room 10	Charcoal dust	3861	32
KIA-28159	TB30/27-31b	MB Phase 1a	Foundation below plaster floor, Room 10	Charcoal dust	3528	27
KIA-26683	TB32/26 context 63	MB Phase 1a	Deep trench, Room 1	Charred seeds (<i>Triticum dicoccum</i>)	3564	25
KIA-44711	TB09-30/29-16	MB Phase 1a	Stone glacia	Charcoal	3562	31
VERA-5580	TB10-BP017	MB Phase 1a	Mud attached to front of foundation wall	Charred seeds (<i>Triticum</i> spp.)	3535	30
VERA-5579	TB10-BP014	MB Phase 1a	Burnt floor	Charred seeds (<i>Olea europaea</i>)	3565	30
VERA-5578	TB10-BP013	MB Phase 1a	Floor material	Charred seeds (<i>Triticum monococcum/dicoccum</i>)	3550	35
VERA-5576	TB10-BP008	MB Phase 1a	Accumulated floor material	Charred seeds (<i>Olea europaea</i>)	3490	30
KIA-44712	TB09-31/29-20	MB Phase 1c	Pottery assemblage lower floor, Room 15	Charcoal	3699	28
KIA-26684	TB31/25 context 76	MB Phase 1c	Sediment on top of stone pavement, Room 7	Charred seeds (<i>Olea europaea</i>)	2772	24
KIA-26685	TB31/26 context 51	MB Phase 1c	Sediment on top of stone pavement, Room 7	Charred seeds (<i>Olea europaea</i>)	297	25
KIA-28160	TB29/28-11a	MB Phase 2a	Fill, Room 11	Charcoal	3622	24
KIA-28161	TB29/28-11b	MB Phase 2a	Fill, Room 11	Charcoal	3560	26
KIA-42708	TB08-29/28-20	MB Phase 2a	Fill, Room 11	Charred seeds (Fabaceae)	3619	29
VERA-5572	TB10-BP002	MB Phase 2a	Fill, Room 10	Charred seeds (<i>Vitis vinifera</i>)	3540	30
VERA-5573	TB10-BP003	MB Phase 2a	Fill, Room 10	Charred seeds (<i>Vicia ervilia</i>)	3530	25
VERA-5574	TB10-BP004	MB Phase 2a	Fill, Room 10	Charred seeds (<i>Triticum monococcum/dicoccum</i>)	3575	30
KIA-42710	TB08-30/28-39	MB Phase 2c	Mud-brick debris and pottery on floor, Room 13	Charred seeds (<i>Hordeum vulgare</i>)	4043	29
KIA-26686	TB31/25 context 85	MB Phase 3	Tomb attached to façade	Charcoal	3411	25
KIA-44714	TB10-31/29-57	RS Phase 1	Foundation trench of Retaining Structure	Charred seeds (<i>Lolium remotum</i>)	3319	26
VERA-5577	TB10-BP009	RS Phase 1	Foundation trench of Retaining Structure	Charred seeds (<i>Olea europaea</i>)	2965	30

Laboratory references	Sample	Phase	Context	Material	¹⁴ C Determination (¹⁴ C years BP)	
					Date	± (σ)
VERA-5577HS					3170	30
VERA-5577_2					2925	35
VERA-5577_2HS					2925	35
VERA-5575	TB10-BP005	RS Phase 2	Ash layer under stone debris	Charred seeds (<i>Vicia ervilia</i>)	3160	40
VERA-5575HS					3140	40
KIA-44713	TB10-31/29-52	RS Phase 3	Stone debris of Retaining Structure	Charcoal	3140	29

Table 7.5. Results of radiocarbon measurements on samples from *Tell el-Burak* (samples KIA-26684 and KIA-26685 were not used in the models presented here, since they proved to be intrusive, coming from the Iron Age and the 16th/17th cent. C.E.). MB-Phases refer to the Monumental Building, RS-Phases refer to the Retaining Structure above. Lab-codes ending in HS refer to measurements of humic acids. Measurement of VERA-5577 was repeated because the humic acids results were about 200 radiocarbon years older, humic acids measurement of VERA-5577_2 (VERA-5577_2HS) is consistent with the carbon measurement. For the Retaining Structure measurements of humic acids have not been used, as there is the theoretical possibility of younger contamination (although, in general, it has been found that in this region humic acids are reliable for dating: WILD *et al.* 2013).

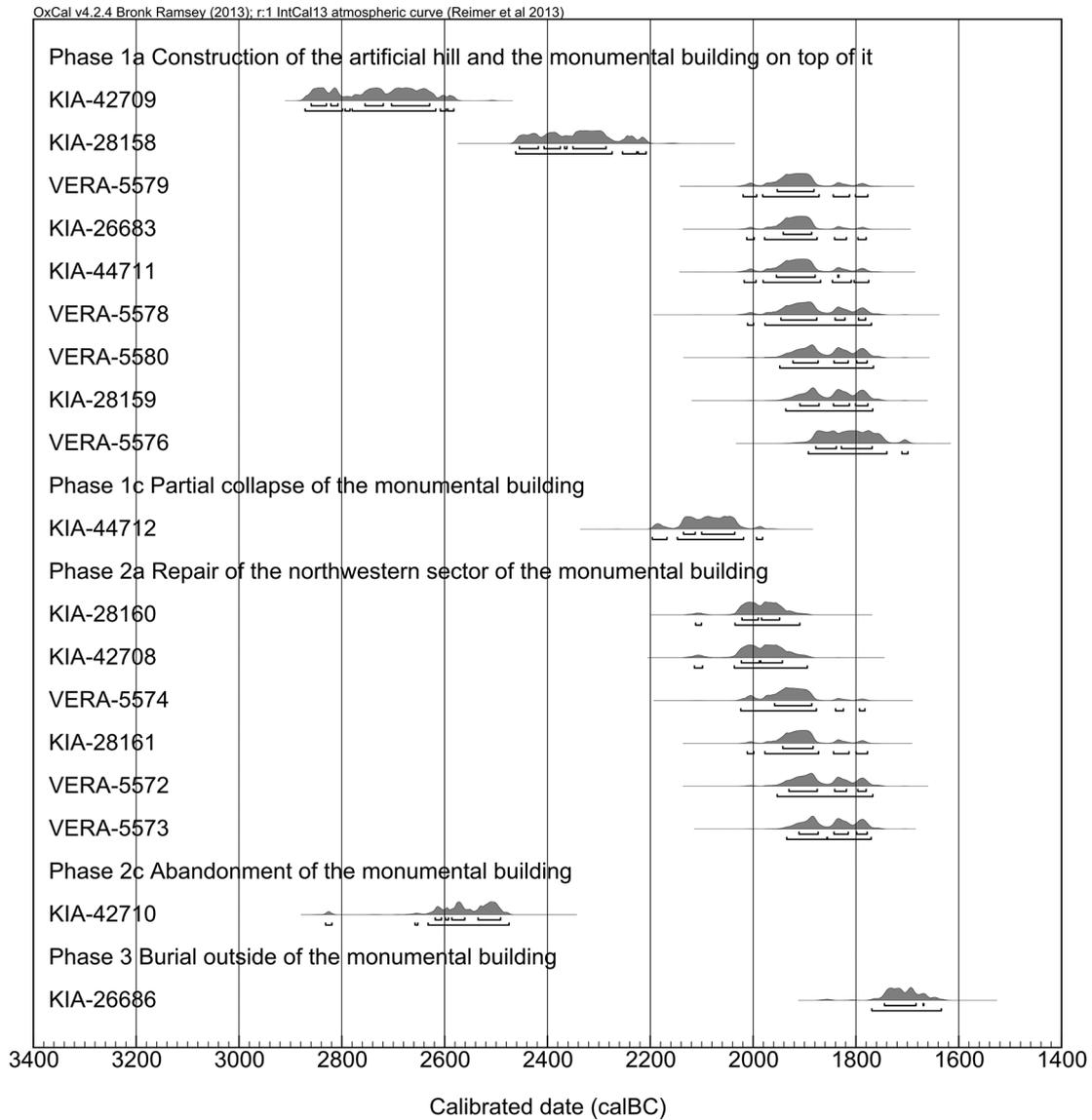


Fig. 7.86. Calibrated radiocarbon determinations for samples associated with the Middle Bronze Age Monumental Building (Phases 1a–2c) and the subsequent burial outside the building (Phase 3).

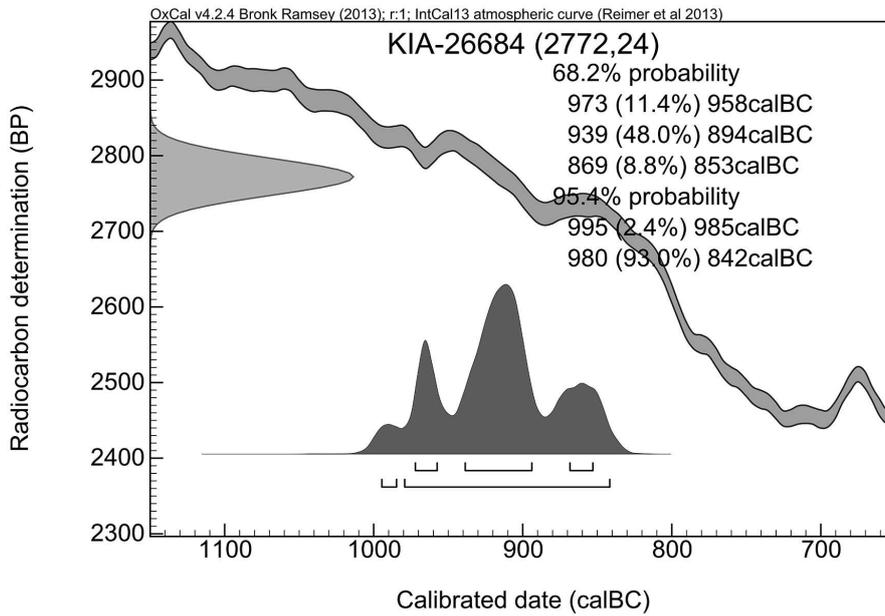


Fig. 7.87. Calibrated radiocarbon determination for intrusive Iron Age sample KIA-26684 retrieved from Phase 1c.

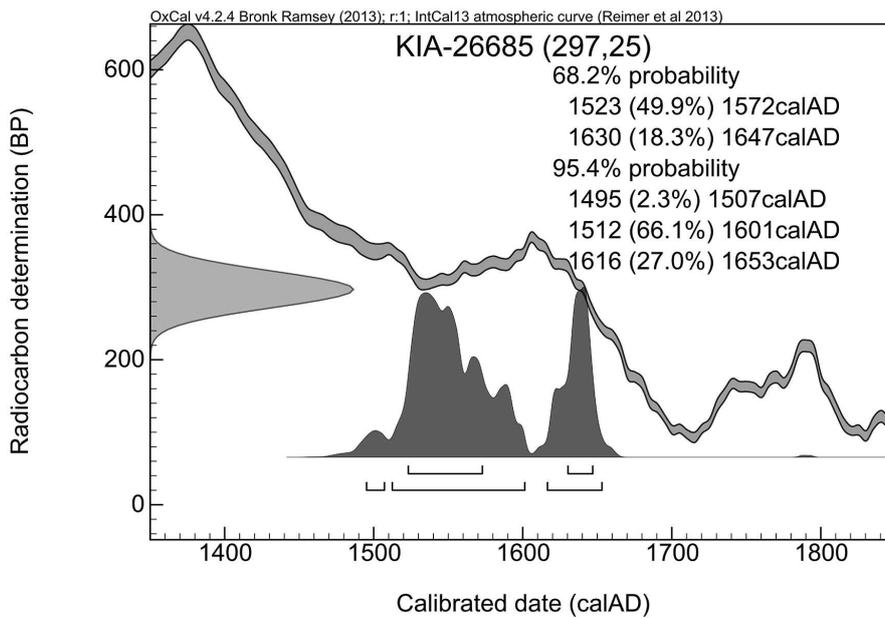


Fig. 7.88. Calibrated radiocarbon determination for intrusive Mamluk-Ottoman sample KIA-26685 retrieved from Phase 1c.

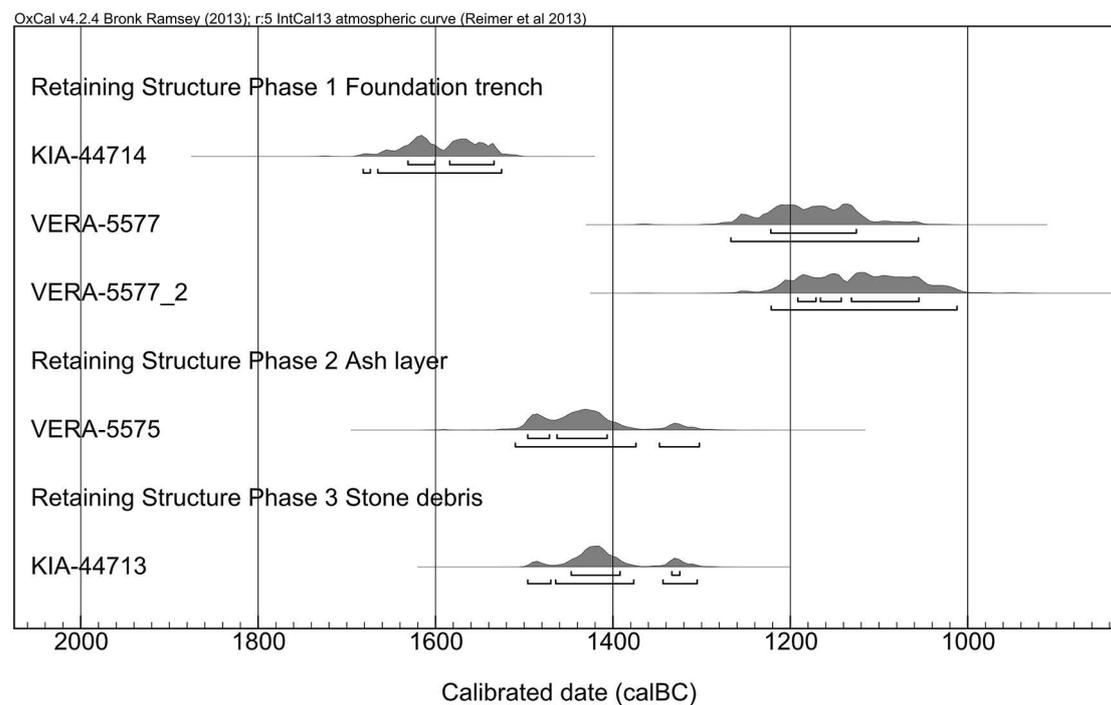


Fig. 7.89. Calibrated radiocarbon determinations for samples associated with the Late Bronze Age Retaining Structure (Phases 1–3).

Phase	Laboratory reference	Calibrated ^{14}C date ranges (B.C.E., 95.4%)
Retaining Structure Phase 1	KIA-44714	1682 – 1526
Retaining Structure Phase 1	VERA-5577	1268 – 1056
	VERA-5577HS	1505 – 1396
	VERA-5577_2	1222 – 1013
	VERA-5577_2HS	1222 – 1013
Retaining Structure Phase 2	VERA-5575	1511 – 1303
	VERA-5575HS	1501 – 1297
Retaining Structure Phase 3	KIA-44713	1497 – 1306

Table 7.6. Results of calibrated radiocarbon determinations from the Retaining Structure of *Tell el-Burak*.

7.7.3. Bayesian Models

In order to increase the precision of the calibrated radiocarbon determinations, a Bayesian probability approach was applied. Bayesian analysis allows additional information to be taken into account, such as the sequence of the samples based on archaeological stratigraphy. This additional information is called prior information, since it is derived from sources other than and prior to, radiocarbon analysis in the laboratory³⁶⁸. Based on the prior information and the radiocarbon measurements, a posterior probability for each individual sample (and each additional event in the model, such as transitions between phases) is calculated – *i. e.*, the probability for the age of a sample based on its individual calibration combined with all additional information included in the model.

Usually one would have to assume that all radiocarbon determinations are representative for their respective contexts and stratigraphic phases. In practice, however, residual material is often present in the archaeological record, especially in cases where one has to rely on samples that do not come from closed contexts (*e. g.*, from a sealed storage jar where only minimal or no residuality at all can be assumed). Samples that are too old and thus do not “fit” the model based on stratigraphic evidence are usually excluded by hand, a process that is often highly subjective. In order not to “hand-pick” and exclude any samples a priori, we instead employed the automated Outlier Analysis of OxCal, using the “General” model for short-lived samples and the “Charcoal” model for the charcoal samples³⁶⁹.

Outlier analysis detects which individual samples are not consistent with the prior information (*e. g.*, the sequence) or the other radiocarbon dates for their context, and incrementally reduces their contribution to the model outputs (meaning that outliers have a very limited impact on the posterior probabilities). The outlier index shows the expected (prior) chance of a sample being an outlier and the real (posterior) value based on the model. Generally, short-lived samples are expected to be representative for their respective contexts and are given only a 5% prior chance of being an outlier, but applying the model may give very different results. For example, VERA-5573 [O:0/5] was given a 5% chance of being an outlier but, based on Model A, it has in fact a 0% chance of being one, while KIA-42710 [O:100/5] was given a 5% chance of being an outlier, but, based on Model A, its actual chance of being one is 100% (Fig. 7.90). The “Charcoal” model automatically gives a 100% chance of the respective sample being an outlier. This is because charcoal samples are always older than the archaeological context to which they pertain. In labeling each charcoal date in this manner, the program is instructed that the result is just a *terminus post quem* and the true age of its context is actually younger than the date obtained.

³⁶⁸ BUCK *et al.* 1991; WENINGER *et al.* 2006; BRONK RAMSEY 2009a.

³⁶⁹ BRONK RAMSEY 2009b.

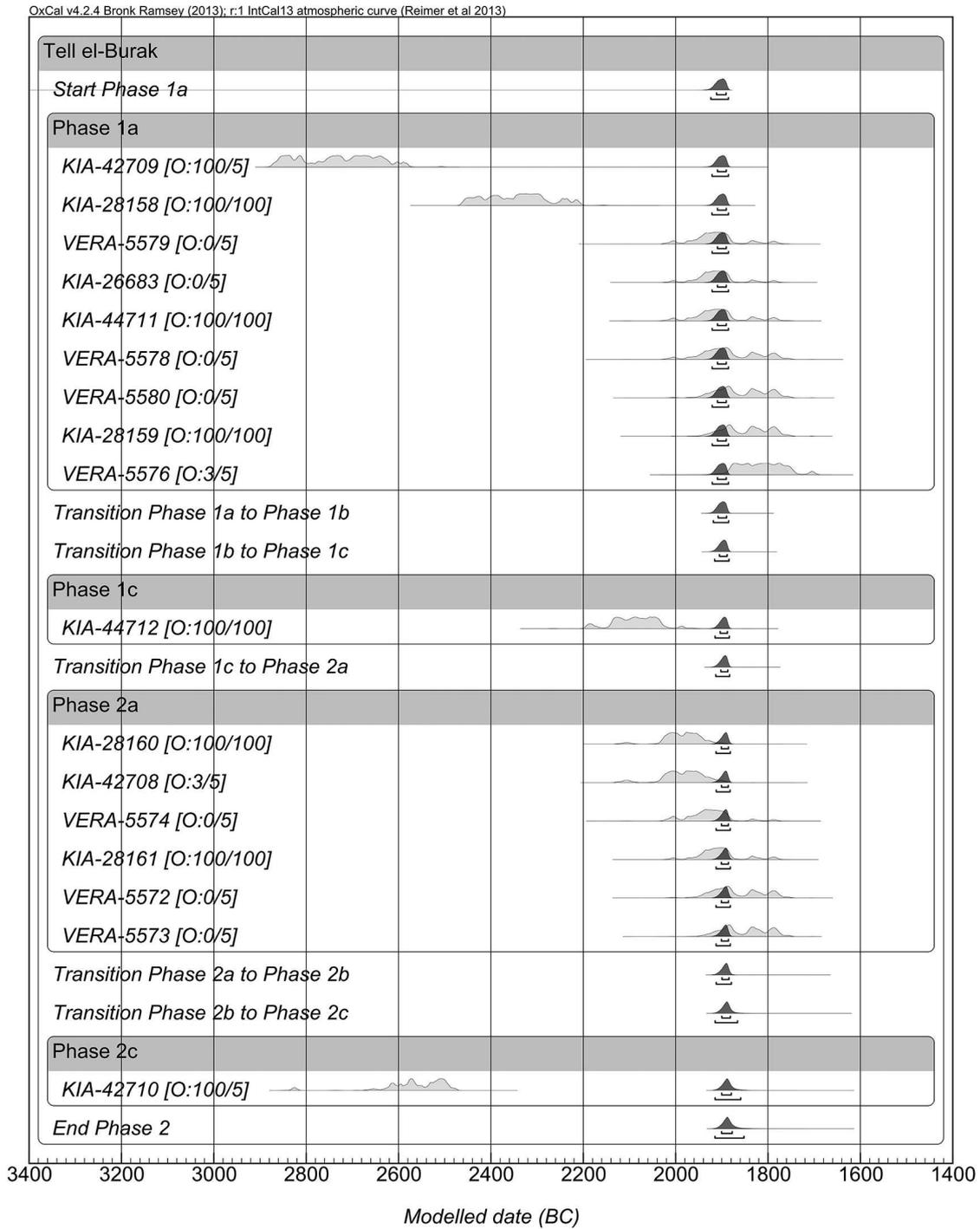


Fig. 7.90. Modeled probability ranges for each individual sample and “boundaries” based on Model A (detailed stratigraphical model). Light shaded areas represent individual calibrated radiocarbon determinations (without prior information), dark shaded areas represent modeled calibrated radiocarbon determinations (posterior probabilities) based on the prior information entered into the model.

Four models (A–D) were created employing slightly different sets of prior information to test the validity of the results:

- a. Model A (detailed stratigraphical model): For this model, it was assumed that all short-lived samples were representative of the archaeological phase in which they were found, and that all archaeological phases were in their correct chronological order. Within each archaeological phase, the order of the individual samples was taken to be unknown. Samples originating from any of these stratigraphic phases were grouped together using the ‘Phase’ function of OxCal (being an unordered normal distributed group of events), separated by ‘boundaries’ (reflecting the transitions between these phases). Results for this model are shown in Figs. 7.90 and 7.91, as well as in Table 7.7.
- b. Model B (simplified stratigraphical model): For this model, we only distinguished between Phases 1 and 2, since it cannot be necessarily expected that such minute differentiations as between, for example, the occupational Phase 1b and the collapse Phase 1c (though clearly observable in the architecture), are also reflected in the radiocarbon record, especially since many samples come from fill layers. Thus only the following succession was used: Phase 1, followed by Phase 2. Results for this model are shown in Figs. 7.92 and 7.93, as well as in Table 7.7.
- c. Model C (uniform phase model): For this model, we only considered the short-lived samples (without the obvious outliers KIA-42709 and KIA-42710) and treated all samples as coming from a single phase. All samples were grouped together in a “Phase” enclosed by two “boundaries”, thus assuming a uniform distribution. Results for this model are shown in Figs. 7.94 and 7.95, and in Table 7.7.
- d. Model D (exponential phase model): For the last model, we tested the latest possible date for the end of the Middle Bronze Age Monumental Building. Since many of the samples were retrieved from fill layers, we created a more cautious model, where we assumed that all samples belong to the building in general but allow for residuality since many samples originate from fill layers. We did not differentiate between separate phases for this model, but instead treated all samples as coming from a single phase, assumed to be distributed exponentially towards the end of the use of the building using a “Tau_Boundary” paired with a “Boundary” in OxCal. In this model we assume that all radiocarbon samples are older than the final abandonment, maybe even considerably, while making sure that dates for these residual samples do not affect the end-date for the structure too much. We basically test how late the end of the Middle Bronze Age Monumental Building could be. Results are shown in Figs. 7.96 and 7.97, and in Table 7.7.

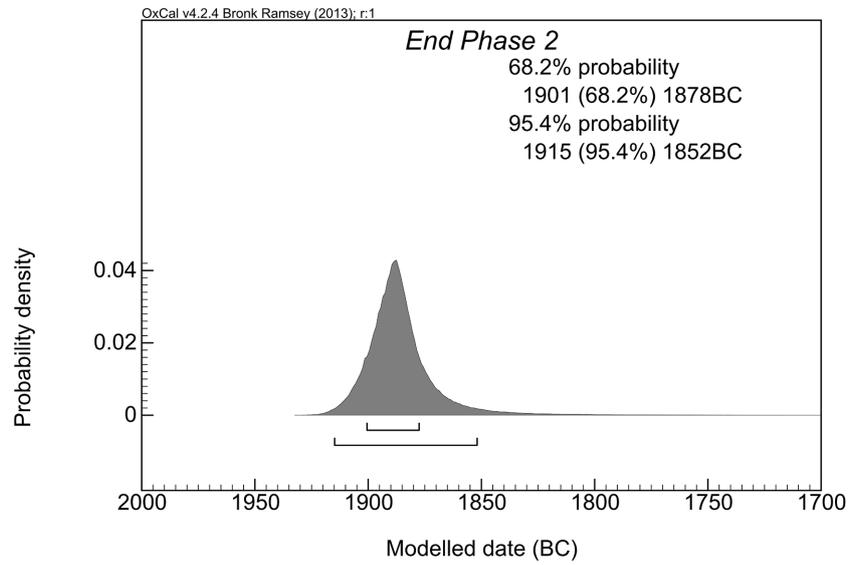


Fig. 7.91. Modeled probability distribution for the end of the Monumental Building based on Model A (detailed stratigraphical model).

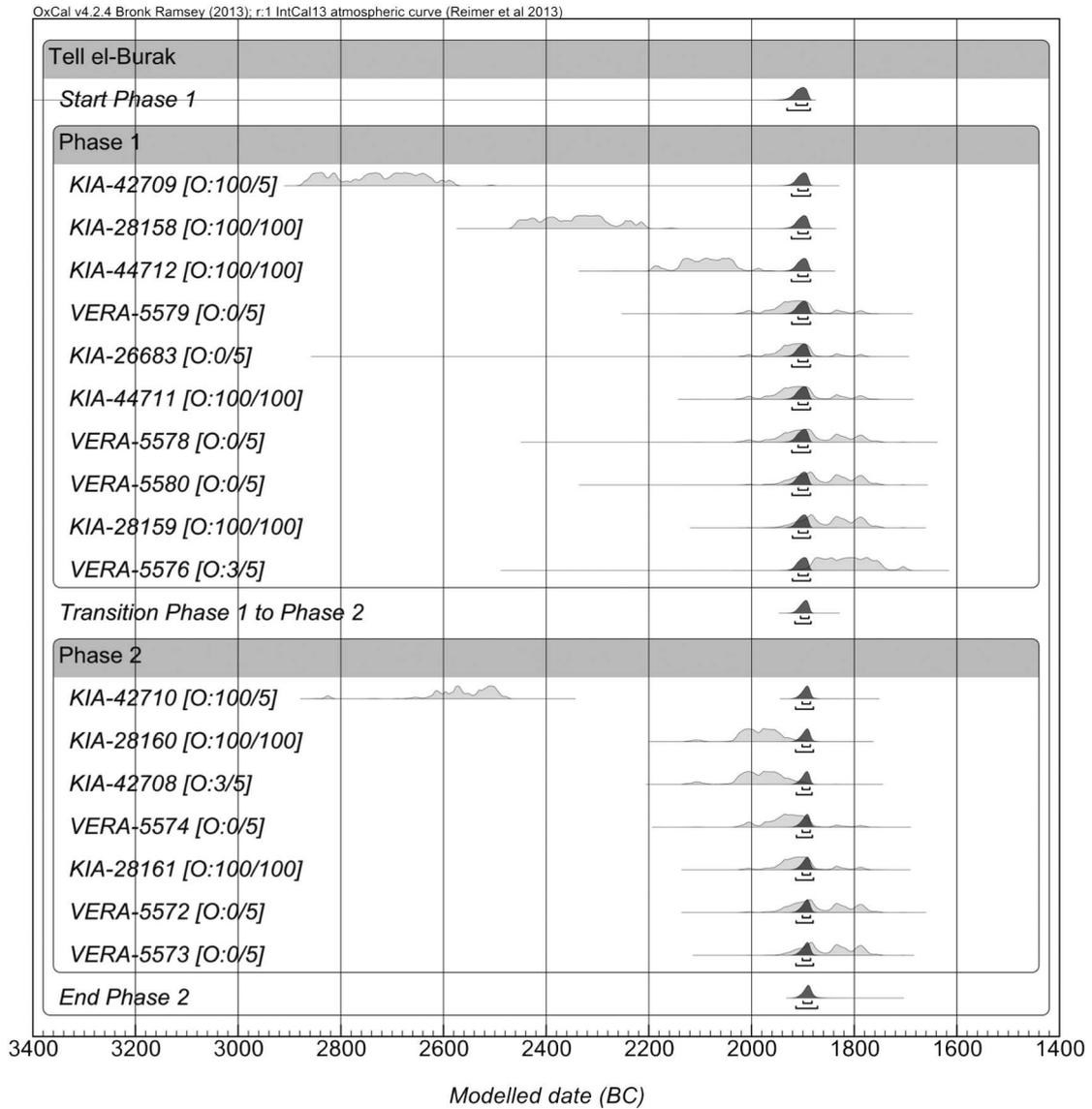


Fig. 7.92. Modeled probability ranges for each individual sample and “boundaries” based on Model B (simplified stratigraphical model).

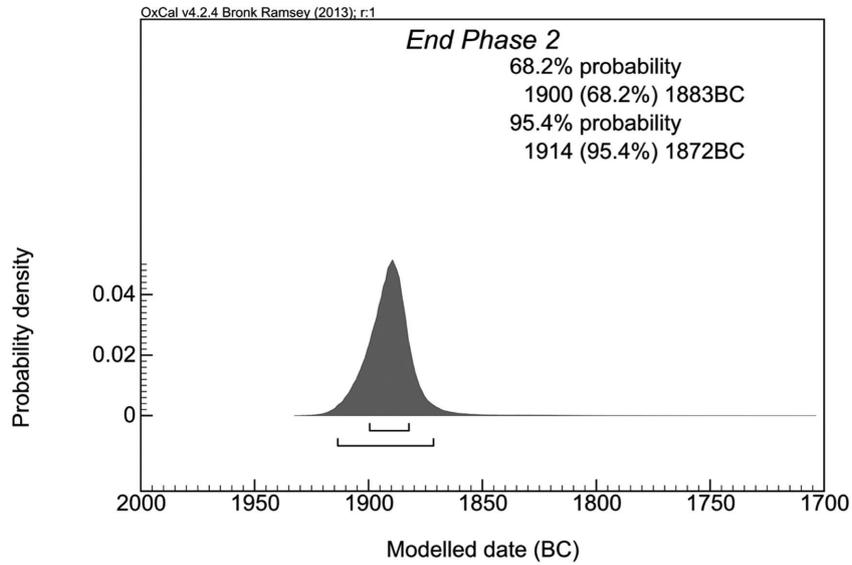


Fig. 7.93. Modeled probability distribution for the end of the Monumental Building based on Model B (simplified stratigraphical model).

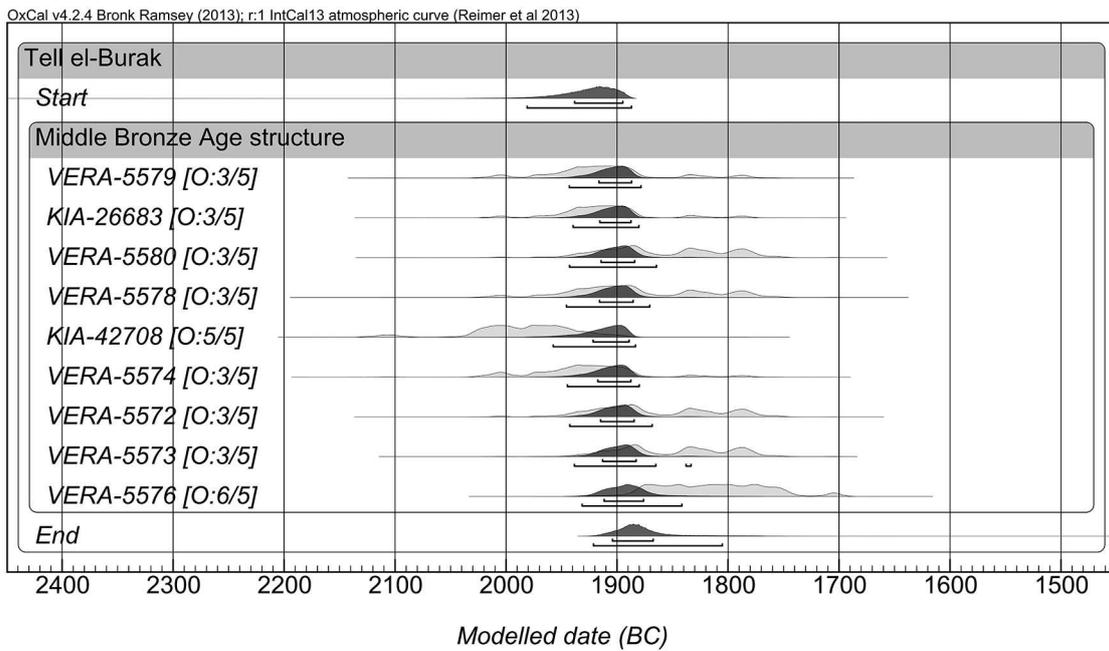


Fig. 7.94. Modeled probability ranges for each individual sample and “boundaries” based on Model C (uniform phase model).

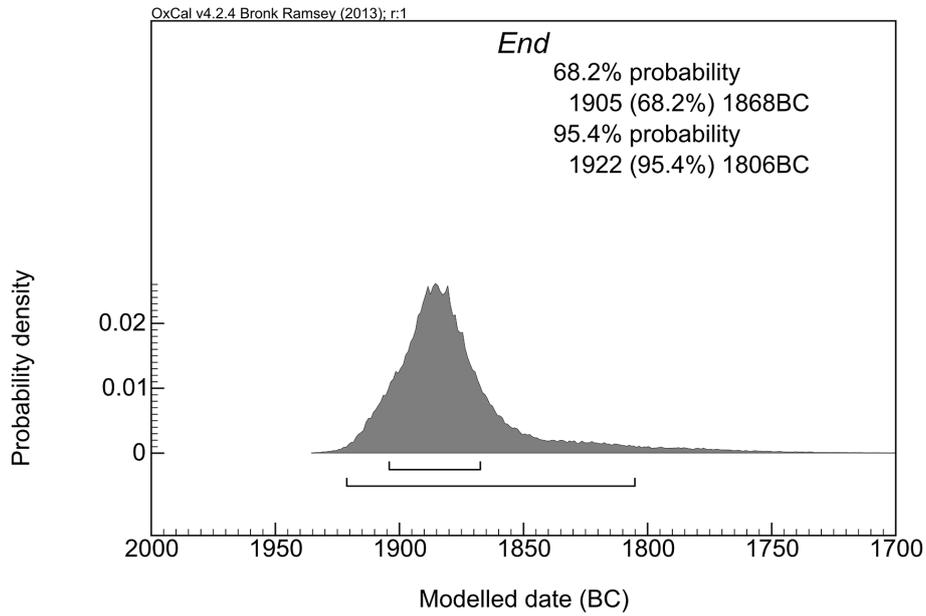


Fig. 7.95. Modeled probability distribution for the end of the Monumental Building based on Model C (uniform phase model).

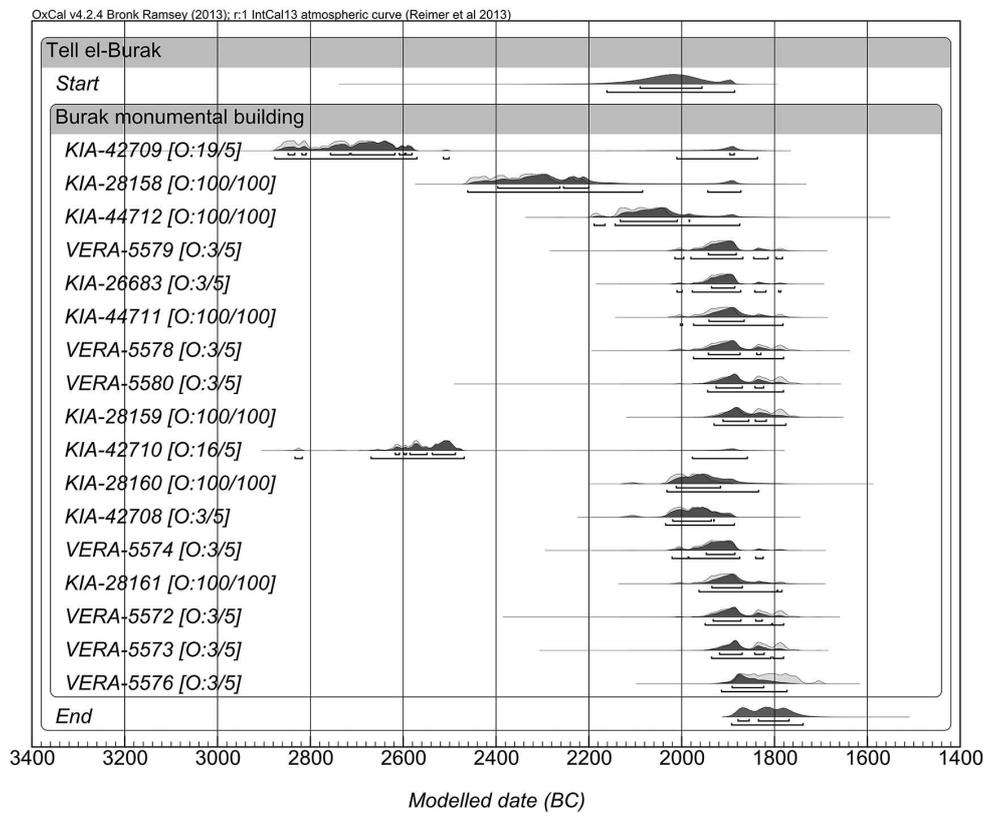


Fig. 7.96. Modeled probability ranges for each individual sample and “boundaries” based on Model D (exponential phase model).

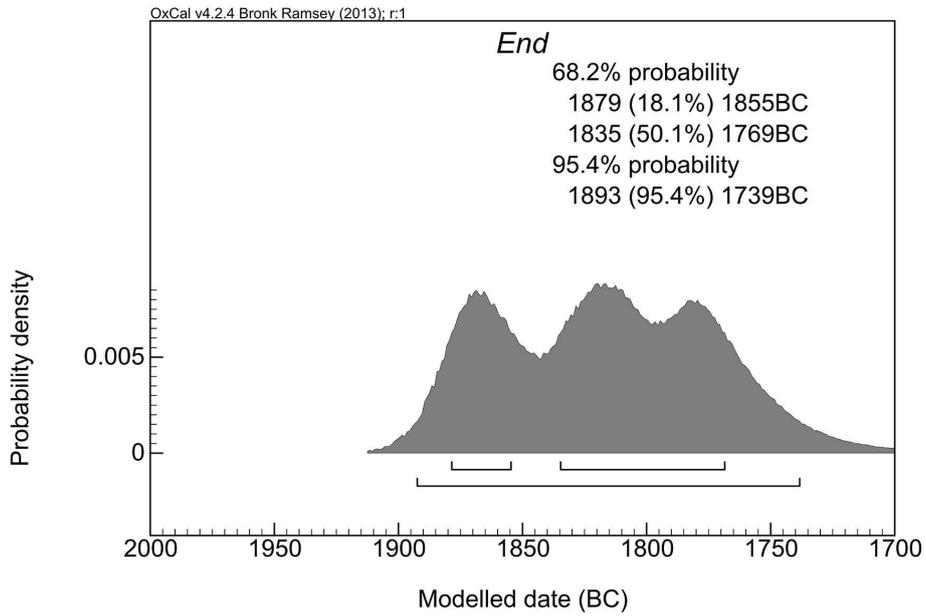


Fig. 7.97. Modeled probability distribution for the Monumental Building based on Model D (exponential phase model).

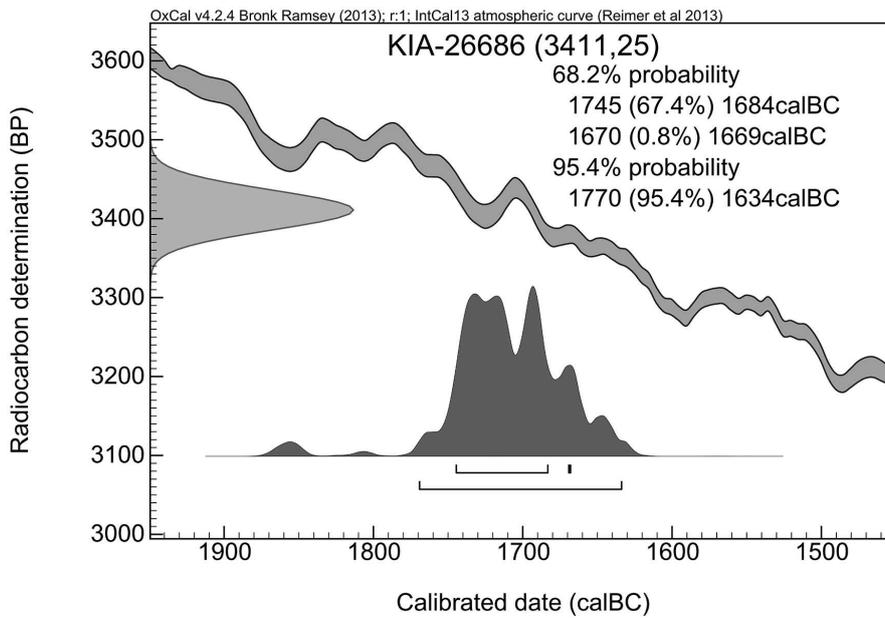


Fig. 7.98. Calibrated radiocarbon determination for charcoal sample KIA-26686 from the tomb attached to the façade of the Monumental Building (Phase 3).

Event/Phase	Laboratory references	Calibrated ¹⁴ C date ranges (B.C.E., 95.4%)	Modelled ¹⁴ C date ranges (B.C.E., 95.4% probability)			
			Individual calibrations	Model A (detailed stratigraphical model)	Model B (simplified stratigraphical model)	Model C (uniform phase model)
<i>Start Phase 1</i>			1924 – 1886	1931 – 1886	1982 – 1888	2162 – 1887
Phase 1a	KIA-42709	2872 – 2583	1922 – 1886*	1923 – 1886*	n/a	2877 – 1837
Phase 1a	KIA-28158	2462 – 2209	TPQ only	TPQ only	n/a	TPQ only
Phase 1a	VERA-5579	2020 – 1777	1922 – 1886	1922 – 1886	1944 – 1879	2015 – 1783
Phase 1a	KIA-26683	2013 – 1781	1922 – 1886	1922 – 1886	1940 – 1881	2011 – 1787
Phase 1a	KIA-44711	2018 – 1776	TPQ only	TPQ only	n/a	TPQ only
Phase 1a	VERA-5578	2011 – 1770	1922 – 1886	1922 – 1886	1946 – 1871	1975 – 1781
Phase 1a	VERA-5580	1949 – 1766	1921 – 1886	1922 – 1886	1943 – 1865	1945 – 1781
Phase 1a	KIA-28159	1937 – 1768	TPQ only	TPQ only	n/a	TPQ only
Phase 1a	VERA-5576	1893 – 1699	1921 – 1886*	1921 – 1886*	1932 – 1842*	1915 – 1774
<i>Transition Phases 1a – b</i>			1919 – 1886	n/a	n/a	n/a
<i>Transition Phases 1b – c</i>			1916 – 1885	n/a	n/a	n/a
Phase 1c	KIA-44712	2197 – 1982	TPQ only	TPQ only	n/a	TPQ only
<i>Transition Phases 1 – 2</i>			1914 – 1884	1916 – 1885	n/a	n/a
Phase 2a	KIA-28160	2112 – 1910	TPQ only	TPQ only	n/a	TPQ only
Phase 2a	KIA-42708	2115 – 1895	1913 – 1883*	1913 – 1883*	1958 – 1884*	2035 – 1887
Phase 2a	VERA-5574	2024 – 1783	1913 – 1882	1913 – 1882	1945 – 1881	2021 – 1825
Phase 2a	KIA-28161	2012 – 1778	TPQ only	TPQ only	n/a	TPQ only
Phase 2a	VERA-5572	1954 – 1768	1913 – 1882	1914 – 1881	1943 – 1869	1950 – 1781
Phase 2a	VERA-5573	1935 – 1771	1913 – 1882	1914 – 1880	1939 – 1834	1936 – 1781
<i>Transition Phases 2a – b</i>			1913 – 1880	n/a	n/a	n/a
<i>Transition Phases 2b – c</i>			1915 – 1866	n/a	n/a	n/a
Phase 2c	KIA-42710	2832 – 2475	1915 – 1860*	1915 – 1880*	n/a	2834 – 1859
<i>End Phase 2</i>			1915 – 1852	1914 – 1872	1922 – 1806	1893 – 1739

Table 7.7. Results of calibrated and modelled radiocarbon determinations from *Tell el-Burak*. Gray shaded samples come from charcoal and were modelled using the “Charcoal” outlier model, thus providing only *termini post quos* for Models A–C. An asterisk (*) indicates that the respective sample yielded a low (<60) agreement index and was down weighted accordingly not to impact the overall results. Modelled age ranges for these samples can also lie outside the individual calibrations due to their low agreement to the prior information. The ranges given are merged from the oldest to the youngest dates in the 95% probability range.

7.7.4. Discussion

The results for Models A–C are very similar. According to all of these models, the calculated start for the Monumental Building of *Tell el-Burak* falls to around 1900 B.C.E., whereas the end falls to the first half of the 19th cent. B.C.E. (for details see Table 7.7). With Model D (exponential phase model), the end-date could still fall to the 19th cent. B.C.E., although now the potential date range also includes the first half of the 18th cent. B.C.E. However, this model was only created to test the *latest possible* end-date for the Middle Bronze Age Monumental Building based on the existing dates. We regard an end-date for the Monumental Building sometime during the first half of the 19th cent. B.C.E. as most likely.

This date is considerably earlier than calendar dates conventionally proposed for the late Middle Bronze I (IIA) or transitional Middle Bronze I/II (IIA/B) period. The conventional chronology puts the transition from Middle Bronze I (IIA) to Middle Bronze II (IIB) around ca. 1750 B.C.E.³⁷⁰ whereas the low chronology dates this transition between 1710 and 1680 B.C.E.³⁷¹. However, the radiocarbon evidence for *Tell el-Burak* is in agreement with other Middle Bronze I (IIA) and II (IIB) radiocarbon data from other sites, such as *Tell eḏ-Ḍabʿa*³⁷²; *Tell el-Ifṣār*³⁷³, and *el-Kabrī*³⁷⁴, and thus challenges the current Middle Bronze Age chronological framework³⁷⁵.

From the tomb attached to the façade of the Middle Bronze Age Monumental Building, only a single charcoal sample is available that dates to ca. the second half of the 18th or the first half of the 17th cent. B.C.E. However, as this date can only be considered as a *terminus post quem* for the tomb, it cannot be used for more concise chronological conclusions. In general, the date fits to a Middle Bronze II or III attribution.

³⁷⁰ SHARON 2014.

³⁷¹ BIETAK 2002; 2012.

³⁷² KUTSCHERA *et al.* 2012.

³⁷³ MARCUS 2012.

³⁷⁴ HÖFLMAYER *et al.* 2016b.

³⁷⁵ For details cf. HÖFLMAYER 2015; HÖFLMAYER *et al.* 2016a and 2016b.

Bibliography

- ABDUL-NOUR, H./N. ZEIDAN-GÈZE/C. DOUMET-SERHAL
2009 Sidon British Museum Excavations (College Site). Shells Identification, in: *Archaeology and History in the Lebanon* 29, 16–22.
- ABU KHALAF, M.
2009 The Ottoman Pottery of Palestine, in: B.J. WALKER (*ed.*), *Reflections of Empire. Archaeological and Ethnographic Studies on the Pottery of the Ottoman Levant* (The Annual of the American Schools of Oriental Research 64; Boston), 15–21.
- ACSÁDI, G./J. NEMESKÉRI
1970 *History of Human Life Span and Mortality* (Budapest).
- ADAMS, J.L.
2002 *Ground Stone Analysis. A Technological Approach* (Salt Lake City).
- AHRENS, A.
in prep. *Aegyptiaca in der nördlichen Levante. Eine Studie zur Kontextualisierung und Rezeption ägyptischer und ägyptisierender Objekte in der Bronzezeit* (Orbis Biblicus et Orientalis. Series Archaeologica 35; Fribourg Suisse, Göttingen).
- AKKERMANS, P.M.M.G./G.M. SCHWARTZ
2003 *The Archaeology of Syria. From Complex Hunter-Gatherers to Early Urban Societies (c. 16.000–300 BC)* (Cambridge World Archaeology; Cambridge *et al.*).
- ALBRIGHT, W.F.
1938 The Excavation of Tell Beit Mirsim, II. The Bronze Age (The Annual of the American Schools of Oriental Research 17; New Haven).
- AL-SHAMMARI, K.F. *et al.*
2005 Risk Indicators for Tooth Loss Due to Periodontal Disease, in: *Journal of Periodontology* 76, 1910–1918.
- ALTENMÜLLER, H.
2001 Hunting, in: D.B. REDFORD (*ed.*), *The Oxford Encyclopedia of Ancient Egypt, II* (New York), 130–133.
- AMIET, P.
1961 *La glyptique mésopotamienne archaïque* (Paris).
- AMIRAN, R.
1969 *Ancient Pottery of the Holy Land. From Its Beginnings in the Neolithic Period to the End of the Iron Age* (Jerusalem).
- ANDERSON, P.C./M.-L. INIZAN
1994 Utilisation du tribulum au début du III^e millénaire: des lames «cananéennes» lustrées à Kután (Ninive 5) dans la région de Mossoul, Iraq, in: *Paléorient* 20/2, 85–103.
- ANDERSON, W.P.
1979 A Stratigraphic and Ceramic Analysis of the Late Bronze and Iron Age Strata of Sounding Y at Sarepta (Sarafand, Lebanon) (Ann Arbor); <http://repository.upenn.edu/dissertations/AAI7928105> (access: 09/17/2018).
1988 Sarepta, I. The Late Bronze and Iron Age Strata of Area II, Y (Publications de l'Université Libanaise. Section des Études Archéologiques 2; Beirut).
- ANDRAE, W.
1931 Kultrelief aus dem Brunnen des Assurtempels zu Assur (Wissenschaftliche Veröffentlichungen der Deutschen Orient-Gesellschaft 53; Leipzig).
- ANDRAE, W. (*ed.*)
1923 *Farbige Keramik aus Assur und ihre Vorstufen in altassyrischen Wandmalereien nach Aquarellen von Mitgliedern der Assur-Expedition und nach photographischen Aufnahmen von Originalen im Auftrag der Deutschen Orient-Gesellschaft* (Berlin).

- ARNOLD, D.
2005 Dokumentation zur Untersuchung des Bestandes und Zustandes einer mittelbronzezeitlichen Wandmalerei in Tell el-Burak, Libanon. Konservierungskonzeption und Restaurierungsmaßnahmen [unpublished].
- ARUZ, J./K. BENZEL/J.M. EVANS (ed.)
2008 Beyond Babylon. Art, Trade, and Diplomacy in the Second Millennium B.C. Catalog of an Exhibition at the Metropolitan Museum of Art, New York, November 18, 2008 – March 15, 2009 (New York, New Haven).
- ARUZ, J. *et al.* (ed.)
2003 Art of the First Cities. The Third Millennium B.C. from the Mediterranean to the Indus (New York, New Haven, London).
- ASHBY, S. P.
2002 The Role of Zooarchaeology in the Interpretation of Socioeconomic Status. A Discussion with Reference to Medieval Europe, in: *Archaeological Review from Cambridge* 18, 37–59.
- ASLANIDOU, K.
2002 Der minoische Spiralfries aus dem Grabungsareal H/IV in Tell el-Dab'a. Malvorgang und Rekonstruktion, in: *Egypt and the Levant* 12, 13–27.
- ASTON, D. A./M. BIETAK
2012 Tell el-Dab'a, VIII. The Classification and Chronology of Tell el-Yahudiya Ware. With Contributions by A. MAEIR *et al.* (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 66; Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Institutes 12; Vienna).
- AUBERIVE, C.
1861 Voyage au Mont Liban (Paris).
- AUBET, M. E. (ed.)
2004 The Phoenician Cemetery of Tyre-Al Bass. Excavations 1997–1999 (*Bulletin d'Archéologie et d'Architecture Libanaises. Hors-Série 1*; Beirut).
- AVISSAR, M.
1996 The Medieval Pottery, in: A. BEN-TOR/M. AVISSAR/Y. PORTUGALI, Yoqne'am I. The Late Periods. With Contributions by S. AGADI *et al.* (*Qedem Reports* 3; Jerusalem), 75–172.
2005 Tel Yoqne'am Excavations on the Acropolis. The Late Periods (*Israel Antiquities Authority Reports* 25; Jerusalem).
2009 Ottoman Pottery Assemblages from Excavations in Israel, in: B. J. WALKER (ed.), *Reflections of Empire. Archaeological and Ethnographic Studies on the Pottery of the Ottoman Levant* (*The Annual of the American Schools of Oriental Research* 64; Boston), 7–14.
- AVISSAR, M./E. J. STERN
2005 Pottery of the Crusader, Ayyubid, and Mamluk Periods in Israel (*Israel Antiquities Authority Reports* 26; Jerusalem).
- BAAS, J.
1980 Ein bedeutsamer botanischer Fund der Gattung *Echium* Linné aus Kāmid el-Lōz, in: R. HACHMANN *et al.*, Bericht über die Ergebnisse der Ausgrabungen in Kāmid el-Lōz in den Jahren 1968 bis 1970 (*Saarbrücker Beiträge zur Altertumskunde* 22; Bonn), 111–115.
- BADRESHANY, K.
2005 The Middle Bronze Age Pottery of Tell el-Burak [M.A. thesis, American University of Beirut; Beirut].
- BADRESHANY, K./H. GENZ
2009 Pottery Production on the Northern Lebanese Coast during the Early Bronze Age II–III. The Petrographic Analysis of the Ceramics from Tell Fadous-Kfarabida, in: *Bulletin of the American Schools of Oriental Research* 355, 51–83.
- BADRESHANY, K./H. GENZ/H. SADER
2005 An Early Bronze Age Site on the Lebanese Coast. Tell Fadous-Kfarabida 2004 and 2005. Final report. With Contributions by P. BREUER *et al.*, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 9, 5–115.

- BADRESHANY, K./J. KAMLAH
2010–11 Middle Bronze Age Pottery from Tell el-Burak, Lebanon, in: *Berytus. Archaeological Studies* 53–54, 81–113.
- BAEDEKER, K.
1910 Palästina und Syrien. Die Haupttrouten Mesopotamiens und Babyloniens und die Insel Cypern. Handbuch für Reisende, 7th edition (Leipzig).
- BAGG, A.
2007 Die Orts- und Gewässernamen der neuassyrischen Zeit, Teil 1. Die Levante (*Répertoire géographique des textes cunéiformes* 7,1; Beihefte zum Tübinger Atlas des Vorderen Orients B 7; Wiesbaden).
- BAR-ADON, P.
1980 The Cave of the Treasure. The Finds from the Caves in Naḥal Mishmar (Judean Desert Studies; Jerusalem).
- BAR-MATTHEWS, M./A. AYALON
2011 Mid-Holocene Climate Variations Revealed by High-Resolution Speleothem Records from Soreq Cave, Israel and Their Correlation with Cultural Changes, in: *The Holocene* 21, 163–171.
- BARNETT, R. D.
1976 Sculptures from the North Palace of Ashurbanipal at Nineveh (668–627 B.C.) (London).
- BARTL, K.
2013 Clay Pipes from Ottoman Beirut, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 7, 321–340.
- BASS, W. M.
1971 Human Osteology. A Laboratory and Field Manual of the Human Skeleton (Columbia).
- BECK, H. C.
1928 Classification and Nomenclature of Beads and Pendants, in: *Archaeologia. Second Series* 77, 1–76.
- BECK, P.
1989 Stone Ritual Artifacts and Statues from Areas A and H, in: Y. YADIN *et al.* 1989, 322–338.
2000a Area A: Middle Bronze IIA Pottery, in: M. KOCHAVI, Aphek-Antipatris, I. Excavation of Areas A and B. The 1972–1976 Seasons. Contributions by P. BECK *et al.* (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 19; Tel Aviv), 173–238.
2000b Area B: Pottery, in: M. KOCHAVI, Aphek-Antipatris, I: Excavation of Areas A and B. The 1972–1976 Seasons. Contributions by P. BECK *et al.* (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 19; Tel Aviv), 93–133.
- BEHRE, K. E.
1970 Kulturpflanzenreste aus Kāmid el-Lōz, in: R. HACHMANN (*ed.*), Bericht über die Ergebnisse der Ausgrabungen in Kamid el-Loz (Libanon) in den Jahren 1966 und 1967 (*Saarbrücker Beiträge zur Altertumskunde* 4; Bonn), 59–69.
- BEHRENSMEYER, A. K.
1978 Taphonomic and Ecologic Information from Bone Weathering, in: *Paleobiology* 4, 150–162.
- BELMONTE MARÍN, J. A.
2001 Die Orts- und Gewässernamen der Texte aus Syrien im 2. Jt. v. Chr. (*Répertoire géographique des textes cunéiformes* 12,2; Beihefte zum Tübinger Atlas des Vorderen Orients B 7; Wiesbaden).
- BEN-TOR, D.
2007 Scarabs, Chronology, and Interconnections. Egypt and Palestine in the Second Intermediate Period (*Orbis Biblicus et Orientalis. Series Archaeologica* 27; Fribourg Switzerland, Göttingen).
- BETTLES, E. A.
2003 Phoenician Amphora Production and Distribution in the Southern Levant. A Multi-Disciplinary Investigation into Carinated-Shoulder Amphorae of the Persian Period (539–332 BC) (*British Archaeological Reports. International Series* 1183; Oxford).

- BIETAK, M.
 2002 Relative and Absolute Chronology of the Middle Bronze Age. Comments on the Present State of Research, in: BIETAK (*ed.*) 2002, 29–42.
 2007 Bronze Age Paintings in the Levant. Chronological and Cultural Considerations, in: BIETAK/CZERNY (*ed.*) 2007, 269–300.
 2013 Antagonisms in Historical and Radiocarbon Chronology, in: A. J. SHORTLAND/C. BRONK RAMSEY (*ed.*), *Radiocarbon and the Chronologies of Ancient Egypt* (Oxford), 78–110.
- BIETAK, M./I. FORSTNER-MÜLLER
 2003 Ausgrabungen im Palastbezirk von Avaris. Vorbericht Tell el-Dab‘a/‘Ezbet Helmi Frühjahr 2003, in: *Egypt and the Levant* 13, 39–50.
- BIETAK, M./N. MARINATOS/C. PALIVOU
 2007 Taureador Scenes in Tell el-Dab‘a (Avaris) and Knossos. With a Contribution by A. BRYSBART (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 43; Untersuchungen der Zweigstelle Kairo des Österreichischen Archäologischen Institutes 27; Vienna).
- BIETAK, M. *et al.*
 2008 Synchronisation of Stratigraphies. Ashkelon and Tell el-Dab‘a, in: *Egypt and the Levant* 18, 49–60.
 2012–13 Preliminary Report of the Tell el-Dab‘a Wall Painting Project – Season 2011/2012, in: *Egypt and the Levant* 22–23, 131–147.
- BIETAK, M. (*ed.*)
 2002 The Middle Bronze Age in the Levant. Proceedings of an International Conference on MB IIA Ceramic Material. Vienna, 24th – 26th of January 2001. Spezialforschungsbereich SCIEM 2000 – „Die Synchronisierung der Hochkulturen im Östlichen Mittelmeerraum im 2. Jahrtausend v. Chr.“ der Österreichischen Akademie der Wissenschaften beim Fonds zur Förderung der Wissenschaftlichen Forschung (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 26; Contributions to the Chronology of the Eastern Mediterranean 3; Vienna).
 2003 The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C., II. Proceedings of the SCIEM 2000 – EuroConference, Haindorf, 2nd of May – 7th of May 2001 (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 29; Contributions to the Chronology of the Eastern Mediterranean 4; Vienna).
- BIETAK, M./E. CZERNY (*ed.*)
 2007 The Synchronisation of Civilisations in the Eastern Mediterranean in the Second Millennium B.C., III. Proceedings of the SCIEM 2000 – 2nd EuroConference, Vienna 28th of May – 1st of June 2003 (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 37; Contributions to the Chronology of the Eastern Mediterranean 9; Vienna).
 2008 The Bronze Age in the Lebanon. Studies on the Archaeology and Chronology of Lebanon, Syria and Egypt (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 50; Contributions to the Chronology of the Eastern Mediterranean 17; Vienna).
- BLACK, J./A. GREEN
 1992 Gods, Demons and Symbols of Ancient Mesopotamia. An Illustrated Dictionary. Illustrations by T. RICKARDS (London).
- BLACKMAN, A. M.
 1914 The Rock Tombs of Meir, I. The Tomb-Chapel of Ukh-Hotp’s Son Senbi (Archaeological Survey of Egypt. Memoir 22; London).
- BOEHMER, R. M.
 1965 Die Entwicklung der Glyptik während der Akkad-Zeit (Untersuchungen zur Assyriologie und Vorderasiatischen Archäologie 4; Berlin).
- BOESSNECK, J.
 1992 Besprechung der Tierknochen- und Molluskenreste von Hassek Höyük, in: M. R. BEHMBLANCKE (*ed.*), *Hassek Höyük. Naturwissenschaftliche Untersuchungen und lithische Industrie* (Istanbuler Forschungen 38; Tübingen), 58–74.

- BOESSNECK, J./H. H. MÜLLER/M. TEICHERT
 1964 Osteologische Unterscheidungsmerkmale zwischen Schaf (*Ovis aries* Linné) und Ziege (*Capra hircus* Linné), in: *Kühn-Archiv* 78, 1–129.
- BOFILL, M. *et al.*
 2013 Use-Wear Analysis of Near Eastern Prehistoric Grinding Stones, in: P. C. ANDERSON/C. CHEVAL/A. DURAND (*ed.*), *Regards croisés sur les outils liés au travail des végétaux. An Interdisciplinary Focus on Plant-Working Tools. Actes des 33e Rencontres Internationales d'Archéologie et d'Histoire d'Antibes*, 23–25 octobre 2012 (Antibes), 219–236.
- BOUDAGHER-FADEL, M./G. N. CLARK
 2006 Stratigraphy, Paleoenvironment and Paleogeography of Maritime Lebanon. A Key to Eastern Mediterranean Cenozoic History, in: *Stratigraphy* 3, 81–118.
- BOYD, B.
 2005 Transforming Food Practices in the Epipalaeolithic and Pre-Pottery Neolithic Levant, in: J. CLARKE (*ed.*), *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean (Levant. Supplementary Series 2; Oxford)*, 106–112.
- BRACHERT, T.
 2001 *Lexikon historischer Maltechniken. Quellen, Handwerk, Technologie, Alchemie (Veröffentlichung des Instituts für Kunsttechnik und Konservierung im Germanischen Nationalmuseum 5; Munich)*.
- BRAIDWOOD, R. J.
 1940 Report on Two Sondages on the Coast of Syria, South of Tartous, in: *Syria* 21, 183–226.
- BRAUN-HOLZINGER, E. A.
 2007 Das Herrscherbild in Mesopotamien und Elam. Spätes 4. bis frühes 2. Jt. v. Chr. (*Alter Orient und Altes Testament* 342; Münster).
- BREWER, D. J.
 2001 Ancient Egyptian Dogs, in: D. BREWER/T. CLARK/A. PHILLIPS, *Dogs in Antiquity. Anubis to Cerberus. The Origins of the Domestic Dog (Warminster)*, 28–48.
- BRONK RAMSEY, C.
 1995 Radiocarbon Calibration and Analysis of Stratigraphy. The OxCal Program, in: *Radiocarbon* 37, 425–430.
 2001 Development of the Radiocarbon Calibration Program, in: *Radiocarbon* 43, 355–363.
 2009a Bayesian Analysis of Radiocarbon Dates, in: *Radiocarbon* 51, 337–360.
 2009b Dealing with Outliers and Offsets in Radiocarbon Dating, in: *Radiocarbon* 51, 1023–1045.
- BROTHWELL, D. R.
 1981 *Digging Up Bones. The Excavation, Treatment and Study of Human Skeletal Remains (Ithaca)*.
- BRUZEK, J.
 2002 A Method for Visual Determination of Sex, Using the Human Hip Bone, in: *American Journal of Physical Anthropology* 117, 157–168.
- BRYLSBAERT, A.
 2008 *The Power of Technology in the Bronze Age Eastern Mediterranean. The Case of the Painted Plaster (Monographs in Mediterranean Archaeology 12; London et al.)*.
- BUCK, C. E. *et al.*
 1991 Combining Archaeological and Radiocarbon Information. A Bayesian Approach to Calibration, in: *Antiquity* 65, 808–821.
- BUIKSTRA, J. E./D. H. UBELAKER
 1994 Standards for Data Collection from Human Skeletal Remains. Proceedings of a Seminar at The Field Museum of Natural History (*Arkansas Archaeological Survey Research Series* 44; Fayetteville).
- BURKE, A. A.
 2008 “Walled Up to Heaven”. The Evolution of Middle Bronze Age Fortification Strategies in the Levant (*Studies in the Archaeology and History of the Levant* 4; Winona Lake).
 2014 Introduction to the Levant during the Middle Bronze Age, in: STEINER/KILLEBREW (*ed.*) 2014, 397–407.

- BUXTON, L. H. D.
1938 Platymeria and Platycnemia, in: *Journal of Anatomy* 73, 31–36.
- ÇAKIRLAR, C.
2009a Problems in Determining the Chain of Production in Shell “Objects”. Observations on Shell Assemblages from Coastal Sites in the Eastern Mediterranean, in: R. DE BEAUCLAIR/S. MÜNDEL/H. NAPIERALA (ed.), *Knochen pflastern ihren Weg. Festschrift für Margarethe und Hans-Peter Uerpmann (BioArchaeologica 5; Rahden/Westf.)*, 45–50.
2009b Mollusk Shells in Troia, Yenibademli and Ulucak. An Archaeomalacological Approach to the Environment and Economy in the Aegean (British Archaeological Reports. International Series 2051; Oxford).
- ÇAKIRLAR C./S. IKRAM/M.-H. GATES
2014 New Evidence for Fish Processing in the Ancient Eastern Mediterranean. Formalised *Epinephelus* Butchery in Fifth Century BC Kinet Höyük, Turkey, in: *International Journal of Osteoarchaeology* 26, 3–16.
- CAMPBELL, E. F.
2002 Shechem III. The Stratigraphy and Architecture of Shechem/Tell Balâṭah, I. Text. Illustrated by L. C. ELLENBERGER, Photographer and G. R. H. WRIGHT, Architect (American Schools of Oriental Research. Archaeological Reports 6; Boston).
- CAMPILLO, D.
1977 Paleopatología del cráneo en Cataluña, Valencia y Baleares (Barcelona).
- CAUVIN, M.-C.
1983 Les faucilles préhistoriques du Proche-Orient. Données morphologiques et fonctionnelles, in: *Paléorient* 9/1, 63–79.
- CHAHOUJ J./E. VILA
2011–12 The Role of Animals in Ancient Sidon. An Overview of Ongoing Zooarchaeological Studies, in: *Archaeology and History in the Lebanon* 34/35, 259–284.
- CHÉHAB, M. H.
1939 Tombe phénicienne de Sin el Fil, in: *Mélanges syriens offerts à monsieur René Dussaud, secrétaire perpétuel de l’Académie des Inscriptions et Belles-Lettres (Bibliothèque Archéologique et Historique 30; Paris)*, 803–810.
1962 Tyr à l’époque romaine. Aspects de la cité à la lumière des textes et des fouilles, in: *Mélanges de l’Université Saint-Joseph* 38, 13–40.
1970 Tyr. Histoire, topographie, fouilles (Beirut).
1975 Tyr à l’époque des Croisades, I. Histoire militaire et diplomatique. Première partie, in: *Bulletin du Musée de Beyrouth* 27, 1–208.
1983 Fouilles de Tyr. La nécropole, I. L’arc de triomphe (*Bulletin du Musée de Beyrouth* 33; Paris).
1984 Fouilles de Tyr. La nécropole, II. Description des fouilles (*Bulletin du Musée de Beyrouth* 34; Paris).
1985 Fouilles de Tyr. La nécropole, III. Description des fouilles (*Bulletin du Musée de Beyrouth* 35; Paris).
1986 Fouilles de Tyr. La nécropole, IV. Description des fouilles (*Bulletin du Musée de Beyrouth* 36; Paris).
- CLARK, T.
2001 The Dogs of the Ancient Near East, in: D. BREWER/C. TERENCE/A. PHILLIPS, *Dogs in Antiquity. Anubis to Cerberus. The Origins of the Domestic Dog (Warminster)*, 49–80.
- COHEN, S. L.
2002 Canaanites, Chronologies, and Connections. The Relationship of Middle Bronze IIA Canaan to Middle Kingdom Egypt (Studies in the Archaeology and History of the Levant 3; Winona Lake).
2014 The Southern Levant (Cisjordan) during the Middle Bronze Age, in: STEINER/KILLEBREW (ed.) 2014, 451–464.
- COLE, D. P.
1984 Shechem I. The Middle Bronze IIB Pottery (American Schools of Oriental Research. Excavation Reports; Winona Lake).

- COLLON, D.
1988 First Impressions. Cylinder Seals in the Ancient Near East (Chicago, London; reprint: 2005).
- COMMISSION ON ORAL HEALTH, RESEARCH AND EPIDEMIOLOGY
1982 An Epidemiological Index of Developmental Defects of Dental Enamel (DDE Index), in: *International Dental Journal* 32, 159–167.
- CONTENAU, G.
1920 Mission archéologique à Sidon (1914), in: *Syria* 1, 16–55.
- CORNELIUS, I./H. NIEHR
2004 Götter und Kulte in Ugarit. Kultur und Religion einer nordsyrischen Königsstadt in der Spätbronzezeit (Zaberns Bildbände zur Archäologie; Sonderbände der Antiken Welt; Mainz am Rhein).
- CRIVELLARO, A./F.H. SCHWEINGRUBER
2013 Atlas of Wood, Bark and Pith Anatomy of Eastern Mediterranean Trees and Shrubs. With a Special Focus on Cyprus. With Contributions by C. S. CHRISTODOULOU *et al.* (Heidelberg *et al.*).
- CURVERS, H.
2001–02 The Lower Town of Pre-Classical Beirut (1200–300). A Preliminary Synthesis, in: *ARAM Periodical* 13–14, 51–72.
- DAMICK, A.
2009 The Ground Stone Assemblage, in: H. GENZ *et al.*, Excavations at Tell Fadous-Kfarabida. Preliminary Report on the 2009 Season of Excavations, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 13, 71–123.
2010 The Ground Stone Assemblage, in: H. GENZ *et al.*, Excavations at Tell Fadous-Kfarabida. Preliminary Report on the 2010 Season of Excavations, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 14, 241–274.
- DECKER, W.
1987 Sport und Spiel im Alten Ägypten (Beck's Archäologische Bibliothek; Munich).
- DECKER, W./M. HERB
1994 Bildatlas zum Sport im alten Ägypten. Corpus der bildlichen Quellen zu Leibesübungen, Spiel, Jagd, Tanz und verwandten Themen (Handbuch der Orientalistik I 14,1–2; Leiden, New York, Cologne).
- DECKERS, K.
2010 Anthracological Research at the Early to Middle Bronze Age Settlement of Tell Mozan, in: K. DECKERS *et al.* (ed.), *Development of the Environment, Subsistence and Settlement of the City of Urkeš and Its Region* (Studien zur Urbanisierung Nordmesopotamiens A 3; Wiesbaden), 159–190.
2011 Wood Use in the Palace of Qatna, in: K. DECKERS (ed.), *Holocene Landscapes through Time in the Fertile Crescent* (Subartu 28; Turnhout), 157–172.
- DEFRANCE, S. D.
2009 Zooarchaeology in Complex Societies. Political Economy, Status, and Ideology, in: *Journal of Archaeological Research* 17, 105–168.
- DOKLÁDAL, M.
1970 Ergebnisse experimenteller Verbrennungen zur Feststellung von Form- und Größenveränderungen von Menschenknochen unter dem Einfluss von hohen Temperaturen, in: *Anthropologie* 8/2, 3–17.
- DOLCE, R.
1990 Les magasins et les lieux de traitement des denrées alimentaires à Ebla au III^e et au II^e millénaires, in: *Annales Archéologiques Arabes Syriennes* 40, 122–145.
- DORRELL, P. G.
1983 Stone Vessels, Tools, and Objects, in: K. M. KENYON/T. A. HOLLAND, *Excavations at Jericho, V. The Pottery Phases of the Tell and Other Finds. With Contributions by R. BURLEIGH et al.* (London), 485–575.
- DOUMAS, C.
1992 The Wall-Paintings of Thera (Athens).

- DOUMET-SERHAL, C.
 2001 Third Season of Excavation at Sidon. Preliminary Report, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 5, 153–172.
 2003 Fifth Season of Excavation at Sidon. Preliminary Report, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 7, 175–207.
 2004 Sidon (Lebanon). Twenty Middle Bronze Age Burials from the 2001 Season of Excavation, in: *Levant* 36, 89–154.
 2006 The Early Bronze Age in Sidon. “College Site” Excavations (1998 – 2000 – 2001). With Contributions from D. GRIFFITHS, E. VILA, C. YAZBECK (*Bibliothèque Archéologique et Historique* 178; Beirut).
 2008 The British Museum Excavation at Sidon. Markers for the Chronology of the Early and Middle Bronze Age in Lebanon, in: BIETAK/CZERNY (*ed.*) 2008, 11–44.
 2011–12a A Decorated Box from Sidon, in: *Archaeology and History in the Lebanon* 34–35, 93–103.
 2011–12b Tell el-Yahudieh Ware in Sidon, in: *Archaeology and History in the Lebanon* 34–35, 139–153.
- DRIESCH, A. VON DEN
 1976 A Guide to the Measurement of Animal Bones from Archaeological Sites. As Developed by the Institut für Palaeoanatomie, Domestikationsforschung und Geschichte der Tiermedizin of the University of Munich (*Peabody Museum Bulletin* 1; Cambridge, Bonn).
- DUBERTRET, L.
 1955 Carte géologique du Liban au 1/200.000^{ème} (Beirut).
 1961 Carte géologique au 50.000^{ème}. Feuille de Tyr-Nabatiyé et Naqoura-Bent Jbail (Beirut).
- DUDAY, H.
 2005 L'archéothanatologie ou l'archéologie de la mort, in: O. DUTOUR/J.-J. HUBLIN/B. VANDERMEERSCH (*ed.*), *Objets et méthodes en paléanthropologie (Orientations et Méthodes* 7; Paris), 153–215.
- DUNAND, M.
 1939 Fouilles de Byblos, I. 1926–1932. Texte (*Études et Documents d'Archéologie* 1; Paris).
 1940 Chronique, in: *Bulletin du Musée de Beyrouth* 4, 117–125.
 1950 Fouilles de Byblos, II. 1933–1938. Atlas (*Études et Documents d'Archéologie* 3; Paris).
 1973 Le temple d'Echmoun à Sidon. Essai de chronologie, in: *Bulletin du Musée de Beyrouth* 26, 7–25.
- DUNAND, M./J. CAUVIN
 1968 Fouilles de Byblos, IV. Les outillages néolithiques de Byblos et du littoral libanais (*Études et Documents d'Archéologie* 5; Paris).
- DUSSAUD, R.
 1927 Topographie historique de la Syrie antique et médiévale (*Bibliothèque Archéologique et Historique* 4; Paris).
- DZIOBEK, E.
 1992 Das Grab des Ineni. Theben Nr. 8 (*Archäologische Veröffentlichungen* 68; Mainz am Rhein).
- EBELING, J.R.
 2010 Tel Hazor Excavations. Highlights from Recent Seasons; www.bibleinterp.com/articles/hazor358002.shtml (access: 07/07/2016).
- EDER, C.
 1995 Die ägyptischen Motive in der Glyptik des östlichen Mittelmeerraumes zu Anfang des 2. Jts. v. Chr. (*Orientalia Lovaniensia Analecta* 71; Leuven).
- EINWAG, B.
 2002 The Early Middle Bronze Age in the Euphrates Valley. The Evidence from Tuttul/Tell Bi'a, in: BIETAK (*ed.*) 2002, 143–161.
- ELAYI, J.
 1982 Studies in Phoenician Geography during the Persian Period, in: *Journal of Near Eastern Studies* 41, 83–110.
 1990 Sidon, cité autonome de l'empire perse, 2nd edition (Paris).

- ELAYI, J./H. SAYEGH
 1999 Un quartier du port phénicien de Beyrouth au Fer III/Perse, I. Les objets (Transeuphratène. Supplément 6; Paris).
 2000 Un quartier du port phénicien de Beyrouth au Fer III/Perse, II. Archéologie et Histoire (Transeuphratène. Supplément 7; Paris).
- ELIAS, A.
 2007 Active Thrusting Offshore Mount Lebanon. Source of the Tsunamigenic A.D. 551 Beirut-Tripoli Earthquake, in: *Geology* 35, 755–758.
- ELIAS, A./P. TAPPONNIER
 2010 The Tyr-Nabatiyeh Plateau. A Relatively Stable Cenozoic Plateau of the Locally Inverted Lebanese Margin, in: *Geophysical Research Abstracts* 12, EGU2010-13432.
- EL-MASRI, S.
 1997–98 Medieval Pottery from Beirut's Downtown Excavations. The First Results, in: *ARAM Periodical* 9–10, 103–119.
 1999 Beirut. The City and Its Crafts in the Medieval Period [Dissertation, Freie Universität Berlin; Microfiche].
- EMERY, V.L.
 2011 Mud-Brick Architecture, in: W. WENDRICH (ed.), *UCLA Encyclopedia of Egyptology* (Los Angeles); <http://digital2.library.ucla.edu/viewItem.do?ark=21198/zz0026w9hb> (pp. 1–14; access: 05/10/2016).
- Euromed Heritage
 2002 Traditional Mediterranean Architecture. A 7: Mud Brick Walls. Mediterranean Area, in: http://www.meda-corpus.net/eng/gates/PDF/F2/A07_MED.PDF (access: 09/16/2015).
- FATHY, H.
 1972 The Arab House in the Urban Setting. Past, Present and Future. The Fourth Carreras Arab Lecture of the University of Essex, 3 November 1970 (London).
 1973 Architecture for the Poor. An Experiment in Rural Egypt (Chicago).
 1986 Natural Energy and Vernacular Architecture. Principles and Examples with Reference to Hot Arid Climates (Chicago).
- FÉDÉRATION DENTAIRE INTERNATIONALE
 1971 Two-Digit System of Designating Teeth, in: *International Dental Journal* 21, 104–106.
- FELDMAN, M.H.
 2006 Diplomacy by Design. Luxury Arts and an “International Style” in the Ancient Near East, 1400–1200 BCE (Chicago).
 2007 Frescoes, Exotica, and the Reinvention of the Northern Levantine Kingdoms during the Second Millennium B.C.E., in: M. HEINZ/M.H. FELDMAN (ed.), *Representations of Political Power. Case Histories from Times of Change and Dissolving Order in the Ancient Near East* (Winona Lake), 39–65.
- FEREMBACH, D./I. SCHWIDETZKY/M. STLOUKAL
 1980 Recommendations for Age and Sex Diagnoses of Skeletons, in: *Journal of Human Evolution* 9, 517–549.
- FINKBEINER, U.
 2001–02 BEY 020 – The Iron Age Fortification, in: *ARAM Periodical* 13–14, 27–36.
- FINKBEINER, U./H. SADER
 1997 Beirut BEY 020 – Preliminary Report of the Excavations 1995. With Contributions by I. HITZL *et al.*, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 2, 114–166.
 2001 The Tell el-Burak Archaeological Project. A Preliminary Report on the 2001 Season. With Contributions by I. GAMER-WALLERT *et al.*, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 5, 173–194.
- FISCHER, E.
 2007 Der so genannte Internationale Stil der Späten Bronzezeit. Kritische Anmerkungen zu einem kunsthistorischen Phantom, in: *Ugarit-Forschungen* 39, 803–886.
 2013 Sphingen in Ägypten und in der Levante: Variationen eines vielseitigen Motivs, in: *Altorientalische Forschungen* 40, 220–281.

- FISCHER, E./D. WICKE
 2011 Review of: FELDMAN 2006, in: *Die Welt des Orients* 41, 240–249.
- FITZGERALD, C.M./J.C. ROSE
 2008 Reading between the Lines. Dental Development and Subadult Age Assessment Using the Microstructural Growth Markers of Teeth, in: M.A. KATZENBERG/S.R. SAUNDERS (*ed.*), *Biological Anthropology of the Human Skeleton*, 2nd edition (Hoboken), 237–263.
- FORRER, E.
 1920 *Die Provinzeinteilung des assyrischen Reiches* (Leipzig).
- FOŘTOVÁ-ŠÁMALOVÁ, P./M. VILÍMKOVÁ
 1963 *Das ägyptische Ornament* (Hanau, Main).
- FREY, W./H. KÜRSCHNER
 1989 *Die Vegetation im Vorderen Orient. Erläuterungen zur Karte A VI 1 Vorderer Orient; Vegetation des "Tübinger Atlas des Vorderen Orients"* (Beihefte zum Tübinger Atlas des Vorderen Orients A 30; Wiesbaden).
- FUGMANN, E.
 1958 *Hama. Fouilles et recherches 1931–1938, II,1. L'architecture des périodes pré-hellénistiques* (Nationalmuseets Skrifter. Større Beretninger 4; Copenhagen).
- GADOT, Y./E. YADIN
 2009 *Aphek-Antipatris, II. The Remains on the Acropolis. The Moshe Kochavi and Pirhiya Beck Excavations. With Contributions by G. BACHI et al.* (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 27; Tel Aviv).
- GAMER-WALLERT, I.
 2001 A Scarab of Queen Hatshepsut (1479–1457 BC), in: FINKBEINER/SADER 2001, 190.
- GARIS DAVIES, N. DE
 1973 *The Tomb of Rekh-mi-Rē' at Thebes. Two Volumes in One* (Publications of the Metropolitan Museum of Art. Egyptian Exhibition 11; New York).
- GAUTIER, A.
 1987 Taphonomic Groups. How and Why?, in: *Archaeozoologia* 1/2, 47–51.
- GENZ, H.
 2010 Recent Excavations at Tell Fadous-Kfarabida, in: *Near Eastern Archaeology* 73, 102–113.
- GENZ, H./H. SADER
 2008 [2010] Tell Hizzin. Digging Up New Material from an Old Excavation, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 12, 183–201 [2008; published 2010].
- GENZ H. *et al.*
 2009 Excavations at Tell Fadous-Kfarabida. Preliminary Report on the 2009 Season of Excavations, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 13, 71–123.
 2010 A Middle Bronze Age Burial from Tell Fadous-Kfarabida, Lebanon, in: *Egypt and the Levant* 20, 183–205.
- GHIRSHMAN, R.
 1938 *Fouilles de Sialk près de Kashan 1933, 1934, 1937, I* (Musée du Louvre – Département des Antiquités Orientales. Série Archéologique 4; Paris).
- GOLDMAN, H.
 1956 *Excavations at Gözli Kule, Tarsus, II. From the Neolithic through the Bronze Age. With Chapters by M.J. MELLINK and I.J. GELB and an Appendix by F.R. MATSON* (Princeton).
- GOODMAN, A.H./G.J. ARMELAGOS
 1985a Factors Affecting the Distribution of Enamel Hypoplasias within the Human Permanent Dentition, in: *American Journal of Physical Anthropology* 68, 479–493.
 1985b The Chronological Distribution of Enamel Hypoplasia in Human Permanent Incisor and Canine Teeth, in: *Archives of Oral Biology* 30, 503–507.
- GOODMAN, A.H./J.C. ROSE
 1991 Dental Enamel Hypoplasia as Indicators in Nutritional Status, in: M.A. KELLEY/C.S. LARSEN (*ed.*), *Advances in Dental Anthropology* (New York), 279–293.

- GOPHNA, R./E. AYALON
 1982 A Fortified Middle Bronze Age IIA Site at 'Ain Zurekiyeh in the Poleg Basin, in: *Tel Aviv* 9, 69–78.
- GOREN, Y./I. FINKELSTEIN/N. NA'AMAN
 2004 *Inscribed in Clay. Provenance Study of the Amarna Tablets and Other Ancient Near Eastern Texts. With Contributions by M. ARTZY et al.* (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 23; Tel Aviv).
- GRANT, A.
 1982 The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates, in: B. WILSON/C. GRIGSON/S. PAYNE (ed.), *Ageing and Sexing Animal Bones from Archaeological Sites* (British Archaeological Reports. British Series 109; Oxford), 91–108.
- GRAW, M./A. CZARNETZKI/H.-T. HAFFNER
 1999 The Form of the Supraorbital Margin as a Criterion in Identification of Sex from the Skull. Investigations Based on Modern Human Skulls, in: *American Journal of Physical Anthropology* 108, 91–96.
- GRAW, M./H.-T. HAFFNER/A. CZARNETZKI
 1997 Methode zur Untersuchung des Margo supraorbitalis als Kriterium zur Geschlechtsdiagnose – Reliabilität und Validität, in: *Rechtsmedizin* 7, 121–126.
- GRAYSON, A. K./J. NOVOTNY
 2012 The Royal Inscriptions of Sennacherib, King of Assyria (704–681 BC), I (The Royal Inscriptions of the Neo-Assyrian Period 3/1; Winona Lake).
- GRESSMANN, H.
 1923 Sidon, in: W. KROLL/K. WITTE (ed.), *Paulys Real-Encyclopädie der classischen Altertumswissenschaft. Neue Bearbeitung begonnen von G. WISSOWA*, II 2 (Stuttgart), 2216–2230.
- GRIBBLE, C. D./A. J. HALL
 1993 *Optical Mineralogy. Principles and Practice* (New York).
- GRIFFITHS, D. R.
 2003 Petrographic Analysis of MBA Burial Jars from Sidon, in: *Archaeology and History in Lebanon* 17, 17–21.
 2006 The Petrography, in: *DOUMET-SERHAL 2006*, 279–290.
- GUIDOBONI, E./A. COMASTRI
 1997 The Large Earthquake of 8 August 1303 in Crete. Seismic Scenario and Tsunami in the Mediterranean Area, in: *Journal of Seismology* 1, 55–72.
- HABERMEHL, K.-H.
 1975 *Die Altersbestimmung bei Haus- und Labortieren*, 2nd edition (Berlin, Hamburg).
- HADAD, S.
 2002 The Oil Lamps from the Hebrew University Excavations at Bet Shean (Excavations at Bet Shean I; Qedem Reports 4; Jerusalem).
- HAMBLIN, W. J.
 2006 *Warfare in the Ancient Near East to 1600 BC. Holy Warriors at the Dawn of History* (Warfare and History; London, New York).
- HAMDY BEY, O./T. REINACH
 1892 *Une nécropole royale à Sidon* (Paris).
- HANGLEITER, H. M.
 1998 Erfahrungen mit flüchtigen Bindemitteln. Welche Materialien eignen sich und wie wird bei der temporären Hydrophobierung von Wandmalereien vorgegangen?, in: *Restaura* 5, 314–319.
- HARPUR, Y.
 1987 *Decoration in Egyptian Tombs of the Old Kingdom. Studies in Orientation and Scene Content* (Studies in Egyptology; London et al.).
- HAYES, J. W.
 1980 Turkish Clay Pipes. A Provisional Typology, in: P. DAVEY (ed.), *The Archaeology of the Clay Tobacco Pipe, IV. Europe 1* (British Archaeological Reports. British Series 92; Oxford), 3–10.

- HAYTAC, M. C./O. OZCELIK/A. MARIOTTI
2013 Periodontal Disease in Men, in: *Periodontology* 2000 61, 252–265.
- HEINZ, M./W. VOLLMER (*ed.*)
2010 Libanon. Treffpunkt der Kulturen. Eine archäologische Perspektive (Archäologie 1; Berlin, Münster).
- HELCK, W.
1962 Die Beziehungen Ägyptens zu Vorderasien im 3. und 2. Jahrtausend v. Chr. (Ägyptologische Abhandlungen 5; Wiesbaden).
- HELMER D./L. GOURICHON/E. VILA
2007 The Development of the Exploitation of Products from *Capra* and *Ovis* (Meat, Milk and Fleece) from the PPNB to the Early Bronze in the Northern Near East (8700 to 2000 BC cal.), in: *Anthropozoologica* 42/2, 41–69.
- HERB, M.
2005 Der Jäger der Wüste. Zur kulturgeschichtlichen Entwicklung der Jagd im alten Ägypten, in: Nikephoros. Zeitschrift für Sport und Kultur im Altertum 18, 21–37.
- HERM, C.
2005 Reports from the Labor Hochschule für Bildende Künste, Dresden [unpublished].
2009 Reports from the Labor Hochschule für Bildende Künste, Dresden [unpublished].
2010 Reports from the Labor Hochschule für Bildende Künste, Dresden [unpublished].
- HILLSON, S.
1998 Dental Anthropology, 2nd edition (New York).
- HÖFLMAYER, F.
2012 The Date of the Minoan Santorini Eruption. Quantifying the “Offset”, in: *Radiocarbon* 54, 435–448.
2015 Carbone-14 Comparé. Middle Bronze Age I (IIA) Chronology, Tell el-Dab’a and Radiocarbon Data, in: J. MYNÁŘOVÁ/P. ONDERKA/P. PAVÚK (*ed.*), There and Back Again – the Crossroads II. Proceedings of an International Conference Held in Prague, September 15–18, 2014 (Prague), 265–295.
- HÖFLMAYER, F. *et al.*
2016a New Evidence for Middle Bronze Age Chronology and Synchronisms in the Levant. Radiocarbon Dates from Tell el-Burak, Tell el-Dab’a, and Tel Ifshar Compared, in: *Bulletin of the American Schools of Oriental Research* 375, 53–76.
2016b New Radiocarbon Dates from Tel Kabri Support a High Middle Bronze Age Chronology, in: *Radiocarbon* 58, 599–613.
- HOLLAND, T.
2006 Archaeology of the Bronze Age, Hellenistic, and Roman Remains at an Ancient Town on the Euphrates River (Excavations at Tell es-Sweyhat, Syria II/1–2; The University of Chicago. Oriental Institute Publications 125/1–2; Chicago).
- HONGO, H./R. H. MEADOW
1998 Pig Exploitation at Neolithic Çayönü Tepesi (Southeastern Anatolia), in: S. M. NELSON (*ed.*), Ancestors for the Pigs. Pigs in Prehistory (MASCA Research Papers in Science and Archaeology 15; Philadelphia), 77–98.
- HONIGMANN, E.
1939 Ὀρνίθων πόλις in: W. KROLL (*ed.*), *Paulys Real-Encyclopädie der classischen Altertumswissenschaft*. Neue Bearbeitung begonnen von G. WISSOWA, I 35 (Stuttgart), 1129.
- HORWITZ, L. K.
2001 Animal offerings in the Middle Bronze Age. Food for the Gods, Food for Thought, in: *Palestine Exploration Quarterly* 133, 78–90.
- HUMPHREY, J. W.
1990 The Turkish Clay Smoking Pipes of Mytilene, in: *Society for Clay Pipe Research Newsletter* 26, 2–9.
- ILAN, D.
1992 A Middle Bronze Age Offering Deposit from Tel Dan and the Politics of Cultic Gifting, in: *Tel Aviv* 19, 247–266.

- 1995 The Dawn of Internationalism – The Middle Bronze Age, in: T. E. LEVY (*ed.*), *The Archaeology of Society in the Holy Land* (London), 297–319, 578–581.
- ILAN, D./R. S. HALLOTE/E. H. CLINE
2000 The Middle and Late Bronze Age Pottery from Area F, in: I. FINKELSTEIN/D. USSISHKIN/B. HALPERN (*ed.*), *Megiddo III. The 1992–1996 Seasons* (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 18; Tel Aviv), 186–222.
- IMMERWAHR, S. A.
1990 *Aegean Painting in the Bronze Age* (London *et al.*).
- INSTITUT DU MONDE ARABE
1998 *Liban l'autre rive. Exposition présentée à l'Institut du Monde Arabe du 27 octobre 1998 au 2 mai 1999* (Paris).
- JAMES, T. G. H.
2000 *Tutankhamun. The Eternal Splendour of the Boy Pharaoh* (London, New York).
- JIDEJIAN, N.
1971 *Byblos through the Ages*, 2nd edition (Beirut).
- KALLAS, N.
2010 Stratigraphic Study of Area I – Northwest at Tell el-Burak, South Lebanon. Squares 29/27, 29/28, 30/27 and 30/28 [MA thesis, Department of History and Archaeology, American University of Beirut; Beirut].
- KAMEL, D.
2005 The Middle Bronze Age Burials of Tell el-Burak [MA thesis, Department of History and Archaeology, American University of Beirut; Beirut].
- KAMLAH, J.
2016 Südlich von Sidon. Forschungen zu regionalen Ressourcen einer phönizischen Hafenmetropole, in: *Antike Welt* 47/4, 40–48.
- KAMLAH, J./H. SADER
2003 The Tell el-Burak Archaeological Project. Preliminary Report on the 2002 and 2003 Seasons, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 7, 145–173.
2004 Deutsch-libanesische Ausgrabungen auf *Tell el-Burak*, südlich von Sidon. Vorbericht nach Abschluß der dritten Kampagne 2003, in: *Zeitschrift des Deutschen Palästina-Vereins* 120, 123–140.
2008 [2010] The Tell el-Burak Archaeological Project. Preliminary Report on the 2005, 2008 and 2009 Seasons, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 12, 17–34 [2008; published 2010].
2010a Tell el-Burak. A New Middle Bronze Age Site from Lebanon, in: *Near Eastern Archaeology* 73, 130–141.
2010b Deutsch-libanesische Ausgrabungen auf *Tell el-Burak* südlich von Sidon. Vorbericht nach Abschluss der siebten Kampagne 2010, in: *Zeitschrift des Deutschen Palästina-Vereins* 126, 93–115.
- KAMLAH, J./H. SADER/A. SCHMITT
2016 The Tell el-Burak Archaeological Project. Preliminary Report on the 2011, 2013 and 2014 Seasons in Area 3. With Contributions by M. NEUMANN and A. ORENDI, in: *Bulletin d'Archéologie et d'Architecture Libanaises* 16, 79–130.
- KANAWATI, N.
1980 *The Rock Tombs of El-Hawawish. The Cemetery of Akhmim, I* (Sydney).
- KANAWATI, N./M. ABDER-RAZIQ
2011 Mereruka and His Family III, 2. The Tomb of Mereruka (The Australian Centre for Egyptology. Reports 30; London).
- KANAWATI, N./A. WOODS
2010 *Beni Hassan. Art and Daily Life in an Egyptian Province* (Cairo).
- KANTOR, H. J.
1958 The Glyptic, in: C. W. MCEWAN *et al.*, *Soundings at Tell Fakhariyah* (The University of Chicago. Oriental Institute Publications 79; Chicago), 69–85.
- KAREEM, J. M. H.
2000 *The Settlement Patterns in the Jordan Valley in the Mid- to Late Islamic Period* (British Archaeological Reports. International Series 877; Oxford).

- KEATING, J.F./R.S. KUO/C.M. COURT-BROWN
 1994 Bifocal Fractures of the Tibia and Fibula. Incidence, Classification and Treatment, in: *Journal of Bone and Joint Surgery*. British Volume 76, 395–400.
- KEEL, O.
 1995 *Corpus der Stempelsiegel-Amulette aus Palästina/Israel. Von den Anfängen bis zur Perserzeit. Einleitung* (Orbis Biblicus et Orientalis. Series Archaeologica 10; Freiburg Switzerland, Göttingen).
 1998 *Goddesses and Trees, New Moon and Yahweh. Ancient Near Eastern Art and the Hebrew Bible* (Journal for the Study of the Old Testament. Supplement Series 261; Sheffield).
 2013 *Corpus der Stempelsiegel-Amulette aus Palästina/Israel. Von den Anfängen bis zur Perserzeit, Katalogband IV. Von Tel Gamma bis Chirbet Husche. Unter Mitarbeit von D. BEN-SHLOMO et al. Mit Beiträgen von B. BRANDL, D. BEN-TOR und L. PAJAROLA* (Orbis Biblicus et Orientalis. Series Archaeologica 33; Fribourg Switzerland, Göttingen).
- KEEL, O./C. UEHLINGER
 1998 *Göttinnen, Götter und Gottessymbole. Neue Erkenntnisse zur Religionsgeschichte Kanaans und Israels aufgrund bislang unerschlossener ikonographischer Quellen*, 4th edition (Quaestiones Disputatae 134; Freiburg, Basel, Vienna).
- KEMPINSKI, A.
 1983 *Syrien und Palästina (Kanaan) in der letzten Phase der Mittelbronze IIB-Zeit (1650–1570 v. Chr.)* (Ägypten und Altes Testament 4; Wiesbaden).
 2002 *Tel Kabri. The 1986–1993 Excavation Seasons. Contributions by N. ANGEL-ZOHAR et al.* (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 20; Tel Aviv).
- KEMPINSKI, A./R. REICH (ed.)
 1992 *The Architecture of Ancient Israel from the Prehistoric to the Persian Periods. In Memory of Immanuel (Munya) Dunayevsky* (Jerusalem).
- KENOYER, J.M.
 2001 *Bead Technologies at Harappa, 3300–1900 BC. A Comparative Summary*, in: M. TADDEI/G. DE MARCO (ed.), *South Asian Archaeology 1997. Proceedings of the Fourteenth International Conference of the European Association of South Asian Archaeologists, Held in the Istituto Italiano per l’Africa e l’Oriente, Palazzo Brancaccio, Rome, 7–14 July 1997, I* (Serie Orientale Roma 90/1; Rome), 157–170.
- KENYON, K.M.
 1960 *Excavations at Jericho, I. The Tombs Excavated in 1952–4. With Contributions by E. CROWFOOT et al.* (London).
 1981 *Excavations at Jericho, III. The Architecture and Stratigraphy of the Tell. With Contributions by R. BURLEIGH et al.* (London).
- KENYON, K.M./T.A. HOLLAND
 1983 *Excavations at Jericho, V. The Pottery Phases of the Tell and Other Finds. With Contributions by R. BURLEIGH et al.* (London).
- KEPINSKI-LECOMTE, C.
 1982 *L’arbre stylisé en Asie occidentale au 2^e millénaire avant J.-C., I–III* (Bibliothèque de la Délégation Archéologique Française en Iraq 1; Recherche sur les Civilisations 7; Travaux du Centre de Recherche d’Archéologie Orientale – Université de Paris I – 1; Paris).
 1992 *Haradum I. Une ville nouvelle sur le Moyen-Euphrate (XVIII^e–XVII^e siècles av. J.-C.)* (Paris).
- KLENGEL, H.
 1992 *Syria. 3000 to 300 B.C. A Handbook of Political History* (Berlin).
- KNOEPFLI, A./O. EMMENEGGER
 1990 *Wandmalerei bis zum Ende des Mittelalters*, in: A. KNOEPFLI et al. (ed.), *Wandmalerei, Mosaik* (Reclams Handbuch der künstlerischen Techniken II; Stuttgart), 7–212.
- KOCHAVI, M./E. YADIN
 2002 *Typological Analysis of the MB IIA Pottery from Aphek according to Its Stratigraphic Provenance*, in: BIETAK (ed.) 2002, 189–225.

- KOPETZKY, K.
2008 The MB IIB-Corpus of the Hyksos Period at Tell el-Dab'a, in: BIETAK/CZERNY (ed.) 2008, 195–241.
- KOZLOFF, A. P./B. M. BRYAN/L. M. BERMAN
1992 Egypt's Dazzling Sun. Amenhotep III and His World (Cleveland).
- KROGMAN, W. M./M. Y. IŞCAN
1986 The Human Skeleton in Forensic Medicine, 2nd edition (Springfield).
- KÜHNE, H./B. SALJE
1996 Kāmid el-Lōz, XV. Die Glyptik (Saarbrücker Beiträge zur Altertumskunde 56; Bonn).
- KUTSCHERA, W. *et al.*
2012 The Chronology of Tell El-Daba. A Crucial Meeting Point of 14C Dating, Archaeology, and Egyptology in the 2nd Millennium BC, in: Radiocarbon 54, 407–422.
- LANE, A.
1957 The Ottoman Pottery of Iznik, in: *Ars Orientalis* 2, 247–281.
- LANGE, S.
2010 Die Mittelbronzezeit (ca. 2000–1600 v. Chr.), in: HEINZ/VOLLMER (ed.) 2010, 43–50.
- LANGSDORFF, A./D. E. MCCOWN
1942 Tall-i-Bakun A. Season of 1932 (The University of Chicago. Oriental Institute Publications 59; Chicago).
- LARSEN, M. T.
2008 The Old Assyrian Merchant Colonies, in: ARUZ/BENZEL/EVANS (ed.) 2008, 70–81.
- LAUE, S.
2005 Reports on Plaster Analysis from Tell el-Burak, Lebanon [unpublished].
2008 Reports on Plaster Analysis from Tell el-Burak, Lebanon [unpublished].
2009 Reports on Plaster Analysis from Tell el-Burak, Lebanon [unpublished].
2010 Reports on Plaster Analysis from Tell el-Burak, Lebanon [unpublished].
- LEICHTY, E.
2011 The Royal Inscriptions of Esarhaddon, King of Assyria (680–669 BC). With a Contribution by G. FRAME (The Royal Inscriptions of the Neo-Assyrian Period IV; Winona Lake).
- LEPSIUS, R.
1849 Denkmäler aus Ägypten und Äthiopien. Nach den Zeichnungen der von seiner Majestät dem Könige von Preussen Friedrich Wilhelm IV nach diesen Ländern gesendeten und in den Jahren 1842–1845 ausgeführten wissenschaftlichen Expedition. Auf Befehl seiner Majestät herausgegeben und erläutert (Berlin).
- LERNAU, O.
2002 Fish Bones, in: KEMPINSKI 2002, 409–427.
- LEV-TOV, N./A. GOPHER/P. SMITH
2003 Dental Evidence for Dietary Practices in the Chalcolithic Period. The Findings from a Burial Cave in Peqi'in (Northern Israel), in: *Paléorient* 29/1, 121–134.
- LIEBOWITZ, H. A.
1977 Bone and Ivory Inlay from Syria and Palestine, in: *Israel Exploration Journal* 27, 89–97.
- LINGEN, B. VAN DER
2003 Smoking in the Ottoman Empire and an Introduction to the Clay Tobacco Pipes from the Beirut Souks Excavations, in: *Berytus. Archaeological Studies* 47, 129–142.
- LIPHSCHITZ, N.
2007 Timber in Ancient Israel. Dendroarchaeology and Dendrochronology (Tel Aviv University. Sonia and Marco Nadler Institute of Archaeology. Monograph Series 26; Tel Aviv).
- LITT, T. *et al.*
2009 'PALEOVAN', International Continental Scientific Drilling Program (ICDP). Site Survey Results and Perspectives, in: *Quaternary Science Reviews* 28, 1555–1567.
- LITTAUER, M. A./J. H. CROUWEL
1985 Chariots and Related Equipment from the Tomb of Tut'ankhamūn (Tut'ankhamūn's Tomb Series 8; Oxford).

- LOFFET, H.
2011–12 The Sidon Scarabs, in: *Archaeology and History of the Lebanon* 34–35, 104–138.
- LONDON, G.
2016 *Ancient Cookware from the Levant. An Ethnoarchaeological Perspective (Worlds of the Ancient Near East and Mediterranean; Sheffield, Bristol)*.
- LOON, M.N. VAN
1980 *Korucutepe. Final Report on the Excavations of the Universities of Chicago, California (Los Angeles) and Amsterdam in the Keban Reservoir, Eastern Anatolia, 1968–1970, III (Amsterdam)*.
- LOUD, G.
1948 *Megiddo II. Seasons of 1935–39 (The University of Chicago. Oriental Institute Publications 62; Chicago)*.
- LOVEJOY, C.O./A.H. BURSTEIN/K.G. HEIPLE
1976 The Biomechanical Analysis of Bone Strength. A Method and Its Application to Platycnemia, in: *American Journal of Physical Anthropology* 44, 489–505.
- MAEIR, A.M.
2010 “In the Midst of the Jordan”. The Jordan Valley during the Middle Bronze Age (circa 2000–1500 BCE). *Archaeological and Historical Correlates. With a Contribution by E.S. MARCUS (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtkademie 64; Contributions to the Chronology of the Eastern Mediterranean 26; Vienna)*.
- MAINBERGER, M.
2001 The “Seven Captains” Reef – An Archaeological Under Water Survey off the Coast of Tell el-Burak, in: FINKBEINER/SADER 2001, 191–193.
- MANNICHE, L.
1989 *An Ancient Egyptian Herbal (Austin)*.
- MARCHETTI, N.
1998 L’Area A. Le Fortificazioni e l’insediamento del Bronzo Medio II–III, in: N. MARCHETTI/L. NIGRO (*ed.*), *Scavi a Gerico, 1997. Relazione preliminare sulla prima campagna di scavi e prospezioni archeologiche a Tell es-Sultan, Palestina (Quaderni di Gerico 1; Rome)*, 117–197.
- MARCUS, E.S.
2012 Correlating and Combining Egyptian Historical and Southern Levantine Radiocarbon Chronologies at Middle Bronze Age IIA Tel Ifshar, Israel, in: A.J. SHORTLAND/C. BRONK RAMSEY (*ed.*), *Radiocarbon and the Chronologies of Ancient Egypt (Oxford)*, 182–208.
- MARCUS, E.S./Y. PORATH/S.M. PALEY
2008 The Early Middle Bronze Age IIA Phases at Tel Ifshar and Their External Relations, in: *Egypt and the Levant* 18, 221–244.
- MARCUS, E.S. *et al.*
2008 The Middle Kingdom Egyptian Pottery from Middle Bronze Age IIA Tel Ifshar, in: *Egypt and the Levant* 18, 203–219.
- MARGUERON, J.-C.
2004 *Mari. Métropole de l’Euphrate au IIIe et au début du IIe millénaire av. J.-C. (Paris)*.
- MARIETTE, A./G. MASPERO
1872 *Monuments divers recueillis en Égypte et en Nubie (Paris)*.
- MARINATOS, N./L. MORGAN
2005 The Dog Pursuit Scenes from Tell el-Dab‘a and Kea, in: MORGAN (*ed.*) 2005, 119–122.
- MARKOE, G.
2000 *Phoenicians (Peoples of the Past; London)*.
- MAROM, N./G. BAR-OZ/S. MÜNGER
2006 A New Incised Scapula from Tel Kinrot, in: *Near Eastern Archaeology* 69, 37–40.
- MARRINER, N./J.-L. DE BEAULIEU/C. MORHANGE
2004 Note on the Vegetation Landscapes of Sidon and Tyre during Antiquity, in: *Archaeology and History in Lebanon* 19, 86–91.

- MARSTON, J. M.
2009 Modeling Wood Acquisition Strategies from Archaeological Charcoal Remains, in: *Journal of Archaeological Science* 36, 2192–2200.
- MARTIN, R./K. SALLER
1957 *Lehrbuch der Anthropologie in systematischer Darstellung mit besonderer Berücksichtigung der anthropologischen Methoden. Begründet von R. MARTIN. Dritte, völlig umgearbeitete und erweiterte Auflage von K. SALLER* (Stuttgart).
- MATTHIAE, G. S.
1997 The Relations between Ebla and Egypt, in: OREN (*ed.*) 1997, 415–427.
- MATTHIAE, P.
1970 Mission archéologique de l'Université de Rome à Tell Mardikh. Rapport sommaire sur la quatrième et la cinquième campagnes, 1967 et 1968, in: *Annales Archéologiques Arabes Syriennes* 20, 55–72.
1985 *I tesori di Ebla, 2nd edition* (Grandi opere; Rome, Bari).
1989 *Ebla. Un impero ritrovato. Dai primi scavi alle ultime scoperte* (Saggi 719; Turin).
2013 North-Western Syria in the Old Syrian Period. Stratigraphy and Architecture, in: W. ORTHMANN/M. AL-MAQDISSI/P. MATTHIAE (*ed.*) 2013, 283–307.
- MATTHIAE, P./F. PINNOCK/G. SCANDONE MATTHIAE (*ed.*)
1995 *Ebla. Alle origini della civiltà urbana. Trent'anni di scavi in Siria dell'Università di Roma "La Sapienza"* (Milan).
- MAYER, L. A.
1934 A Hoard of Mamluk Coins, in: *The Quarterly of the Department of Antiquities in Palestine* 3, 167–171.
- MEHLMANN, M.
1993 Bestimmung von chemisch-mineralogischen Kennwerten sowie Untersuchungsmethoden, in: D. KNÖFEL/P. SCHUBERT (*ed.*), *Handbuch Mörtel und Steinerfüllstoffe in der Denkmalpflege* (Publikationsreihe der BMFT-Verbundforschung zur Denkmalpflege. Sonderheft; Berlin), 39–53.
- MERLUZZI, E.
2000 Basalt Tools at Ebla. An Example of "Ground Stone" Industry in a Central Syria Site of the Bronze Age Period, in: P. MATTHIAE *et al.* (*ed.*), *Proceedings of the First International Congress on the Archaeology of the Ancient Near East, Rome, May 18th–23rd 1998* (Rome), 1097–1115.
2003 Ground Stone Artifacts from Ebla and Tell Afis. A Preliminary Analysis of the Cutting and Percussion Tools, in: *Berytus. Archaeological Studies* 47, 29–61.
- METZGER, M.
2004 *Vorderorientalische Ikonographie und Altes Testament. Gesammelte Aufsätze. Herausgegeben von M. PIETSCH und W. ZWICKEL* (Jerusalem Theologisches Forum 6; Münster).
- MEUSZYŃSKI, J.
1981 Die Rekonstruktion der Relieffdarstellungen und ihrer Anordnung im Nordwestpalast von Kalḫu (Nimrūd) (Räume B.C.D.E.F.G.H.L.N.P) (Baghdader Forschungen 2; Mainz am Rhein).
- MEYER, J.-W.
2013 Die mittlere Bronzezeit am Euphrat und in der westlichen Ġezīra, in: W. ORTHMANN/M. AL-MAQDISSI/P. MATTHIAE (*ed.*) 2013, 273–282.
- MIENIS, H. K.
2003 Molluscs from the Excavation of Tell Kabri (With an Appendix Dealing with Crustaceans Found at that Site), in: *Triton* 7, 28–37.
- MILWRIGHT, M.
2000 Pottery of Bilad al-Sham in the Ottoman Period. A Review of the Published Archaeological Evidence, in: *Levant* 32, 189–208.

- MLINAR, C.
2004 The Scarab Workshops of Tell el-Dab'a, in: M. BIETAK/E. CZERNY (*ed.*), *Scarabs of the Second Millennium BC from Egypt, Nubia, Crete and the Levant. Chronological and Historical Implications. Papers of a Symposium, Vienna, 10th–13th of January 2002* (Österreichische Akademie der Wissenschaften. Denkschriften der Gesamtakademie 35; Vienna), 107–140.
- MOHR, H. T.
1943 The Mastaba of Hetep-Her-Akhti. Study on an Egyptian Tomb Chapel in the Museum of Antiquities Leiden (Vooraziatisch-Egyptisch Gezelschap "Ex Oriente Lux". Mededeelingen en Verhandelingen 5; Leiden).
- MOORREES, C. F. A./E. A. FANNING/E. E. HUNT
1963a Formation and Resorption of Three Deciduous Teeth in Children, in: *American Journal of Physical Anthropology* 21, 205–213.
1963b Age Variation of Formation Stages for Ten Permanent Teeth, in: *Journal of Dental Research* 42, 1490–1502.
- MORA, P./L. MORA/P. PHILIPPOT
1984 Conservation of Wall Paintings (Butterworth Series in Conservation and Museology; London).
- MORANDI-BONACOSSO, D.
2014 The Northern Levant (Syria) during the Middle Bronze Age, in: M. L. STEINER/A. E. KILLEBREW (*ed.*) 2014, 414–433.
- MORENO GARCÍA, J. C.
2017 Trade and Power in Ancient Egypt. Middle Egypt in the Late Third/Early Second Millennium BC, in: *Journal of Archaeological Research* 25, 87–132.
- MORGAN, L.
1995 Minoan Painting and Egypt. The Case of Tell el-Dab'a, in: W. V. DAVIES/L. SCHOFIELD (*ed.*), *Egypt, the Aegean and the Levant. Interconnections in the Second Millennium BC* (London), 29–53.
2006 Art and International Relations. The Hunt Frieze at Tell el-Dab'a, in: E. CZERNY/M. BIETAK (*ed.*), *Timelines. Studies in Honour of Manfred Bietak, II* (Orientalia Lovaniensia Analecta 149/2; Leuven, Paris), 249–258.
- MORGAN, L. (*ed.*)
2005 *Aegean Wall Painting. A Tribute to Mark Cameron* (British School at Athens Studies 13; London).
- MOULINS, D. DE
2015 Plant Remains from the Middle Bronze Age to Iron Age. Samples of the College Site, Sidon, in: *Archaeology and History in Lebanon*, 42–43, 32–54.
- MOULINS, D. DE/A. MARSH
2011–12 Sidon. Plant Remains from the Middle Bronze Age, in: *Archaeology and History in Lebanon* 34–35, 236–258.
- MOUSSA, A. M./H. ALTENMÜLLER
1977 Das Grab des Nianchchnum und Chnumhotep (Archäologische Veröffentlichungen 21; Mainz am Rhein).
- MÜLLER-KARPE, A.
2003 Remarks on Central Anatolian Chronology of the Middle Hittite Period, in: M. BIETAK (*ed.*) 2003, 383–394.
- MURPHY, T.
1959 Gradients of Dentine Exposure in Human Molar Tooth Attrition, in: *American Journal of Physical Anthropology* 17, 179–186.
- MUSEUM OF FINE ARTS, BOSTON
1982 *Egypt's Golden Age. The Art of Living in the New Kingdom, 1558–1085 B.C.* (Boston).
- NEER, W. VAN
2006 Bronze Age Fish Remains from Sidon, in: *Archaeology and History in the Lebanon* 24, 86–95.
- NEER W. VAN/I. ZOHAR/O. LERNAU
2005 The Emergence of Fishing Communities in the Eastern Mediterranean Region. A Survey of Evidence from Pre- and Protohistoric Periods, in: *Paléorient* 31/1, 131–157.

- NEWBERRY, P. E.
1893 Beni Hasan, I (Archaeological Survey of Egypt. Memoir 1; London).
- NICHOLSON, P. T./I. SHAW (*ed.*)
2000 Ancient Egyptian Materials and Technology (Cambridge).
- NICOLAKAKI-KENTROU, M.
2000 Amenhotep III and the Aegean. New Evidence on Intimacy. The Painted Plaster Fragments from Site K at Malkata (Cat. No. 286–288), in: A. KARETSOU (*ed.*), Κρήτη – Αἴγυπτος. Πολιτισμικοί δεσμοί τριῶν χιλιετιῶν (Athens), 47–51.
2003 Malkata, Site K. The Aegean-Related Motifs in the Painted Decoration of a Demolished Building of Amenhotep III, in: Z. HAWASS (*ed.*), Egyptology at the Dawn of the Twenty-First Century, I. Archaeology. Proceedings of the Eighth International Congress of Egyptologists, Cairo, 2000 (Cairo, New York), 352–360.
- NIEHR, H.
2009 Vielfalt der Götter – Syriens Religionen, in: LANDESMUSEUM WÜRTTEMBERG, STUTTGART (*ed.*) 2009, 74–79.
- NIEMEIER, B./W.-D. NIEMEIER
2000 Aegean Frescoes in Syria-Palestine. Alalakh and Tel Kabri, in: S. SHERRATT (*ed.*), Proceedings of the First International Symposium “The Wall Paintings of Thera”, Thera, 30 August – 4 September 1997 (Athens), 763–802.
2002 The Frescoes in the Middle Bronze Age Palace, in: KEMPINSKI 2002, 254–298.
- NIGRO, L.
1994 [1995] Ricerche sull’architettura palaziale della Palestina nelle Età del Bronzo e del Ferro. Contesto Archeologico e sviluppo storico (Contributi e materiali di archeologia orientale 5; Rome) [1994; published 1995].
2002 The Middle Bronze Age Pottery Horizon of Northern Inner Syria on the Basis of the Stratified Assemblages of Tell Mardikh and Hama, in: M. AL-MAQDISSI/V. MATOÏAN/C. NICOLLE (*ed.*), Céramique de l’âge du Bronze en Syrie, I. La Syrie sud et la vallée de l’Oronte (Bibliothèque Archéologique et Historique 161; Beirut), 97–128.
2007 Towards a Unified Chronology of Syria and Palestine. The Beginning of the Middle Bronze Age, in: P. MATTHIAE *et al.* (*ed.*), Proceedings of the International Colloquium From Relative Chronology to Absolute Chronology. The Second Millennium BC in Syria-Palestine, Rome (29th November – 1st December 2001) (Contributi del Centro Linceo Interdisciplinare Beniamino Segre 117; Rome), 365–389.
- NURPETLIAN, J./H. SADER
2014 An Eclectic Collection of Bronze Coins from Tell el-Burak, Lebanon, in: A. LEMAIRE (*ed.*), Phéniciens d’Orient et d’Occident. Mélanges Josette Elayi (Cahiers de l’Institut du Proche-Orient Ancien du Collège de France 2; Paris), 233–242.
- OGDEN, A.
2004a Sidon, Burial 27. Skeletal Report, in: Archaeology and History in the Lebanon 20, 30.
2004b Burials Excavated at Sidon, 2001–2003, in: Archaeology and History in the Lebanon 20, 58–59.
- OGDEN, A./H. SCHUTKOWSKI
2004 Human Remains from Middle Bronze Age Burials at Sidon, Lebanon. The 2001 Season, in: Levant 36, 159–166.
- OGDEN, A. *et al.*
2011 Human Remains from Twelve Years of Excavation in Sidon, Lebanon, in: Archaeology and History in the Lebanon 34–35, 226–235.
- OREN, E. D.
1992 Palaces and Patrician Houses in the Middle and Late Bronze Ages, in: KEMPINSKI/REICH (*ed.*) 1992, 105–120.
- OREN, E. D. (*ed.*)
1997 The Hyksos. New Historical and Archaeological Perspectives (The University of Pennsylvania. University Museum Monograph 96; University Museum Symposium Series 8; Philadelphia).

- ORENDI, A./K. DECKERS
2018 Agricultural Resources on the Coastal Plain of Sidon during the Late Iron Age. Archaeobotanical Investigations at Phoenician Tell el-Burak, Lebanon, in: *Vegetation History and Archaeobotany*, 1–20; <https://doi.org/10.1007/s00334-018-0667-x> (access: 05/04/2018).
- ORTHMANN, W./M. AL-MAQDISSI/P. MATTHIAE (ed.)
2013 *Archéologie et histoire de la Syrie, I. La Syrie de l'époque néolithique à l'âge du fer* (Schriften zur Vorderasiatischen Archäologie 1; Wiesbaden).
- ORTON, D.C.
2012 Taphonomy and Interpretation. An Analytical Framework for Social Zooarchaeology, in: *International Journal of Osteoarchaeology* 22, 320–337.
- PARROT, A.
1958 *Mission archéologique de Mari, II. Le palais, 2. Peintures murales* (Bibliothèque Archéologique et Historique 69; Paris).
1961 *Assur. Die Mesopotamische Kunst vom XIII. vorchristlichen Jahrhundert bis zum Tode Alexanders des Grossen* (Universum der Kunst 2; Munich).
- PAYNE, S.
1972 Partial Recovery and a Sample Bias. The Results of Some Sieving Experiments, in: E.S. HIGGS (ed.), *Papers in Economic Prehistory. Studies by Members and Associates of the British Academy Major Research Project in the Early History of Agriculture* (Cambridge), 49–64.
1973 Kill-Off Patterns in Sheep and Goats. The Mandibles from Aşvan Kale, in: *Anatolian Studies* 23, 281–303.
- PAYNE, S./G. BULL
1988 Components of Variation in Measurements of Pig Bones and Teeth, and the Use of Measurements to Distinguish Wild from Domestic Pig Remains, in: *Archaeozoologia* 2, 27–66.
- PECK, W.H.
1978 *Drawings from Ancient Egypt. Photographs by J.G. ROSS* (London).
- PELTENBURG, E.
2008 Nitovikla and Tell el-Burak. Cypriot Mid – Second Millennium B.C. Forts in a Levantine Context, in: *Report of the Department of Antiquities of Cyprus 2008*, 145–157.
- PENNER, S.
2006 Kāmid el-Lōz, XIX. Die Keramik der Spätbronzezeit. Tempelanlagen T3 bis T1, Palastanlagen P5 bis P1/2, Königsgrab ('Schatzhaus') und 'Königliche Werkstatt' (Saarbrücker Beiträge zur Altertumskunde 63; Bonn).
- PERETZ, B./P. SMITH
2004 Dental Morphology and Pathology of Middle Bronze Age Populations in Israel. Sasa and Jebel Qa'aqir, in: *Atiqot* 46, 45*–49*.
- PETERSON, J.
2002 *Sexual Revolutions. Gender and Labor at the Dawn of Agriculture* (Gender and Archaeology Series 4; Walnut Creek).
- PETIT, L.P.
1999 Grinding Implements and Material Found at Tall Dayr 'Alla, Jordan. Their Place and Role in Archaeological Research, in: *Annual of the Department of Antiquities of Jordan* 43, 145–167.
- PETRIE, F.
1932 *Ancient Gaza, II. Tell el Ajjūl* (Publications of the Egyptian Research Account and School of Archaeology in Egypt 54; London).
- PFÄLZNER, P.
2009 Residenz der toten Herrscher – Die Königsgruft, in: *LANDESMUSEUM WÜRTEMBERG, STUTTGART* (ed.) 2009, 200–203.
- PHILIPPOT, P.
1972 *Die Wandmalerei. Entwicklung, Technik, Eigenart* (Munich, Vienna).
- PINNOCK, F.
1993 *Le perle del Palazzo Reale G* (Materiali e Studi Archeologici di Ebla 2; Rome).

- PLASSARD, J./B. KOGOJ
 1981 Seismicité du Liban. Catalogue des séismes récentes, 3rd edition (Collection des Annales-Memoires de l'Observatoire de Ksara 4; Beirut).
- PRAUSNITZ, M. W.
 1975 The Planning of the Middle Bronze Age Town at Achzib and Its Defences, in: *Israel Exploration Journal* 25, 202–210.
- PRINGLE, D.
 1984 Thirteenth-Century Pottery from the Monastery of St. Mary of Carmel, in: *Levant* 16, 91–111.
 1986 The Red Tower (al-Burj al-Ahmar). Settlement in the Plain of Sharon at the Time of the Crusaders and Mamluks A.D. 1099–1516. With Contributions by J. CARTLEDGE *et al.* (British School of Archaeology in Jerusalem. Monograph Series 1; London).
- PRITCHARD, J. B.
 1963 The Bronze Age Cemetery at Gibeon (The University of Pennsylvania. Museum Monographs; Philadelphia).
 1975 Sarepta. A Preliminary Report on the Iron Age. Excavations of the University Museum of the University of Pennsylvania, 1970–72. With Contributions by W.P. ANDERSON, E. HERSCHER, J. TEIXIDOR (The University of Pennsylvania. Museum Monographs; Philadelphia).
 1978 Recovering Sarepta, a Phoenician City. Excavations at Sarafand, Lebanon, 1969–1974, by the University Museum of the University of Pennsylvania (Princeton).
- PUSCH, E. B.
 1979 Das Senet-Brettspiel im Alten Ägypten, I. Das inschriftliche und archäologische Material (Münchener Ägyptologische Studien 38; Munich, Berlin).
- QUINN, P. S.
 2013 Ceramic Petrography. The Interpretation of Archaeological Pottery and Related Artefacts in Thin Section (Oxford).
- RAPP, G.
 2009 Archaeomineralogy, 2nd edition (Natural Science in Archaeology; Berlin, Heidelberg).
- RAUCHBERGER, L.
 2017 Ottoman Clay Tobacco Pipes from the Seawall Excavations in Jaffa, in: A. A. BURKE/L. S. BURKE/M. PEILSTÖCKER (*ed.*), *The History and Archaeology of Jaffa, II* (The Jaffa Cultural Heritage Project Series 2; Monumenta Archaeologica 41; Los Angeles), 249–269.
- REESE, D. S.
 2002 On the Incised Cattle Scapulae from the East Mediterranean and Near East, in: *Bonner zoologische Beiträge* 50, 183–198.
 2010 Shells from Sarepta (Lebanon) and East Mediterranean Purple-Dye Production, in: *Mediterranean Archaeology and Archaeometry* 10/1, 113–141.
- REIMER, P. J. *et al.*
 2013 IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years Cal BP, in: *Radiocarbon* 55, 1869–1887.
- RENAN, E. (*ed.*)
 1864 [1874] *Mission de Phénicie* (Paris) [1864; published 1874].
- RICE, M.
 2006 *Swifter than the Arrow. The Golden Hunting Hounds of Ancient Egypt* (London, New York).
- RIEDERER, J.
 1987 *Archäologie und Chemie – Einblicke in die Vergangenheit. Ausstellung des Rathgen-Forschungslabors SMPK, September 1987 – Januar 1988* (Berlin).
- RIEHL, S.
 2004 Archaeobotany at the Early Bronze Age Settlement of *Hirbet ez-Zeraqōn*. A Preliminary Report, in: *Zeitschrift des Deutschen Palästina-Vereins* 120, 101–122.
 2009 Archaeobotanical Evidence for the Interrelationship of Agricultural Decision-Making and Climate Change in the Ancient Near East, in: *Quaternary International* 197, 93–114.

- 2012 Variability in Ancient Near Eastern Environmental and Agricultural Development, in: *Journal of Arid Environments* 86, 113–121.
- in press Flourishing Surplus Economy in Coastal Lands. Archaeobotany and Stable Carbon Isotopes, in: H. GENZ (*ed.*), *Tell Fadous-Kfarabida I. The Site and Its Environment* (American Schools of Oriental Research. Archaeological Reports).
- RIEHL, S./R. BRYSON/K. PUSTOVOYTOV
2008 Changing Growing Conditions for Crops during the Near Eastern Bronze Age (3000–1200 BC). The Stable Carbon Isotope Evidence, in: *Journal of Archaeological Science* 35, 1011–1022.
- RIEHL, S./K. DECKERS
2005 Plant Remains, in: BADRESHANY/GENZ/SADER 2005, 84–88.
2009 The Botanical Finds from the 2007 and 2008 Seasons of Excavations, in: GENZ *et al.* 2009, 110–116.
- RIEHL, S. *et al.*
2014 Drought Stress Variability in Ancient Near Eastern Agricultural Systems Evidenced by $\delta^{13}\text{C}$ in Barley Grain, in: *Proceedings of the National Academy of Sciences of the United States of America* 111 (34), 12348–12353; <http://doi.org/10.1073/pnas.1409516111> (access: 01/24/2018).
- ROBINSON, R. C. W.
1983 Clay Tobacco Pipes from the Kerameikos, in: *Mitteilungen des Deutschen Archäologischen Instituts. Athenische Abteilung* 98, 265–285.
1985 Tobacco Pipes of Corinth and of the Athenian Agora, in: *Hesperia* 54/2, 149–203.
- RODENWALDT, G.
1912 Tiryns. Die Ergebnisse der Ausgrabungen des Instituts, II. Die Fresken des Palastes (Athens).
- ROSEN, S. A.
1997 *Lithics after the Stone Age. A Handbook of Stone Tools from the Levant* (Walnut Creek, London, New Delhi).
- ROUX, V.
1985 *Le matériel de broyage. Étude ethnoarchéologique à Tichitt* (Éditions Recherche sur les Civilisations. Mémoire 58; Paris).
- ROWAN, Y. M.
1998 Ancient Distribution and Deposition of Prestige Objects. Basalt Vessels during Late Prehistory in the Southern Levant [Ph.D. dissertation, The University of Texas; Austin].
2003 The Groundstone Assemblage, in: A. GOLANI, *Salvage Excavations at the Early Bronze Age Site of Qiryat Ata. With Contributions by R. Y. BANKIRER et al.* (Israel Antiquities Authority. Reports 18; Jerusalem), 183–202.
2006 The Groundstone Assemblages, in: E. YANNAI, ‘En Esur (‘Ein Asawir), I. Excavations at a Protohistoric Site in the Coastal Plain of Israel. With Contributions by D. T. ARIEL *et al.* (Israel Antiquities Authority. Reports 31; Jerusalem), 211–250.
- ROWAN, Y. M./J. R. EBELING (*ed.*)
2008 *New Approaches to Old Stones. Recent Studies of Ground Stone Artifacts* (Approaches to Anthropological Archaeology; London, Oakville).
- ROWE, A.
1936 *A Catalogue of Egyptian Scarabs, Scaraboids, Seals and Amulets in the Palestine Archaeological Museum* (Cairo).
- RÜDEN, C. VON
2011 Die Wandmalereien aus Tall Mišrife/Qatna im Kontext überregionaler Kommunikation. Mit Beiträgen von A. BRYNSBAERT und I. WEISSER (Qatna Studien 2; Wiesbaden).
2014 Beyond the East–West Dichotomy in Syrian and Levantine Wall Paintings, in: B. A. BROWN/M. H. FELDMAN (*ed.*), *Critical Approaches to Ancient Near Eastern Art* (Berlin, Boston), 55–78.
- RUSSELL, N.
2012 *Social Zooarchaeology. Humans and Animals in Prehistory* (Cambridge).

- SADER, H.
 1997 Tell el Burak. An Unidentified City of Phoenician Sidon, in: B. PONGRATZ-LEISTEN/H. KÜHNE/P. XELLA (*ed.*), *Ana šadî Labnāni lū allik*. Beiträge zu altorientalischen und mittelmeerischen Kulturen. Festschrift für Wolfgang Röllig (Alter Orient und Altes Testament 247; Kevelaer, Neukirchen-Vluyn), 363–376.
- 2004 Tell Burak, in: *Archäologischer Anzeiger* 2004/2, 104–106.
- 2009a Beirut and Tell el-Burak. New Evidence on Phoenician Town Planning and Architecture in the Homeland, in: S. HELAS/D. MARZOLI (*ed.*), *Phönizisches und punisches Städtewesen*. Akten der internationalen Tagung in Rom vom 21. bis 23. Februar 2007 (Iberia Archaeologica 13; Mainz am Rhein), 55–67.
- 2009b Palace Architecture in Tell el-Burak – Lebanon. Some Evidence for Egyptian-Mesopotamian-Levantine Interconnections, in: A.-M. MAÏLA-AFEICHE (*ed.*), *Interconnections in the Eastern Mediterranean. Lebanon in the Bronze and Iron Ages*. Proceedings of an International Symposium, Beirut 2008 (Bulletin d'Archéologie et d'Architecture Libanaises. Hors-Série 6; Beirut), 177–185.
- SADER H./J. KAMLAH
 2010 Tell el-Burak. A New Middle Bronze Age Site from Lebanon, in: *Near Eastern Archaeology* 73, 130–141.
- SAIDAH, R.
 1967 Chronique, in: *Bulletin du Musée de Beyrouth* 20, 155–180.
- 1993–94 Beirut in the Bronze Age. The Kharji Tombs, in: *Berytus. Archaeological Studies* 41, 137–210.
- SALAMÉ-SARKIS, H.
 1980 Contribution à l'histoire de Tripoli et de sa région à l'époque des croisades. Problèmes d'histoire, d'architecture et de céramique (Bibliothèque Archéologique et Historique 106; Paris).
- SALLES, J.-F.
 1994 La mort à Byblos. Les necropoles, in: E. ACQUARO *et al.* (*ed.*), *Biblo. Una città e la sua cultura* (Collezione di studi fenici 34; Rome), 49–71.
- SCANDONE MATTHIAE, G.
 1997 The Relations between Ebla and Egypt, in: OREN (*ed.*) 1997, 415–427.
- 2002 Gli avori egittizzanti dal palazzo settentrionale. Missione Archeologica Italiana in Siria (Materiali e Studi Archeologici di Ebla 3; Rome).
- SCHAEFER, J.
 1989 Archaeological Remains from the Medieval Islamic Occupation of Northwest Negev Desert, in: *Bulletin of the American Schools of Oriental Research* 274, 33–60.
- SCHEUER, L./S. BLACK
 2000 Developmental Juvenile Osteology. Illustrations by A. CHRISTIE (San Diego *et al.*).
- SCHMITT, A. W.
 2013 Die eisenzeitlichen Metallfunde aus *Tell el-Burak* und *Beirūt* (BEY 020), in: *Zeitschrift des Deutschen Palästina-Vereins* 129, 171–216.
- SCHNEIDER, T.
 2008 Das Ende der kurzen Chronologie: Eine kritische Bilanz der Debatte zur absoluten Datierung des Mittleren Reiches und der Zweiten Zwischenzeit, in: *Egypt and the Levant* 18, 275–313.
- SCHOUR, I./M. MASSLER
 1941 The Development of the Human Dentition, in: *The Journal of the American Dental Association* 28, 1153–1160.
- SCHRAMM, H.-P./B. HERING
 1989 Historische Malmaterialien und ihre Identifizierung (Berlin).
- SCHROER, S.
 2008 Die Ikonographie Palästinas/Israels und der Alte Orient. Eine Religionsgeschichte in Bildern, II. Die Mittelbronzezeit (Fribourg).

- SELLIN, E.
1926 Die Ausgrabung von Sichem. Kurze vorläufige Mitteilung über die Arbeit im Sommer 1926, in: Zeitschrift des Deutschen Palästina-Vereins 49, 304–320.
- SHACKLETON, C. M./F. PRINS
1992 Charcoal Analysis and the “Principle of Least Effort” – A Conceptual Model, in: Journal of Archaeological Science 19, 631–637.
- SHARON, I.
2014 Levantine Chronology, in: STEINER/KILLEBREW (*ed.*) 2014, 44–65.
- SHAW, B. *et al.*
2008 Eastern Mediterranean Tectonics and Tsunami Hazard Inferred from the AD 365 Earthquake, in: Nature Geoscience 1, 268–276.
- SHEDID, A. G.
1994 Die Felsgräber von Beni Hassan in Mittelägypten (Zaberns Bildbände zur Archäologie 16; Mainz am Rhein).
- SHEHADEH, L.
2005 The Mamluk and Early Ottoman Occupation at Tell el-Burak [M.A. thesis, American University of Beirut; Beirut].
- SHOVAL, S.
1988 Mineralogical Changes upon Heating Calcitic and Dolomitic Marl Rocks, in: Thermochemica Acta 135, 243–252.
- SIMCHONI, O./M. E. KISLEV/Y. MELAMED
2007 Botanical Remains. Beth-Shean as a Trade Center for Crops in the Bronze Age. Botanical and Entomological Evidence, in: A. MAZAR/R. A. MULLINS (*ed.*), Excavations at Tel Beth-Shean 1989–1996, II. The Middle and Late Bronze Age in Area R (The Beth-Shean Valley Archaeological Project II; Jerusalem), 702–715.
- SIVAN, D. *et al.*
2006 The *Glycymeris* Query along the Coast and Shallow Shelf of Israel, Southeast Mediterranean, in: Palaeogeography, Palaeoclimatology, Palaeoecology 233, 134–148.
- SMART, T. L./E. S. HOFFMAN
1988 Environmental Interpretation of Archaeological Charcoal, in: C. A. HASTORF/V. S. POPPER (*ed.*), Current Palaeoethnobotany. Analytical Methods and Cultural Interpretations of Archaeological Plant Remains (Prehistoric Archeology and Ecology; Chicago), 165–205.
- SMITH, P.
2004 Middle Bronze Age II Burials at Sasa, Upper Galilee (Tomb 1 and Graves 37, 39), in: ‘Atiqot 46, 35*–43*.
- SMITH, W. S.
1981 The Art and Architecture of Ancient Egypt, 2nd edition (Pelican History of Art; New York *et al.*).
- SNEH, A. *et al.*
1998 Geological Map of Israel, 1:200,000. Geological Survey of Israel (4 sheets); <http://www.gsi.gov.il/eng/?categoryid=119&articleid=172> (access: 11/15/2017).
- SPARKS, R. T.
2007 Stone Vessels in the Levant (The Palestine Exploration Fund Annual 8; Leeds).
- SPENCER, A. J.
1980 Catalogue of Egyptian Antiquities in the British Museum, V. Early Dynastic Objects (London).
- STAGER, L. E.
2002 The MB IIA Ceramic Sequence at Tel Ashkelon and Its Implications for the “Port Power” Model of Trade, in: BIETAK (*ed.*) 2002, 353–362.
- STAGER, L. E. *et al.*
2008 The North Slope, in: L. E. STAGER/J. D. SCHLOEN/D. M. MASTER (*ed.*), Ashkelon, I. Introduction and Overview (1985–2006) (Final Reports of the Leon Levy Expedition to Ashkelon I; Winona Lake), 215–245.

- STAUBWASSER, M./H. WEISS
 2006 Holocene Climate and Cultural Evolution in Late Prehistoric – Early Historic West Asia, in: *Quaternary Research* 66, 372–387.
- STECKEL, R. H./J. C. ROSE (ed.)
 2002 *The Backbone of History. Health and Nutrition in the Western Hemisphere. Revised Papers from a Second Conference Sponsored by the National Science Foundation Held March 7–10, 1996 at Ohio State University, Columbus* (Cambridge, New York).
- STEEN, E. J. VAN DER
 1997–98 What Happened to Arabic Geometric Pottery in Beirut?, in: *ARAM Periodical* 9–10, 121–127.
- STEINER, M. L./A. E. KILLEBREW (ed.)
 2014 *The Oxford Handbook of the Archaeology of the Levant: c. 8000–332 BCE* (Oxford).
- STERN, E. J.
 1997 Excavation of the Courthouse Site at 'Akko. The Pottery of the Crusader and Ottoman Periods, in: *'Atiqot* 31, 35–70.
- STERN, E. J./D. A. STACEY
 2000 An Eleventh-Century Pottery Assemblage from Khirbat al-Khurrumiya, in: *Levant* 32, 171–177.
- STRANDBERG, Å.
 2009 *The Gazelle in Ancient Egyptian Art. Image and Meaning* (Uppsala Studies in Egyptology 5; Uppsala).
- STUART-MACADAM, P.
 1985 Porotic Hyperostosis. Representative of a Childhood Condition, in: *American Journal of Physical Anthropology* 66, 391–398.
- STUCKEY, J. H.
 2003 The Great Goddesses of the Levant, in: *The Journal of the Society for the Study of Egyptian Antiquities* 30, 127–157.
- TALHOUK, S. N./R. ZURAYK/S. KHURI
 2001 Conservation of the Coniferous Forests of Lebanon. Past, Present and Future Prospects, in: *Oryx* 35, 206–215.
- TARAQJI, A. F.
 1999 Nouvelles découvertes sur les relations avec l'Égypte à Tel Sakka et à Keswé, dans la région de Damas, in: *Bulletin de la Société Française d'Égyptologie* 144, 27–43.
- TAYLOR, J. H.
 2004 Scarabs from the Bronze Age Tombs at Sidon (Lebanon), in: *Levant* 36, 155–158.
- TEISSIER, B.
 1996 *Egyptian Iconography on Syro-Palestinian Cylinder Seals of the Middle Bronze Age* (*Orbis Biblicus et Orientalis. Series Archaeologica* 11; Fribourg, Göttingen).
- THALMANN, J.-P.
 1978 Tell 'Arqa (Liban Nord). Campagnes I–III (1972–1974). Chantier I, Rapport préliminaire, in: *Syria* 55, 1–151.
 2006 Tell Arqa, I. Les niveaux de l'âge du Bronze. Contributions de H. CHARAF-MULLINS, E. COQUEUGNIOT et G. GERNEZ (*Bibliothèque Archéologique et Historique* 177; Beirut).
- THÉRY-PARISOT, I./L. CHABAL/J. CHRZAVZEZ
 2010 Anthracology and Taphonomy, from Wood Gathering to Charcoal Analysis. A Review of the Taphonomic Processes Modifying Charcoal Assemblages, in: *Archaeological Contexts, in: Palaeogeography, Palaeoclimatology, Palaeoecology* 291, 142–153.
- THOLBECQ, L.
 1997–98 Une installation d'époque médiévale dans la sanctuaire de Zeus de Jérash (Jordanie). La céramique, in: *ARAM Periodical* 9–10, 153–179.
- THOMSON, W. M.
 1864 *The Land and the Book; or, Biblical Illustrations Drawn from the Manners and Customs, the Scenes and Scenery of the Holy Land* (London, Edinburgh, New York).

- TONGHINI, C.
1998 Qal'at Ja'bar Pottery. A Study of a Syrian Fortified Site of the Late 11th–14th Centuries (British Academy Monographs in Archaeology 11; Oxford).
- TSAHAR E. *et al.*
2009 Distribution and Extinction of Ungulates during the Holocene of the Southern Levant, in: PLoS ONE 4/4, 1–13; DOI: 10.1371/journal.pone.0005316 (access: 11/15/2016).
- TUFNELL, O.
1984 Studies on Scarab Seals, II. Scarab Seals and Their Contribution to History in the Early Second Millennium B.C. (Warminster).
- TWISS, K.
2012 The Archaeology of Food and Social Diversity, in: Journal of Archaeological Research 20, 357–395.
- TYTUS, R. DE P.
1994 A Preliminary Report on the Re-Excavation of the Palace of Amenhetep III. With a Postscript and Additional Notes by C. C. VAN SICLEN III, reprint of the edition New York 1903 (A VSB Egyptological Reprint; San Antonio).
- UEHLINGER, C.
1997 Zur Datierung des «Brunnenreliefs» aus Assur, in: Nouvelles Assyriologiques Brèves et Utilitaires 1997/3, 79–81.
- VELDE, C. W. M. VAN DE
1855 Reise durch Syrien und Palästina in den Jahren 1851 und 1852, I (Leipzig).
- VERHEY, J.
2008 Berichte über Teilfreilegungen einer mittelbronzezeitlichen Wandmalerei, Tell el-Burak, Libanon. Bestands- und Zustandserfassung. Reports submitted after the 2008/2009/2010 seasons of excavation at Tell el-Burak [unpublished].
2009 Berichte über Teilfreilegungen einer mittelbronzezeitlichen Wandmalerei, Tell el-Burak, Libanon. Bestands- und Zustandserfassung. Reports submitted after the 2008/2009/2010 seasons of excavation at Tell el-Burak [unpublished].
2010 Berichte über Teilfreilegungen einer mittelbronzezeitlichen Wandmalerei, Tell el-Burak, Libanon. Bestands- und Zustandserfassung. Reports submitted after the 2008/2009/2010 seasons of excavation at Tell el-Burak [unpublished].
- VINCENZ, A. DE
2011 Ottoman Clay Tobacco Pipes from Ramla, in: 'Atiqot 67, 43*–53*.
- WAHL, J.
1982 Leichenbranduntersuchungen. Ein Überblick über die Bearbeitungs- und Aussagemöglichkeiten von Brandgräbern, in: Prähistorische Zeitschrift 57, 2–125.
- WALKER, B. J.
2009 Identifying the Late Islamic Period Ceramically. Preliminary Observations on Ottoman Wares from Central and Northern Jordan, in: B. J. WALKER (*ed.*), Reflections of Empire. Archaeological and Ethnographic Studies on the Pottery of the Ottoman Levant (The Annual of the American Schools of Oriental Research 64; Boston), 37–65.
- WALPER, U.
1998 Cribra Orbitalia in Anthropobiology. Diagnostic Criteria and Implications in the Study of Ancient Skeletal Populations [unpublished; Bordeaux].
- WASTLHUBER, C.
2011 Die Beziehungen zwischen Ägypten und der Levante während der 12. Dynastie: Ökonomie und Prestige in Außenpolitik und Handel; <http://edoc.ub.uni-muenchen.de/12817/> (access: 11/15/2016).
- WATSON, J. P. N.
1979 The Estimation of the Relative Frequencies of Mammalian Species. Khirokitia 1972, in: Journal of Archaeological Science 6, 127–137.
- WEATHERHEAD, F. J.
2007 Amarna Palace Paintings (Egypt Exploration Society. Excavation Memoir 78; London).

- WELTON, J. E.
1984 SEM Petrology Atlas (Methods in Exploration Series 4; Tulsa).
- WENINGER, F. *et al.*
2006 The Principle of the Bayesian Method, in: *Egypt and the Levant* 16, 317–324.
- WHITBREAD, I. K.
1989 A Proposal for the Systematic Description of Thin Sections towards the Study of Ancient Ceramic Technology, in: Y. MANIATIS (*ed.*), *Archaeometry. Proceedings of the 25th International Symposium, Athens, 1986* (Amsterdam, New York), 127–138.
- WILKINSON, C. K./M. HILL
1983 *Egyptian Wall Paintings. The Metropolitan Museum of Art's Collection of Facsimiles* (New York).
- WOOLLEY, L.
1955 *Alalakh. An Account of the Excavations at Tell Atchana in the Hatay, 1937–1949. With Sections by Professor C. J. GADD and R. D. BARNETT* (Reports of the Research Committee of the Society of Antiquaries of London 18; Oxford).
- WRIGHT, G. E.
1965 *Shechem. The Biography of a Biblical City* (The Norton Lectures of the Southern Baptist Theological Seminary; London).
- WRIGHT, K. I.
1992 A Classification System for Ground Stone Tools from the Prehistoric Levant, in: *Paléorient* 18/2, 53–81.
1994 Ground-Stone Tools and Hunter-Gatherer Subsistence in Southwest Asia. Implications for the Transition to Farming, in: *American Antiquity* 59, 238–263.
2008 Craft Production and the Organization of Ground Stone Technologies, in: ROWAN/EBELING (*ed.*) 2008, 130–143.
- WRIGHT, K. I./A. BAYSAL
2012 Ground Stone Tools and Technologies Associated with Buildings in the BACH Aerea, Last House on the Hill. BACH Area Reports from Çatalhöyük, Turkey (Catalhöyük Research Project Series 11; *Monumenta Archaeologica* 27; Los Angeles), 415–422.
- WRIGHT, K. I./P. CRITCHLEY/A. GARRARD
2008 Stone Bead Technologies and Early Craft Specialization. Insights from two Neolithic Sites in Eastern Jordan, in: *Levant* 40, 131–165.
- WRIGHT, K./A. GARRARD
2003 Social Identities and the Expansion of Stone Bead-Making in Neolithic Western Asia. New Evidence from Jordan, in: *Antiquity* 77, 267–284.
- YADIN, E.
2009 Middle Bronze Age Pottery, in: GADOT/YADIN 2009, 111–181.
- YADIN, Y. *et al.*
1989 *Hazor III–IV. An Account of the Third and Fourth Seasons of Excavation, 1957–1958* (Jerusalem).
- YAZBECK C.
2006 Chipped Stone Tools from the Early Bronze Age Settlement in Saida, in: DOUMET-SERHAL 2006, 291–300.
2009 Chipped Stone Tools from the Bronze Age in Lebanon, in: A.-M. MAÏLA-AFEICHE (*ed.*), *Interconnections in the Eastern Mediterranean. Lebanon in the Bronze and Iron Ages. Proceedings of the International Symposium, Beirut 2008* (*Bulletin d'Archéologie et d'Architecture Libanaises. Hors-Série* 6; Beirut), 69–75.
2011–12 Chipped Stone Tools from the Middle Bronze Age Settlement in Sidon. College Site, Excavations 2000–2002, in: *Archaeology and History in the Lebanon* 34–35, 173–191.
- ZAHRADNIK, E.
2009 Der Hund als geliebtes Haustier im Alten Ägypten anhand von bildlichen, schriftlichen und archäologischen Quellen. *Altes und Mittleres Reich* (Berlin).

ZEDER, M. A.

- 2006 Reconciling Rates of Long Bone Fusion and Tooth Eruption and Wear in Sheep (*Ovis*) and Goat (*Capra*), in: D. RUSCILLO (*ed.*), *Recent Advances in Ageing and Sexing Animal Bones*. Proceedings of the 9th Conference of the International Council of Archaeozoology, Durham, August 2002 (Oxford), 87–118.

ZEDER, M. A./H. A. LAPHAM

- 2010 Assessing the Reliability of Criteria Used to Identify Postcranial Bones in Sheep, *Ovis*, and Goats, *Capra*, in: *Journal of Archaeological Science* 37, 2887–2905.

ZEDER, M. A./S. E. PILAAR

- 2010 Assessing the Reliability of Criteria Used to Identify Mandibles and Mandibular Teeth in Sheep, *Ovis*, and Goats, *Capra*, in: *Journal of Archaeological Science* 37, 225–242.

ZIADEH, G.

- 1995 Ottoman Ceramics from Ti‘innik, Palestine, in: *Levant* 27, 209–245.

ZUSCHIN, M./M. STACHOWITSCH/R. J. STANTON

- 2003 Patterns and Processes of Shell Fragmentation in Modern and Ancient Marine Environments, in: *Earth-Science Reviews* 63, 33–82.